American University of Kosovo
Capstone Project Report

Improving the Enabling Environment for Electronic Communications and ICT Development in Kosova

Submitted as a Capstone Project Report in partial fulfillment of a Master of Science Degree in Professional Studies at the RIT Center for Multidisciplinary Studies

Submitted by:
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My special gratitude is due to my parents, my brother, and his family for their loving support. Finally I am thankful to my wife, my daughter, and my son for their patience and understanding during all my Master Degree process.

\(^1\) Veronica is a Manager of a three-year project (2008-2010) for the European Commission titled “Monitoring regulatory and market developments for electronic communications and information society services in Enlargement countries” covering Albania, Bosnia and Herzegovina, Croatia, Serbia, Montenegro, Kosovo, Macedonia and Turkey
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### Acronyms

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
</tr>
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<tbody>
<tr>
<td>3G</td>
<td>Third Generation (mobile telecommunications)</td>
</tr>
<tr>
<td>Art Motion</td>
<td>ISP Operator</td>
</tr>
<tr>
<td>bSEE</td>
<td>broadband South East Europe</td>
</tr>
<tr>
<td>ccTLD</td>
<td>country code Top Level Domain</td>
</tr>
<tr>
<td>CPS</td>
<td>Carrier Pre-Selection</td>
</tr>
<tr>
<td>CS</td>
<td>Carrier Selection</td>
</tr>
<tr>
<td>DSL</td>
<td>Digital Subscriber Line</td>
</tr>
<tr>
<td>ECLO</td>
<td>European Commission Liaison Office</td>
</tr>
<tr>
<td>eSEE</td>
<td>electronic South East Europe</td>
</tr>
<tr>
<td>EU</td>
<td>European Union</td>
</tr>
<tr>
<td>GDP</td>
<td>Gross Domestic Product</td>
</tr>
<tr>
<td>GSM</td>
<td>Groupe Speciale Mobile or Global Standard for Mobile Communications</td>
</tr>
<tr>
<td>ICT</td>
<td>Information and Communications Technology</td>
</tr>
<tr>
<td>IMC</td>
<td>Independent Media Commission</td>
</tr>
<tr>
<td>IP</td>
<td>Internet Protocol</td>
</tr>
<tr>
<td>IPKO</td>
<td>Fixed, mobile, cable TV, and ISP Operator</td>
</tr>
<tr>
<td>ISP</td>
<td>Internet Service Provider</td>
</tr>
<tr>
<td>ITU</td>
<td>International Telecommunication Union</td>
</tr>
<tr>
<td>KUJTESA</td>
<td>Cable TV, and ISP Operator</td>
</tr>
<tr>
<td>KCC</td>
<td>Kosova Competition Commission</td>
</tr>
<tr>
<td>MEF</td>
<td>Ministry of Economy and Finance</td>
</tr>
<tr>
<td>MNO</td>
<td>Mobile Network Operator</td>
</tr>
<tr>
<td>MTC</td>
<td>Ministry of Transport and Communications</td>
</tr>
<tr>
<td>MVNO</td>
<td>Mobile Virtual Network Operator</td>
</tr>
<tr>
<td>OECD</td>
<td>Organization for Economic Cooperation and Development</td>
</tr>
<tr>
<td>PTK</td>
<td>Post and Telecommunications of Kosovo- Fixed, Mobile and ISP operator</td>
</tr>
<tr>
<td>QoS</td>
<td>Quality of Services</td>
</tr>
<tr>
<td>SRSG</td>
<td>Special Representative of the Secretary General</td>
</tr>
<tr>
<td>STIKK</td>
<td>Shoqata e Teknologjisë Informative dhe Komunikuese e Kosoves- Kosovo ICT Association</td>
</tr>
<tr>
<td>TRA</td>
<td>Telecommunications Regulatory Authority</td>
</tr>
<tr>
<td>USO</td>
<td>Universal Service Obligation</td>
</tr>
<tr>
<td>WTO</td>
<td>World Trade Organization</td>
</tr>
</tbody>
</table>
Abstract

This Capstone Project addresses an important problem hampering growth and development in the Kosova electronic communications sector, namely that its legislative enabling environment is seriously out of phase with current communications technology convergence, modern competition-based regulatory practices, and European Union (EU) information society policies. This is because the existing Law on Telecommunications is eight years old and urgently requires updating, and at the urging of the European Commission (EC), has led Government to commit to completing a new Electronic Communications Law based on EU legislation by end 2010.

Specifically, of the many issues to be addressed by a new legislative framework, this Project focuses on the research and development of legislative solutions that both comply with relevant EU legislation and can be sustainable in the Kosova context in four key problem areas:

(i) Eliminating entry barriers and promoting competition via the adoption of a general authorization regime in lieu of current licensing rules;

(ii) Harmonizing the regulatory approach to the convergent broadcasting and telecommunications sectors, and then proposing them for inclusion in a draft new law;

(iii) Increasing service choice, quality, and consumer protection for users through an effective, technology-neutral regulatory framework; and,

(iv) National regulatory agency set up (coherence, independence, accountability, transparency, predictability, capacity).

The Project outcome enables policy makers and legislators to be presented with fully researched and justified legislative reform proposals in these areas that are fully harmonized with EU standards. By rationalizing the sector it enables an environment (economically and administratively), when promises to enhance the economic development potential and the social utility of the sector.
1. Telecommunications Development in Kosova

Any assessment of telecommunications markets has to be seen against the country characteristics, governance institutions, market structures, population, general performance of the economy, (its level compared to other economies) and the relative growth rates. This requires data on the size and growth of the economy and of the population. Additionally, it helps to consider the distribution of income within an economy, together with (un)employment, and poverty which might all be expected to be correlated with the adoption of ICTs. In this chapter are presented relevant country information, institutional and legal framework relevant for the telecommunications sector, stakeholder analysis and key stakeholders roles and responsibilities in the telecommunication sector.

1.1 Relevant Country Background

Kosova’s territory is land-locked with a geographical size of a little less than 11,000 km². The resident population is estimated to be around 2.2 million. Over 90% of the population is Albanian. The Serb minority represents 5%, while other minority populations are Bosniak, Roma, Ashkali and Egyptians (RAE) and Turkish. A large Kosovan Diasporas lives in the United States, Western Europe and beyond.

Kosova’s economy is small and highly open. By regional standards Kosova is relatively poor with a gross domestic product (GDP) per capita of around € 1,760 per annum. Imports account for around 60% of GDP and, until now, the main characteristic which best described the economy of Kosova was a very high level of inflows from sources other than exports; the main ones being remittances from the Diaspora and donor assistance.

At the same time, Kosova has the weakest employment track record in Europe: the unemployment rate has reached 48 percent and the employment rate is extremely low (26 percent). Consequently, poverty remains persistent and widespread with 45 percent of the population estimated to consume less than the national poverty line, while 17 percent are extremely poor². Foreign investment is still relatively low, partially hindered by regular

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power cuts. Costly and lengthy business registration and licensing procedures: deter entrepreneurial activity, or at least push firms to informality.

Kosova’s tie to the Euro (€) has helped keep inflation low. In general, Kosova’s macro-economic policies over the last few years can be characterized as stable.

United States of America and European Union (EU) are playing a prominent role in the reconstruction and development of Kosova. As the rest of the Western Balkans region, Kosova enjoys an enlargement perspective in the European Union. Kosova has a statute as a potential candidate country, and have signed European Partnership agreement with the EU in 2008. The European Commission plays the key role in implementing this policy by deploying all tools under the Stabilization and Association Process (SAP), such as regular reporting and a European Partnership. The Commission provides sound policy advice and guidance to Kosovo’s reform efforts.

Though small and landlocked, Kosova’s location, free market access, and EU membership prospects offer huge opportunities for growth through EU and regional integration. [1]

1.2 Institutional and Legal Framework Relevant for the Sector

Since 1999, Kosova’s institutional setup has been governed by the United Nations Security Council Resolution 1244 (UNSCR 1244) adopted on June 10, 1999. UNSCR 1244 established an interim international civil administration, the United Nations Interim Administration Mission in Kosovo (UNMIK) headed by the Special Representative of the Secretary General (SRSG). Under the constitutional framework promulgated by the SRSG, administrative responsibilities in Kosova have been divided between UNMIK and the Kosovar Provisional Institutions of Self-Government (PISG), comprising the President, the Parliament (Assembly) and the Government headed by the Prime Minister.

Under the constitutional framework established by the international administration, the specific responsibilities reserved for UNMIK included two aspects particularly relevant for the telecommunications sector:

- administering public-owned companies through the Kosovo Trust Agency (KTA), including the incumbent fixed and mobile operator, Post and Telecom of Kosova (PTK);
• managing the radio frequencies carried out by the Frequency Management Office (FMO) with administrative and spectrum assignment functions implemented by the national regulator, Telecommunications Regulatory Authority (TRA).

In February 2008, the Assembly of Kosova declared Kosova’s independence. A new constitution was approved by the Parliament of the Republic of Kosova in April 2008, which came into force on June 15, 2008. To date Kosova has been recognized by 71 UN Member States, including 22 out of 27 EU Member States. In June 2009 Kosova became a member of the International Monetary Fund (IMF), and the World Bank.

The declaration of independence has facilitated the already foreseen transfer of these responsibilities from UNMIK to the national institutions. In particular, KTA was transformed into the Kosovo Privatization Agency, while all spectrum management functions were transferred to TRA. Ministry of Economy and Finance (MEF), and Publicly Owned Enterprise Policy and Monitoring Unit which is established under the MEF are responsible for administering Post and Telecommunications of Kosova (PTK) j.s.c.3

In 2002, the first set of legal requirements for telecommunications in Kosova was imposed through the adoption of a new Telecommunications Law.4 The 2002 Law vested policy jurisdiction in the Ministry of Transport and Communications of the Provisional Institutions of Self Government (PISG) which has the responsibilities to develop policies and legislation for the provision of services and facilities in the sector of telecommunications and information technology, and created a quasi-independent Telecommunications Regulatory Agency (TRA) to monitor the sector. TRA is responsible for implementing the telecommunications sector policy in compliance with the relevant legislation, adopting regulations and instructions under the Telecommunications Law; issuing licenses and

4 See www.unmikonline.org/regulations/unmikgazette/02english/E2003regs/RE2003_16.pdf (2002 Telecom Law). At the end of hostilities in 2000, the telecommunications sector in Kosovo was virtually destroyed. The assets of the former Kosovo operations of the monopoly Serbia Telekom were reorganized under the Kosovo Trust Agency-administered Post and Telecom of Kosovo (PTK) to provide fixed line service and an arrangement was made whereby PTK used the telephone country code of Monaco of the provision of mobile services under the name Vala 900. There was no telecommunications law or organized regulation in the sector, and most decisions were made by the United Nations Mission on an ad hoc basis in order to restore communications as quickly as possible. Into this environment, numerous small operators established and began to operate free of pricing or consumer protection rules.
authorizations for the provision of telecommunications networks and services in Kosova, and management of the numbering and spectrum resources.

Further, in July 2005, Kosova passed a Law on Information Society Services – essentially enabling electronic commerce techniques to be used legally. Parts of the Information society services law are electronic commerce, electronic signature, and data protection and privacy in electronic communications sector provisions. The laws addressing Cybercrime and generic Law for data protection and privacy has been approved by the Assembly on 2010.

Kosova has a national strategy for development of the information society 2006-2012 adopted in April 2006, and Telecommunications Sector Policy adopted in June 2007. Kosova is a signatory country and heavily supports the implementation of the initiatives set forth in the Memorandum of Understanding and Action Plan for Broadband under the South-East Europe Stability Pact, including the electronic South Eastern Europe Initiative (“eSEE”) for the Development of Information Society in SEE 2007-2012 (“eSEE Agenda +”). eSEE Agenda Plus⁵ is a forward looking framework for promoting the information society in the member countries of the Regional Cooperation Council⁶ for South Eastern Europe. Kosova is also actively participating in the European Commission’s project leaded by Cullen International⁷ (CI) for monitoring the regulation of telecommunications and information society services in the EU enlargement countries. This is a three-year project 2008-2011 (ongoing). The project involves four rounds of data collection and the organization of a forum for regulatory authorities and respective line ministries in the enlargement countries every nine months over the three years. Enlargement countries are Croatia, Turkey, Macedonia and recently Montenegro as candidate countries, and Kosova, Bosnia&Herzegovina, Albania, and Serbia as potential candidate countries for EU membership.

Kosova as a potential candidate country for EU membership have undertaken to:

- align the telecommunications legislation with that of the EU;
- achieve competitive electronic communication markets; and
- strengthen the expertise of the Telecommunications Regulatory Authority.

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⁵ See: www.eseinitiative.org
⁶ See: http://www.rcc.int/index.php?action=page&id=5
⁷ See: www.cullen-international.com
1.3 Key Stakeholders in the Telecommunications sector in Kosova

Prior to collecting information, and data a stakeholder analysis was conducted. Meetings were held with the key stakeholders in order to analyze project risks, challenges and project constrains, and tried to set major milestones for the project, and agreed on processes, standards, methods and tools of the project.

Stakeholders in the electronic communications sector in Kosova- their roles and respective responsibilities regarding key issues addressed in this Capstone are presented in Table 1.1.

Table 1-1. Stakeholders and their respective roles and responsibilities in electronic communications sector in Kosova

<table>
<thead>
<tr>
<th>STAKEHOLDERS</th>
<th>removing barriers to market entry</th>
<th>QoS and consumer protection</th>
<th>Convergence of broadcasting and telecommunications</th>
<th>National Regulatory Agency Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investment Promotion Agency</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Competition Commission</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Telecommunications Regulatory Authority</td>
<td>▲</td>
<td>○</td>
<td>▲</td>
<td>●</td>
</tr>
<tr>
<td>Ministry of Transport and Communications</td>
<td>○</td>
<td>○</td>
<td>▲</td>
<td>○</td>
</tr>
<tr>
<td>Operators (PTK, IPKO, Kujtesa, ARTMotion)</td>
<td>●</td>
<td>▲</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Independent Media Commission</td>
<td>▲</td>
<td>▲</td>
<td>▲</td>
<td>●</td>
</tr>
<tr>
<td>Ministry of Economy and Finance</td>
<td>▲</td>
<td>■</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Parliamentary Commission for Telecommunications</td>
<td>●</td>
<td>▲</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Ministry of European Integration</td>
<td>▲</td>
<td>▲</td>
<td>■</td>
<td>■</td>
</tr>
<tr>
<td>European Commission Liaison Office</td>
<td>▲</td>
<td>▲</td>
<td>■</td>
<td>■</td>
</tr>
<tr>
<td>ICT Association (STIRK)</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Kosovo Private Enterprise Program</td>
<td>●</td>
<td>○</td>
<td>■</td>
<td>●</td>
</tr>
<tr>
<td>USAID</td>
<td>●</td>
<td>●</td>
<td>■</td>
<td>●</td>
</tr>
<tr>
<td>World Bank</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>Public</td>
<td>●</td>
<td>●</td>
<td>●</td>
<td>●</td>
</tr>
</tbody>
</table>

In order to update existing reports and statistics of the electronic communications sector in Kosova, it was tried to get the most up-to-date information from the telecommunications operators in Kosova, Telecommunications Regulatory Authority (TRA), Independent Media Commission (IMC), Ministry of Transport and Communications (MTC), and the Ministry of Economy and Finance (MEF) which are the key stakeholders in electronic communications.

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8 Term Responsible is used to explain direct implementation role of the entity, while term accountable mean the policy and legal responsibility of the certain entity.
sector. The Governance structure of the key stakeholders and their respective responsibility are presented in Figure 1.1.

Fig 1-1. Key Stakeholders in the electronic communications sector- Governance structure

The Ministry of Transport and Communications (MTC) has the responsibilities to develop policies and legislation for the provision of services and facilities in the sector of telecommunications and information technology. In the field of telecommunications, the Ministry monitors compliance with the European standards covering tariffs and fees, quality of service and technical standards; develops policies to promote competition and better services for consumers.

The Telecommunications Regulatory Authority (TRA) is responsible for implementing the telecommunications sector policy issued by Kosova’s Government in compliance with the relevant legislation; adopting regulations and instructions under the Telecommunications Law; issuing licenses and authorizations for the provision of telecommunications networks and services in Kosovo, and management of the numbering and spectrum resources.

The Independent Media Commission (IMC) is the independent broadcast regulator in Kosova. IMC manages broadcast frequencies, and maintains fairness in competition among broadcasters. The IMC’s activities include monitoring broadcast coverage of current events, commenting on media-related legislation, evaluating complaints, and enforcing its
regulations and the terms of its licenses. The IMC must ensure that media respect the rights of the people to free expression and diversity of opinion; and the rights of the people to fairness and accuracy, not only in news but in advertising as well. It also ensures that media protect the interests and sensitivities of children, the rights of minorities and the varied cultures in Kosova.

The Ministry of Economy and Finance (MEF) through publicly owned enterprises Monitoring Unit manages and controls incumbent telecommunications operator Post Telecommunications of Kosova j.s.c (PTK). MEF Minister is also leading the Intergovernmental Commission for PTK privatization. The privatization of PTK will have great impact for the future development of Kosova’s telecommunications sector.

The Parliamentary Commission for Telecommunications- Reviews and prepares draft laws, amendments, and draft resolutions to the Kosova’s Assembly pertaining Telecommunications sector. Requests from the minister reports or clarifications for particular issues related with telecommunications. This Commission may also suggest measures that need to be taken by the Assembly or the government and the Ministry of Transport and Communications.

Regular annual reports are already issued by Cullen International a consultant company which is implementing a second round of the three year project of the European Commission for the project “Supply of services in monitoring regulatory and market developments for electronic communications and information society services in Enlargement countries (2008-2010)”\(^9\). The Fourth Forum of this observatory for monitoring of electronic communications and information society services in the Enlargement countries took place in Sarajevo (Bosnia and Herzegovina) on November 4 and 5, 2010. In this Forum one of the main discussion themes was “The content of the fourth comparative report prepared by Cullen International”.

The field work is performed mainly in Kosova, but visits and meetings in neighboring countries and in Brussels were part of our research work. The research work involved collecting information (qualitative and quantitative) about four key issues from different sources (reports, books, journals, newspapers, magazines, libraries, databases and the

\(^9\)http://www.cullen-international.com/cullen/projects/balkan2/welcome2.htm
Internet), present them to the stakeholders, debate about relevant aspects, and in the end try to give the best possible recommendations for the particular issue.

The entire project is based on exchanging information, reviewing current situation in terms of policies, regulation, and market development; studying best practices within and outside of the EU member states, and discussing all these issues with all stakeholders. After extensive discussions and presentations, but prior to giving any recommendations everything is analyzed and reviewed by the project advisors.
2. Telecommunications Market Structure

In this chapter are presented extensive market data for Kosova’s telecommunication sector and comparisons of those data with regional countries, and the EU 27.

2.1 Fixed Sector

Even though penetration is very low 4.81%, fixed telephony services continued to stay in the same numbers or slightly declined for the last six years in Kosova. In comparison to regional and other EU countries this penetration is very low. The average penetration rate of the eight regional countries is 26% (July 2009)\(^{10}\), while EU countries have 40% average penetration rate.

Fig 2-1. Fixed lines per 100 population is South East European Countries in percentage [3]

<table>
<thead>
<tr>
<th>Year</th>
<th>Croatia-HR</th>
<th>Macedonia-MK</th>
<th>Turkey-TR</th>
<th>Albania-AL</th>
<th>Bosnia and Herzegovina-BA</th>
<th>Montenegro-ME</th>
<th>Serbia-RS</th>
<th>Kosovo-XK</th>
<th>SEE 8</th>
<th>EU 27</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>37.8%</td>
<td>29.2%</td>
<td>29.2%</td>
<td>8.7%</td>
<td>24.7%</td>
<td>30.6%</td>
<td>33.8%</td>
<td>5.2%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2006</td>
<td>37.1%</td>
<td>26.5%</td>
<td>25.9%</td>
<td>8.9%</td>
<td>25.2%</td>
<td>28.7%</td>
<td>34.3%</td>
<td>5.2%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2007</td>
<td>37.1%</td>
<td>24.5%</td>
<td>25.8%</td>
<td>9.1%</td>
<td>25.3%</td>
<td>26.8%</td>
<td>36.3%</td>
<td>5.4%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2008</td>
<td>37.5%</td>
<td>22.7%</td>
<td>25.1%</td>
<td>9.2%</td>
<td>26.7%</td>
<td>28.2%</td>
<td>38%</td>
<td>4.4%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2009</td>
<td>38.5%</td>
<td>22%</td>
<td>25%</td>
<td>10.3%</td>
<td>25.5%</td>
<td>28.2%</td>
<td>41.1%</td>
<td>4.6%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jul-09</td>
<td>38.5%</td>
<td>19.5%</td>
<td>24.5%</td>
<td>11.3%</td>
<td>26.1%</td>
<td>26.4%</td>
<td>41.8%</td>
<td>4.8%</td>
<td>26%</td>
<td>40%</td>
</tr>
</tbody>
</table>

Source: Cullen International [3]

\(^{10}\) Croatia, Macedonia, Serbia, Bosnia&Herzegovina, Albania, Turkey, Montenegro, and Kosova
The Post Telecommunications of Kosova (PTK j.s.c) as an incumbent operator still keeps dominant position in this sector. Two alternative operators are licensed by the Telecommunications Regulatory Authority to offer fixed line services IPKO (2006), and Konet (2009). IPKO started commercial services in 2008, while Konet is not yet present in the market. PTK j.s.c completed full digitalization of its fixed line network in the end of 2007.

**Fig 2-2. Fixed Telephony market share based on number of connections**

- PTK j.s.c ~ 91.27%
- IPKO ~ 8.73%

**Fig 2-3. Subscribers using alternative providers as percentage of total number of fixed lines [3]**

Source: Cullen International [3]

Fixed telephony market share of alternative operators is very low in all enlargement countries except Croatia. In Turkey and Macedonia this share is growing, and in Kosova is showing promising signs. The continued dominance of the incumbent operators is very clear in all countries.
2.2 Mobile Sector

Mobile service sector in Kosova is more competitive. There are 2 GSM- Mobile Network Operators (MNOs), and two Mobile Virtual Service Operators (MVNOs) providing services in Kosova licensed by TRA. The incumbent’s (PTK j.s.c) mobile subsidiary, Vala was issued the first GSM license in the 900 MHz spectrum in July 2004. On March 6, 2007, following an international tender procedure, TRA granted the second GSM license in the 900 MHz and 1800 MHz to IPKO. Based on the Telecommunications Sector Policy and following the adoption of the regulatory framework for MVNOs in May 2008, TRA issued two MVNO licenses in June 2008. One of the MVNOs, Z-Mobile, operates based on a network access agreement with Vala, while the second, Dukagjini Telecommunications, has concluded an agreement with IPKO.

In addition to the operators licensed by TRA, two mobile operators licensed in Serbia maintain their presence in Kosova without authorization from the Kosovan authorities. [3]

No decision on 3G/UMTS licenses has been adopted yet in Kosova.

In the Figure 2-4, is presented mobile market growth from 2003 to July 2010.

Fig 2-4. Mobile penetration rates in Kosova 2003-2010

As we can see from the Figure 2-4, after the introduction of competition in 2007 it is rapid increase of mobile penetration, from 29% (2007) to 54% (2008).
Table 2-1. Mobile market players- their market share (SIM & Revenues)

<table>
<thead>
<tr>
<th>Market Players</th>
<th>Vala</th>
<th>Ipko</th>
<th>D3</th>
<th>Zmobile</th>
</tr>
</thead>
<tbody>
<tr>
<td>Market share (user - SIM)</td>
<td>66.35%</td>
<td>31.87%</td>
<td>0.81%</td>
<td>1%</td>
</tr>
<tr>
<td>Market share (revenue)</td>
<td>79.53%</td>
<td>20.37%</td>
<td>~</td>
<td>~</td>
</tr>
<tr>
<td>Prepaid subscribers</td>
<td>96.50%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Postpaid subscribers</td>
<td></td>
<td></td>
<td>3.50%</td>
<td></td>
</tr>
</tbody>
</table>

Even though the market share of the incumbent operator Vala decreased, they are still keeping subscribers with higher spending for mobile services. While market share of Vala in terms of users is 66% and IPKO has 32%, the difference of the market share in terms of revenues is very big 80% Vala, 20% IPKO. This is showing a great advantage of the incumbents in comparison with new entrants in the countries where the regulation is still not very developed.

Fig 2-5. Growth in Mobile penetration 2005-2009 in SEE [%]

<table>
<thead>
<tr>
<th>Country</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
<th>2009</th>
<th>Jul-09</th>
</tr>
</thead>
<tbody>
<tr>
<td>Croatia</td>
<td>64%</td>
<td>82.1%</td>
<td>99%</td>
<td>113%</td>
<td>132%</td>
<td>141%</td>
</tr>
<tr>
<td>Macedonia</td>
<td>49%</td>
<td>62%</td>
<td>70%</td>
<td>96%</td>
<td>124%</td>
<td>92%</td>
</tr>
<tr>
<td>Turkey</td>
<td>49%</td>
<td>61%</td>
<td>72%</td>
<td>89%</td>
<td>92%</td>
<td>89%</td>
</tr>
<tr>
<td>Albania</td>
<td>39%</td>
<td>49%</td>
<td>61%</td>
<td>73%</td>
<td>92%</td>
<td>110%</td>
</tr>
<tr>
<td>Bosnia</td>
<td>34%</td>
<td>42%</td>
<td>49%</td>
<td>64%</td>
<td>83%</td>
<td>82%</td>
</tr>
<tr>
<td>Montenegro</td>
<td>78%</td>
<td>88%</td>
<td>103%</td>
<td>169%</td>
<td>186%</td>
<td>226%</td>
</tr>
<tr>
<td>Serbia</td>
<td>58%</td>
<td>74%</td>
<td>89%</td>
<td>113%</td>
<td>115%</td>
<td>119%</td>
</tr>
<tr>
<td>Kosovo</td>
<td>16%</td>
<td>18%</td>
<td>30%</td>
<td>54%</td>
<td>59%</td>
<td>71%</td>
</tr>
<tr>
<td>SEE 8</td>
<td>48%</td>
<td>59%</td>
<td>71%</td>
<td>96%</td>
<td>110%</td>
<td>116%</td>
</tr>
<tr>
<td>EU 27</td>
<td>85%</td>
<td>95%</td>
<td>103%</td>
<td>112%</td>
<td>119%</td>
<td>121%</td>
</tr>
</tbody>
</table>
The great majority of customers use the prepaid service, rather than the subscription or postpaid service (see Figure 2-6). In Kosova nearly all the customers are prepaid. The very high levels of pre-paid customers raises questions about the move to broadband and mobile value added services, where a different business model may be necessary.

2.2 Internet Services Sector

Internet service sector is much more competitive in Kosova. There are 13 licensed Internet Service Providers (ISPs). The major ISPs in the market are IPKO, PTK, and Kujtesa. The incumbent ISP’s market share is low (around 20% by number of connections), IPKO has 60% of the market, while Kujtesa around 17%. Internet penetration has reached 36%, more than 6% are broadband connections. The majority of the broadband connections are offered by alternative ISPs over wireless, and cable infrastructure.

Fig 2-7. Internet penetration rates in Kosova 2003-2010
The number of ISPs active in the market may appear impressive in Kosova. However, the majority of the retail market is controlled by three ISPs. IPKO and Kujtesa are good examples and a success story of local young entrepreneurs. The Figure 2-8 shows that the incumbent operators are very slow on grabbing new markets which do not rely on heavy and costly telecommunications infrastructure. New entrants in the very beginning used fast deploying wireless infrastructure, and now they are more oriented toward deploying cable and broadband fiber in the main Kosova’s cities.

**Fig 2-9. Broadband Internet Penetration in SEE 2010 [%]**

- IPKO ~ 60%
- Kujtesa ~ 17%
- Others ~ 3%
- PTK j.s.c ~ 20%

Broadband penetration rate, measured as the overall number of broadband lines divided by the national population, is significantly below the EU-27 average rate that in May 2010 was

*Source: Cullen International [3]*
24.8%. The average broadband penetration rate for the eight countries was 8.3%. The highest broadband penetration level was observed in Croatia (14.5%), above the level of Romania and Bulgaria that joined the EU in 2007. [4]

In the figure below it is shown composition of electronic communications market in SEE countries in 2008. As we can see Mobile communications is over 50% in all countries of SEE, in Kosova and Albania this percentage is even higher- over 80%.

**Fig 2-10. Composition of electronic communications markets in SEE in 2008 [4]**

![Composition of electronic communications markets in SEE in 2008](image)

*Source: Cullen International [3]*
3. Four Key Issues in Telecommunications

Even though the current framework created conditions for market liberalization and tariff regulation of operators it had significant barriers for market development. There were relatively weak competition policy and consumer protection provisions. This chapter identifies four key market and institutional aspects of the electronic communications market in Kosova that have negative economic impact on the sector. These are:

1) Market access and authorizations;
2) Convergence of broadcasting and telecommunications;
3) Quality of Service and consumer protection; and
4) National Regulatory Authority.

The chapter than explains how each of these four markets and institutional aspects are derogations from best practices, as defined by current EU directives. Data is also presented on the barriers to market growth and development by retaining these derogations in place.

3.1 Market access and authorizations

The law on telecommunications (2002) in Kosova gives TRA the sole power to issue authorizations and licenses to provide telecommunications services in Kosova. TRA shall consider all applications on merits and in determining whether or not to grant a license or authorization document, the TRA must take into account are applicants qualified as defined by law, are financially secure, technically competent and able to operate in accordance with the law on telecommunication so that TRA be able to fulfil its responsibilities and to exercise the rights defined by the law on telecommunications. Use of radio spectrum is authorized in separate individual licenses.\(^{11}\) TRA must be satisfied that an applicant for an individual license has sufficient resources, skills and expertise to put the scarce resources underlying an individual license to efficient use.\(^{12}\) In the event of limited radio frequency, as determined

\(^{11}\) See Regulation on granting license for the right to use radio frequencies, [http://www.art-ks.org/docs/regulation/Regulation_on_Granting_the_License_for_the_Right_to_Use_Radio_Frequenciesfull11_1.pdf](http://www.art-ks.org/docs/regulation/Regulation_on_Granting_the_License_for_the_Right_to_Use_Radio_Frequenciesfull11_1.pdf)

by the TRA, the TRA shall select licensees by way of a tender or auction process pursuant to applicable law. TRA shall recommend or decline completed application forms within 90 days upon receipt. If recommended, the individual license grant will normally be approved within 30 days from recommendation, and if needed, it can be postponed for not more than 30 days.

The law on telecommunications (2002) introduced market liberalization, but the authorization framework enabling competitive market entry was implemented only in 2006. Furthermore, the incumbent maintained a monopoly over international gateway facilities until January 1, 2008. However this law established a comprehensive regime of individual licenses for almost all communications services in Kosovo, which led to the issuance of two licenses in 2004 (fixed and GSM mobile License) to the incumbent operator Post and Telecomm of Kosova (PTK), and several other licenses for Internet Service Providers (ISPs).

The authorization regime in Kosovo is based on individual and class licenses with application fee €50, one-off fees ranging from €2,500 for Value Added Services, €5,000 for the provision of Internet services to €87,000 for national fixed services. Based on the “Regulation on Licensing and Authorizations” issued by TRA Board on 2005 the annual fee which should be paid by authorized operators is 1% of gross annual turnover attributable to licensed activity. These fees as well as the one-off fees are the highest fees in Europe.

3.2 Convergence of Broadcasting and Telecommunications

The convergence of the digital technologies suggests that all forms of networks, including broadcasting networks, can compete for the delivery of voice, data and internet services as well as radio and television broadcasting content. This raises the question of whether all electronic communications networks, including broadcasting transmission networks, can be brought under a single regulatory framework.

For reasons having to do more with politics than with communications, the legislative framework in Kosovo and other related instruments created a bifurcated regime that left almost all decisions over broadcasting to the Temporary Media Commissioner, which

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ultimately became the Independent Media Commission (IMC) after the independence. Even Kosova’s Constitution which came into force on 15th of June, 2008, in article 141 states that “Independent Media Commission is an independent body, which regulates the Range of Broadcasting Frequencies in the Republic of Kosovo, issues licenses to public and private broadcasters, establishes and implements broadcasting policies and exercises other competencies as set forth by law”. This bifurcated regime is having impact on different regulatory processes like licensing, spectrum and it is expected to impact interconnection, universal services, numbering, and analog/digital switchover strategy as well.

3.3 Quality of Service and Consumer Protection

In Kosova, the problem of QoS in telecommunications sector is one of the biggest issues. Often quality is very poor on all parameters. This particularly applies to the Internet technology and services based on IP platform. Internet is presently a ‘best effort’ network, which is not a big problem for most data communications, as smaller delays are unimportant for the transmission of data files, and as packets can be re-transmitted. However, it does constitute a problem for real-time communication as VoIP and IPTV services.

Quality of Service (QoS) obligations do exist in Kosova and the ETSI EG 201 769-1 standards are followed for the method of measurements. However, the Telecommunications Regulatory Authority does not monitor and ensure (e.g., with use of penalties) compliance of the services offered with the corresponding ETSI standards. Free access to emergency services is a universal service condition in the license of all providers. But services offered from GSM service providers as SMS and GPRS are not included in the list of services which shall comply with any service quality targets established by the TRA.

Under the current regulation for Consumer Protection issued by TRA on 2007 regarding QoS obligations, “Service providers shall offer their consumers quality services of approved

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16 See http://kuvendikosoves.org/common/docs/Constitution1%20of%20the%20Republic%20of%20Kosovo.pdf
standards, in the territory of their operation. In exceptional cases, the consumer may reach an agreement with the provider for a higher quality service, upon payment. All service providers in Kosova are obliged to offer to the consumer complete, correct and exact data/information on service characteristics; price, quality, usage and maintenance method, and service risk. Table 2-1 shows the results of QoS measurements for key parameters according to ETSI indicators for the incumbent operator PTK.

Table 3-1. Quality of service measurements of fixed incumbent operators PTK

<table>
<thead>
<tr>
<th>Supply time for initial connection</th>
<th>Fault rate per access line per year</th>
<th>Fault repair time (hours: minutes)</th>
<th>Unsuccessful call ratio</th>
<th>Call set-up time (seconds)</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.4 days</td>
<td>0.3%</td>
<td>24 hours</td>
<td>0.2%</td>
<td>0.50</td>
</tr>
</tbody>
</table>

The transparency rules are requiring that consumers should be clearly informed before signing a contract about any restrictions to the use of the fixed or mobile service and any traffic management techniques that have an impact on service quality.

3.4 National Regulatory Authority for Telecommunications

The Telecommunications Regulatory Authority (TRA) was established under the Telecommunications Law of 2002 (UNMIK Regulation 2003/16) and officially started its operations in January 2004. TRA is responsible for implementing the telecommunications sector policy in compliance with the relevant legislation, adopting regulations and instructions under the Telecommunications Law; issuing licenses and authorizations for the provision of telecommunications networks and services in Kosova, management of the numbering and spectrum resources. TRA is managed by the Board that consists of five members who are appointed and relieved from office by the National Assembly, at the proposal of the Government with the recommendation from the Minister of Transport and Communications. Their term of office is five years with a possibility of a reappointment for

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one more consecutive term. The Minister of Transport and Communications, acting in consultation with the Prime Minister designates one member of the Board to be the Chairman of the Board, who is also responsible for the administration and operational issues. TRA is established as a self-funded body and non-profit legal entity, with the main sources of financing collected through the application of fees under the Telecommunications Law, including authorizations, licensing, and assignment of numbers and rights to use spectrum resources. Official acts and decisions of TRA can be appealed before the administrative court by any party with standing through the appeal procedures.

a). Independence

Even though amendments on the telecommunication law of 2002 in 2008 have removed section 5(4) stating that “all funds collected by the TRA shall be deposited in line with the applicable budget procedures pertaining to all Government funds in Kosovo, still TRA was required by the Ministry of Economy and Finance (MEF) to make all payments through the treasury, the same as all other budgeted agencies, and in practice was not able to manage its funds independently. Even if the regulator’s independence is stated in the strongest statutory terms, its obligation to submit its budget for legislative approval can be used as a political tool to skew its independent exercise of decision-making judgment.

Incumbent Operator Post and Telecommunications of Kosova- PTK j.s.c is 100% in the government ownership. Kosova’s Government has decided to privatize 75% of the shares of PTK, while 25% of shares will remain in the hands of the Government. The privatization process of PTK, according to the Government, should be completed by the end of this year, but in practical terms it will not be completed until end of 2011.\(^{18}\) It is considered that decrease of the state shareholding, facilitates the effectiveness of the independence of the Regulator. When the state owns a controlling share in the incumbent operator, the regulator’s independence can be compromised by the state’s incentive to maximize the value of its share interest.

Figure 2-1, shows the state ownership of the telecommunications operators present in the SEE region, including parent firms such as the Austrian, German and Saudi incumbent operators. [4]

b) Capacity of the Regulator

Under the treasury payment procedures, the salaries of TRA staff have been linked to civil servant pay scales, which made it impossible for TRA to decide independently on its staff salaries and to be able to attract and retain professional resources. It is a big concern the small number of staff handling electronic communications regulatory tasks.

c) Enforcement powers of the Regulator

The TRA have the power to impose fines directly. The maximum fine is €250,000. The TRA have the power to suspend the commercial offers as well.

d) Dispute resolution

Dispute resolution mechanism of TRA cover disputes between operators, between operators and end users. The deadline for resolving the dispute is within six weeks.

e) Transparency and participation

According to the principle of transparency, TRA processes should allow for formal consultation of the stakeholders before decisions are made. The TRA have established
practice to organize public consultation on most decisions. The average period for comments is 30 days. However comments and responses received after public consultation are not published regularly. Based on the law on telecommunications TRA is obliged to publish all decisions on their website. The TRA observes these requirements, but there is very little participation by stakeholder groups in these processes.

f) Market analysis and SMP designation

“The European Commission defines Significant Market Power- SMP as the ability of a firm to act independently of competitors and customers”.

Under the EU regulatory framework, companies that are found to have SMP are subject to additional ex-ante regulatory obligations. This allows telecommunications regulators to impose ex-ante regulatory obligations on firms with SMP, such as:

- Obligations to align interconnection prices with costs,
- Accounting separation requirements, and
- Mandatory publication of reference interconnection offers.\(^{19}\)

The TRAs have no restrictions in collecting the information in order to be able to carry out market analysis. The provisions on definition of the relevant markets it is left to the entire discretion of the TRA.

25% market share threshold is used as a basis for SMP designation and a minimum set of remedies must be automatically applied to the SMP operator while the TRA can add additional remedies on its own discretion.

TRA did not carry out any market analysis yet. However based on the provisions of the Telecommunications Law, the fixed incumbent operator PTK is deemed to have SMP in the market for public fixed telephone networks and services, while its mobile subsidiary, Vala, has SMP in public mobile services.

g) Competitive safeguards

TRA board approved regulation on **Carrier Selection and Carrier Pre-selection** (CS/CPS), but the implementation of this regulation will start on 2011.

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\(^{19}\) See [http://www.ictregulationtoolkit.org/en/Section.1711.html#Definition](http://www.ictregulationtoolkit.org/en/Section.1711.html#Definition)
No clear deadlines have been established for **Number Portability** since Kosova is lacking Country Code. Serbian country code (+381) is being used by fixed networks, while the mobile operators use two other country codes: Vala uses Monaco’s code (+377), while IPKO uses the Slovenian code (+386).

The **Reference Interconnection Offer** (RIO) of the fixed incumbent operator, PTK, was approved by the TRA on January 2007, while there is no clear deadline for the implementation of **Local Loop Unbundling** (LLU) Regulation.

In May 2008, the TRA adopted a policy framework for Mobile Virtual Network Operators-MVNOs and issued licenses to two MVNOs. While there are no legal obligations for access, MVNOs can be launched on the basis of a commercial agreement with one of the two MNOs.

Based on the European Bank for Reconstruction and Development (EBRD) assessment regarding regulatory regime of Kosova’s regulator, TRA is deemed to have “Medium compliance” with current EU regulatory regime. See in Figure 3-2, spider diagram, and in the Figure 3-3 diagram of the regulatory assessment of the South East European Countries.

**Fig 3-2. Kosova’s TRA Spider Diagram [9]**

Source: European Bank for Reconstruction and Development (EBRD)
Fig 3-3. Regulatory assessment for SEE countries [9]

Source: European Bank for Reconstruction and Development (EBRD)
4. Market Access and Convergence

The evolution and growth of electronic communications is technology-driven to a far greater extent than other economic sectors. New communications technologies and advances in networking and ICT services often outpace the parameters of the regulatory regime for the oversight and governance of the market. Therefore, sector policy, law, and regulation must evolve rapidly to keep pace with technology developments to avoid the creation of those barriers to the introduction of new business models and innovative products and services. Thus, every three to four years, policies and regulations will be revised in a modern regulatory regime.

This chapter discusses difficulties in electronic communication sector in Kosova caused by complicated and bifurcated regime for market entry, the removal of legal and regulatory barriers to market entry, and the range of regulatory tools available to reduce entry barriers in the converged electronic communications environment.

This Chapter also discusses the evolution of regulatory approaches to electronic communications in the European Union and compares them to the relatively more static approach in Kosova in the area of communications convergence. First, the evolution of services markets and the concept of conversion are defined and illustrated. Next, the regulatory approach to convergence is discussed. And, finally, the economic impact of these regulatory approaches is illustrated.

4.1 Simplification of Market Entry

The economic literature has shown that, even in markets where the number of licenses is unlimited, the maintenance of high license fees, both for the initial and ongoing turnover-based annual fees, can serve as a regulatory barrier to market entry. Where the barrier is high enough to operate as a complete disincentive to entry, entry will be foregone and market concentration will either be maintained or reduced at a much slower pace. Even if a firm does decide to pay the fee and enter, its pricing strategy must necessarily be affected by the higher capital investment that it must recapture as the result of high initial license fee, whether it is paid in a lump sum or installments. Pricing strategy will also be affected by the higher annual operating costs that the firm must recoup as the result of having to pay
high annual license fees. In the event, the new entrant likely will have to endure a more difficult and longer period before it will be able to capture a sustainable market share in relation to the incumbent. Moreover, the cost of the regulatory barriers creates an artificial price floor for all competitors, which leads, in turn, to higher prices and a corresponding consumer welfare loss. These conclusions follow from the proposition that competition encourages innovation and efficiency, whereas firms in more concentrated markets are slower to invest and improve operations.\textsuperscript{20} Both theoretically and empirically, the elimination of barriers to entry has an overall positive effect on innovation and productivity growth in an economy.

Recognizing this, and knowing that promoting access to low cost, high quality electronic communications services has a direct stimulative effect on ICT businesses that depend on such services as an input and lowers the operational costs for businesses in all sectors across the wider economy, in 1998 the European Union issued the Licensing Directive that required that license fees must be tied to the administrative costs of licensing and other regulatory oversight functions in the sector. This is consistent with the general trend in all the countries of the Organization of Economic Cooperation and Development (OECD) and for basic telecommunications, the provision of the World Trade Organization’s (WTO) General Agreement on Trade in Services.

**Fig 4-1. Number of Licenses issued by TRA**

In Kosova to date, TRA has issued 46 licenses for the provision of telecommunications services within the territory of Republic of Kosova. Dynamic of issuance of the licenses, and the number and type of licenses issued by TRA are shown in the Fig 4-1, and Table 4-1.

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\textsuperscript{20} Recent empirical work shows there is an ‘inverted-U’ shape relationship between innovation and the level of competition. At first, an increase in rivalry leads to an increase in innovation. But as the level of rivalry increases, the innovative activity reaches a maximum value and additional rivalry reduces the level of innovation. See P. Aghion and R. Griffith, *Competition and Growth: Reconciling Theory and Evidence* (2005).
Table 4-1. Type and number of licensed telecommunications operators in Kosovo

<table>
<thead>
<tr>
<th>License type</th>
<th>Number of licensed operators</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mobile telecommunications license (MNO)</td>
<td>2</td>
</tr>
<tr>
<td>National fixed services license</td>
<td>3</td>
</tr>
<tr>
<td>Internet services license</td>
<td>13</td>
</tr>
<tr>
<td>International telecommunications services license</td>
<td>5</td>
</tr>
<tr>
<td>International facilities telecommunications license</td>
<td>5</td>
</tr>
<tr>
<td>Value added service license</td>
<td>16</td>
</tr>
<tr>
<td>Mobile virtual services license (MVNO)</td>
<td>2</td>
</tr>
</tbody>
</table>

As we can see from the Table 4-1 forty six (46) licensed operators exist today, but only four are significant market players. The present licensing structure in Kosovo is designed to authorize the operation of separate defined fixed and mobile networks and services, deploying standard fixed wire line and mobile radio technologies. Use of radio spectrum is authorized in separate licenses. The licensees have clear, well defined rights and obligations and the regulator has a reasonable degree of regulatory discretion in the detailed application of the rules to deal effectively with changing circumstances. The structure has proved appropriate to the stage of telecommunications technology and market development that has so far been achieved in Kosovo. However, this structure is not adequate for the licensing of networks and services in the converged telecommunications environment that is now envisaged.

Convergence can be defined as the restructuring of the electronic communications services sector that is enabled by digitalization. Convergence not only effects telecommunications and broadcasting but the entire services sector, because the use of digital network technology extends into new health, education, entertainment, print and financial services based electronic text, still pictures, and electronic transactions. Convergence also affects the structure of the electronic communications sector, because digitalization firms to offer services that were once thought to be discrete, such as fixed-line voice telephony, mobile telephony, data transmission, and media, over a single, fiber-based hybrid network. Convergence is enabled by technological change that enables firms to exploit new
economies of scale and scope\textsuperscript{21}. To compete most effectively in a convergent world, firms must be able to offer end-to-end service connectivity using a variety of technologies. Similarly, they must be able to offer a full array of convergent services. “Government intervention in these activities is becoming progressively more difficult because the current policy framework relies on traditional assumptions about industry structure and market scope which are increasingly irrelevant”\textsuperscript{22}.

This is true in Kosova, where the licensing system is still largely based on outmoded services and technology classifications and categories. The bifurcated regulatory requirement impedes the ability of competitors to generate the new scale and scope economies that convergence allows. Thus a firm that wishes to offer a so-called “triple play” of broadband services using a fiber and coaxial cable based network must obtain as many as five, expensive licenses from two different regulator in order to run its business.

**4.2 New Regulation and Technologies, Convergence and EU Best Practices**

The European Union (EU) Directives separate regulation of content from the regulation of transmission, place specific limits on the regulation of transmission and permit EU member countries to regulate content in order to achieve social objectives. In 2005, the European Council submitted a proposal to modernize the Television without Frontiers Directive, which will be decided by the European Parliament and the Council. To keep up with convergence, technological progress and market developments, the proposal distinguishes between “linear services” (e.g., scheduled broadcasting via traditional television, the Internet, or mobile phones which “pushes” content to viewers), and “non-linear” services (e.g., video-on-demand, non-scheduled broadcasting, and web-based news which the viewer “pulls” from a network). Generally, linear services would be subject to stricter rules, while non-linear services would be subject only to a minimum set of principles. See [http://europa.eu.int/information_society/newsroom/cf/itemlongdetail.cfm?item_id=2343](http://europa.eu.int/information_society/newsroom/cf/itemlongdetail.cfm?item_id=2343).

In Kosova, this potential conflict of jurisdiction has never been harmonized. The national frequency plan is approved by the Assembly on the basis of the TRA proposal, and the TRA

\textsuperscript{21} This section of the document is based on studies by the European Commission and the Government of Australia.

should carry out all frequency assignments. Even though current telecommunications law establishes TRA effectively as the sole authority to allocate radio frequency spectrum, (subject to “Assembly review and approval in writing” of the TRA spectrum plan) however spectrum assignments for broadcasters, are done by Independent Media Commission. The Law on Independent Media Commission and Broadcasting foresees that the IMC shall coordinate the assignment of broadcasting spectrum with TRA. However practical aspects of this coordination have not been defined yet. Cooperation agreement between TRA and IMC on spectrum issues, licensing, etc. has not been defined. The European Commission has addressed the intersection and sharing of regulatory jurisdiction between agencies responsible for broadcasting and electronic communications. Directive 2002/21/EC of the European Parliament and of the Council of 7 March 2002 on a common regulatory framework for electronic communications networks and services (Framework Directive) (3) according to its Article 1(3) is without prejudice to measures taken at Community or national level, to pursue general interest objectives, in particular relating to content regulation and audiovisual policy.

In the United Kingdom, for example, the convergence of technologies in the communications sector was not initially reflected in the regulatory structure. There were five existing regulators (OFTEL, the ITC, the Radio Communications Agency, the Radio Authority and the Broadcasting Standards Commission) that covered different aspects of broadcasting and electronic communications, but they did not co-ordinate their responses to the cross-cutting issues that affected their respective jurisdictions. In 2003, the UK Communications Bill created a single regulator, OFCOM, combining the functions of OFTEL, the ITC, the Radio Communications Agency, the Radio Authority and the Broadcasting Standards Commission, and holding powers over a range of “communication matters” regardless of whether the means of transmission is over electronic communications networks or by broadcast.

By contrast, in Kosovo Cable TV (CATV) networks, which by definition are delivered over “electronic communications” networks, are outside the scope of the telecommunications legislation. They are subject to an individual license issued by the Independent Media Commission (IMC) under the Regulation on Cable Distribution of Radio and TV in Kosovo (CIMC 2007/04) of July 6, 2007. If the cable TV operator wants to provide other electronic communications services then the TRA has the authority to issue the required licenses. By
limiting its jurisdiction over CATV, including aspects that are unrelated to content regulation, the law in Kosovo unnecessarily erects regulatory barriers to entry. The European Commission has defined Next Generation Access Network (NGA) as “access networks which have been substantially upgraded either wholly or in part, using existing local access infrastructures and technologies and/or using new optical fiber infrastructures, and which are capable of delivering broadband access services with bandwidths significantly above those currently widely available.” By definition, this includes the hybrid fiber-coaxial cable networks use to deliver cable television. These networks are also capable of delivering voice and data services, and, indeed, the significant investment required in an NGA almost demands that the network operator provide a full range of services. In Kosova, deployment of an NGA would require full licenses from two different regulators, even though a single technology is used to deliver all of the services over one network. The bifurcation of jurisdiction in Kosova will also make it more difficult for regulation to address facilities-based competition policy concerns given that the two regulators do not coordinate. Based on the Law on Independent Media Commission and Broadcasting of July 8, 2005 broadcasting authority responsible for content issues is IMC.

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The complexity of communication services, the plethora of new services and the increasing purchase of bundled services through long term contracts have made it increasingly difficult to understand and compare services\textsuperscript{24}.

Maintaining quality of service standards, technical reliability, and increasing access to affordable electronic communications services, better protection of user rights, and improving consumer protection is very important for electronic communications operators, national regulators and users. This chapter discusses about most important aspects of QoS and consumer protection in electronic communication sector.

This Chapter also discusses the institutional and administrative aspects of the regulation of electronic communications sectors. Over the years, the clear trend around the world is towards the elimination of top-down, command regulation in favor of an oversight regime whose primary role is to ensure that market forces are allowed to drive the market. This means that regulation must focus first on eliminating uneconomic market distortions such as barriers to entry, the lack of transparency, and collusive behavior by competitors. First the Chapter describes and illustrates the importance of proper regulation. Then, it describes the various approaches to regulation that have been taken in the European Union and compares them to the current situation in Kosovo.

5.1 Establishment of Reliable Quality of Services & Consumer Protection

Many telecommunications services, particularly services which should be transmitted in real time are very sensitive when network performance is degrading and congestions are occurring during signal conveyance. Services which contain video content require high capacity networks to be transmitted. As a result of the convergence there may continue to be congestion problems particularly in wireless networks. Like all other services; services provided by means of electronic communications networks have a quality component, and a price component. In theory, the price component should relate closely to the quality component. Quality of Service (QoS) is defined in ITU-T Recommendation E.800 as “the collective effect of service performance, which determines the degree of satisfaction of a

\textsuperscript{24} OECD policy guidance for Protecting and empowering Consumers in Communication services
Another important service parameter is Grade of Service (GoS) which is defined in ITU-T Recommendation E.600 as “a number of traffic engineering variables to provide a measure of adequacy of a group of resources under specified conditions”. Due to difficulties in establishing GoS and QoS parameters, Service Level Agreements (SLA) has been adopted.

Nowadays National Regulators are mandated to address problems of QoS and Consumer Protection. Regulators shall perform a range of activities from defining and setting QoS measurements, to monitoring and enforcing QoS for consumers. Ultimately, consumer should reap the benefits from the enforcement of QoS, and consumer protection regulations.

The incompleteness of the QoS rules, the failure of the regulator to monitor them, and the unequal application of the regulatory standards to different technologies creates economic distortions in the market. Since there are at least two competitors in the market, consumer choice can to a certain extent be expected to control for lapses in service quality, because prepaid customers can readily switch between providers. (For technical issues such as call success rate, street level coverage, voice quality, and call drop out, the Mobile Virtual Network Operator (MVNO) is not considered, since it has the same characteristics as the wholesale provider). Nevertheless, in a concentrated market, a competitor only needs to offer marginally better quality in order to attract customers to switch. This reduces the incentive to make capital investment in better quality services, such as highest-quality mobile broadband. Consistent application and better monitoring would overcome this disincentive.

### 5.2 Functional aspects of the National Regulatory Agency for telecommunications in Kosova

Having a competent National Regulatory Authority (NRA) to monitor electronic communications is of key importance for the sector. Credible, coherent, and transparent regulations and an efficient, capable, and independent national regulatory authority are required if the benefits of electronic communications under the modern market-reliant approach to sector monitoring and supervision are to be achieved. Legal and regulatory frameworks are enablers of the telecommunications sector development.
Since 1990 the regulatory reform has been developed in 3 directions:

1. creation of independent and separate regulatory bodies in the countries
2. development of competitive market, and
3. privatization of incumbents

![Fig 5-1. Portrait of an era of regulatory reform [10]](image)

The number of separate regulatory authorities has increased from only 12 in 1990 to 153 at the end of 2009. Today, however, regulators face increasing expectations. Recently, the focus has shifted toward creating an enabling environment for investment, fostering market growth and ensuring effective digital inclusion for all. [10]

**Why and what to regulate**

In order to transition from state monopolies to an effective competitive environment in telecommunications sector, regulators must establish a regulatory framework that can resolve disputes, address anticompetitive behaviors, protect consumer’s rights, and achieve national goals such as universal access/service, industrial competitiveness or economic
productivity and growth. The introduction of competition does not mean regulation is unnecessary.25

Fig 5-2. Need for Regulation- Transition [11]

More regulation because private operator needs to know its rights and obligations and government needs regulatory framework for oversight over operator.

Greater need for regulation as regulator must implement tools to address new competitive market (e.g., rules regarding potential anticompetitive practices, licensing framework, universal service, tariffing).

More limited regulation as competitive market largely regulates itself if and thus there is a shift to more.

Source: Telecommunications Management Group, Inc

The typical functions of an independent regulatory body include licensing, management of scarce resources, and rule-making and enforcement. Regulators should perform these functions in a transparent manner encouraging public participation. The regulatory body should be autonomous when making its legal decisions and independent from the operators and political influence. In performing regulatory functions, the regulators must address some key issues such as provision of services, interconnection, universal access/service, tariffing policies, frequency allocation and assignment, quality of service, standardization/type approval, numbering, and competitive safeguards.

Potential investors consider regulatory environment as a crucial while deciding to invest in a particular country. Fig below shows relationships between regulation and investments in OECD countries in 2007.

Source: Telecommunications Management Group, Inc
Based on the correlation between regulatory scores and investments levels it is clear that better regulation leads to increased sector investments.

Source: European Competitive Telecommunications Association (ECTA), *Regulatory Scorecard*[^26]

6. Final Discussions, Conclusions and Recommendations

While there are dozens of issues that must be addressed to develop a new policy and regulatory framework in order to provide a stronger enabling environment for electronic communications this project report has focused on four key issues that have a direct effect on further opening and liberalizing the market, and in order that the growth potential of the electronic communications and the ICT sector can be unleashed. This chapter discusses these four key issues and provides specific recommendations for:

1. Removing barriers to market entry in the electronic communications sector so that a transparent and non-discriminatory “level playing field” where the same conditions exist on the electronic communications market for all operators and service providers is created;

2. Establishing consistent and reliable Quality of Service (QoS) and Consumer Protection rules and obligations;

3. Revisions to the regulatory framework to facilitate convergence in a consistent and flexible manner, including recommendations for establishment of the collaborative mechanisms between government bodies and proposed legislative revisions that will facilitate the better administrative governance in line with EU legislation and best practices;

4. Revisions to the regulatory framework regarding certain structural, organizational, and the functional aspects of the National Regulatory Agency for electronic communications sector. The specific recommendations will focus on regulatory independence, accountability, transparency, and improving the capacity of the National Regulatory Agency for electronic communications sector in Kosova.

6.1 Final Discussions

The Law on Telecommunications of Kosova was approved in 2002. Following independence, this Law was amended to eliminate the references to the United Nations and clarify the financial independence of the TRA. However, most of the substantive provisions remain

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intact from 2002. At the same, throughout Europe, starting with the United Kingdom and
the Nordic countries, a move towards market liberalization began to take hold. This
approach was expanded throughout Europe when in 1998 the European Commission
directorate for communications adopted a series of legislative Directives designed to open
communications markets. All EU members were required to bring their national legislation
for communications into compliance with these Directives by 30 June 1998.

The package of initial *acquis communautaire* addressed the end of de jure monopoly,
separation of the government regulator from telephone operations, interconnection, the
interoperability of communications networks, universal service and other key issues. In
2002, the EC issued an updated package of *acquis communautaire* that further advanced
concepts of market-based competition and liberalization while also addressing the policy
implications of the convergence of technologies for electronic communications.28 The key
Directives in the 2002 package addressed full competition through the elimination of
individual and class licenses in favor of a regime where only registration is required for an
operator or service provider to enter and begin business operations in the market.29

The only exception is for networks or services that require the assignment of radio
frequencies, where individual application is still required because the radio spectrum is a
limited resource. Furthermore, to address the increasing convergence of technologies, the
2002 *acquis* no longer distinguishes between telecommunications services, such as voice

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electronic communications networks and services, European Commission, Brussels (2002); European
Commission, Decision No. 676/2002/EC of 7 March 2002 on a regulatory framework for radio spectrum policy
in the European Community, European Commission, Brussels (2002); European Commission, Commission
networks and services, European Commission, Brussels (2002); European Commission, A market-based
approach to spectrum management in the European Union, European Commission, Brussels (2005); and,
European Commission, Communication on the Review of EU Regulatory Framework for electronic

29 See Cullen International,, *Monitoring Report III: Supply of services in monitoring regulatory and market
developments for electronic communications and information society services in Enlargement Countries*, at
(2010); Cullen International,. *Country Comparative Report: Supply of Services in Monitoring of South East
Europe - Telecommunications Services Sector and Related Aspects* (2007), at pp. 3-4, a at [www.cullen-
European Parliament and of the Council of 7 March 2002 on the authorisation of electronic communications
and value added services, but treats all electronic communications services alike, including broadcasting and the Internet.\textsuperscript{30} Lastly, the approach to regulation is no longer based on top-down, command regulation, i.e., where regulators set license conditions that they then enforce, but focuses instead on allowing competitive incentives and consumer choice to regulate the market. To enable a national regulator effectively to monitor an electronic communications market, modern laws include strong competition policies, consumer protection, and mechanisms, like number portability, carrier selection and carrier pre-selection, to enable consumer choice.\textsuperscript{31}

All EU countries, including newly added members from Southeastern Europe and the Baltic’s (e.g., Slovenia, Bulgaria, Lithuania, Estonia, etc.), have revised their basic laws that define the enabling environment for electronic communications. Countries that are candidates for accession (e.g., Macedonia, Croatia, Albania, and Montenegro etc.) have followed suit. The results have been dramatic: falling prices, more providers, a greater variety of services, and much larger ICT services sectors. As the number of businesses that depend on information technology has grown, employment and revenue in this sector has grown as well.\textsuperscript{32} “In South East European countries the adoption of the EU framework has been viewed as a defining step towards better functioning markets, as well as being an essential part of the EU accession process. The progress that some countries in this region have made in recent years has been remarkable, given their earlier records of relatively low investment and poor economic management”\textsuperscript{33}

In Kosova, however, ICT development remains stuck.\textsuperscript{34} The absence of a level playing field and a modern enabling environment based on an up-to-date law is only one of the reasons


\textsuperscript{32} See, EBRD Report, supra note 2, at 90.

\textsuperscript{33} Id., at Annex 1.2 (Telecommunications Regulatory Assessment) \url{www.ebrd.com/country/sector/law/telecoms/assess/annex.pdf}.

for the relatively static growth, but it is a critical factor that must be addressed. Accordingly, one key issue for Kosova in the electronic communications sector is to bring its legislation for electronic communications in line with the EU regulatory framework and market developments in order to eliminate barriers to market entry; promote competition and a level playing field, achieve Universal Service/Access, ensure optimal usage of scarce resources; and implement a more effective legal framework for the monitoring and supervision of the sector.

If Kosova is to become an information society, these challenges must be addressed. Meeting them is an essential precondition to achieving efficient and transparent sector governance, deploying new, modern communications technologies, and ICT services to meet user needs, and ensuring that consumer protection principles are followed by all operators and service providers. The immediate task is to bridge the gap between the existing policy/ regulatory framework in Kosovo and the key elements that were introduced in the EU with the 2003 package. Complete 2003 package is illustrated in the Figure 6-1.

Fig 6-1. European Union 2003 Legislative Framework

Failure to take the necessary market measures can lead to productivity gaps. Figure 6-2, below, compares GDP figures and the percentage of GDP represented by the electronic

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communications sector for five years from the countries in the region, the EU 27, and Kosova. Initially, the evidence shows significant GDP growth shortly after the countries in the region began to undertake electronic communications sector market opening initiatives such as the ones considered in this report. Kosova, by contrast, continues to lag.

Fig 6-2. Electronic Communications Sector in South East Europe as a percentage of GDP [%]

![Graph showing electronic communications sector market penetration as a percentage of GDP for various countries over time.]

Source: Cullen International [3]

<table>
<thead>
<tr>
<th>Year</th>
<th>Croatia-HR</th>
<th>Macedonia-MK</th>
<th>Turkey-TR</th>
<th>Albania-AL</th>
<th>Bosnia-BA</th>
<th>Montenegro-ME</th>
<th>Serbia-RS</th>
<th>Kosova-XK</th>
<th>EU-27</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>GDP (€bill)</td>
<td>Telecom Market</td>
<td>TM as a % of GDP</td>
<td>GDP (€bill)</td>
<td>TM as a % of GDP</td>
<td>GDP (€bill)</td>
<td>TM as a % of GDP</td>
<td>GDP (€bill)</td>
<td>TM as a % of GDP</td>
</tr>
<tr>
<td>2004</td>
<td>32.7</td>
<td>4.65</td>
<td>4.1</td>
<td>7.66</td>
<td>2.7</td>
<td>3.48</td>
<td>5.0</td>
<td>6.04</td>
<td>7.4</td>
</tr>
<tr>
<td>2005</td>
<td>35.7</td>
<td>4.92</td>
<td>4.3</td>
<td>7.78</td>
<td>3.1</td>
<td>3.58</td>
<td>5.8</td>
<td>6.18</td>
<td>8.7</td>
</tr>
<tr>
<td>2006</td>
<td>39.1</td>
<td>4.97</td>
<td>4.6</td>
<td>7.1</td>
<td>3.9</td>
<td>2.1</td>
<td>6.5</td>
<td>6.03</td>
<td>9.8</td>
</tr>
<tr>
<td>2007</td>
<td>42.8</td>
<td>4.61</td>
<td>5</td>
<td>7.38</td>
<td>4.2</td>
<td>2.26</td>
<td>7.1</td>
<td>6.69</td>
<td>11.1</td>
</tr>
<tr>
<td>2008</td>
<td>47.3</td>
<td>4.59</td>
<td>6.5</td>
<td>6.26</td>
<td>4.7</td>
<td>2.37</td>
<td>8.7</td>
<td>5.67</td>
<td>12.6</td>
</tr>
<tr>
<td>Growth</td>
<td>20.7%</td>
<td>19.6%</td>
<td>27.0%</td>
<td>30%</td>
<td>33%</td>
<td>41%</td>
<td>35%</td>
<td>12%</td>
<td>15%</td>
</tr>
</tbody>
</table>

*Real GDP Growth=(Year 2 Real GDP - Year 1 Real GDP)/(Year 1 Real GDP)*
The evidence also shows that overall electronic communications sector and firm revenue grows as barriers to entry are eliminated and price competition leads to customer growth. Because the pie is getting larger, individual market shares may also decline even as revenue increases.

Then, the percentage share of overall GDP of electronic communications, measured strictly as a stand-alone sector, starts to decrease. This is due in part to the fact that other sectors are growing more rapidly.

This is especially true for sectors that depend heavily on electronic communications as an input. At the same, lower priced and higher quality electronic communications services also lead to the broader use of ICT by all types of businesses and the availability of a wider variety of ICT applications and services. Increased ICT investment has two productivity-increasing effects: capital deepening and higher usage and usage spillovers.

Thus, market reforms to enable electronic communications to become widely available and more affordable are necessary incentives to facilitate the development of ICT infrastructure, and a precondition for this stimulative effect to take place.\(^\text{38}\) With the lower input cost of electronic communications, firms can employ ICTs to generate substantial productivity gains, which stimulate growth across all economic sectors.\(^\text{39}\)

An additional factor that lowers the percentage share of electronic communications of overall GDP is that electronic communications revenue tends to flatten as markets approach saturation and markets trend towards re-concentration. This would explain the relative percentages for the EU-27 countries, which liberalized in 1998, vis-à-vis a country like Montenegro, which is still not fully liberalized.

Thus, rather than indicating that revenue from electronic communications declines in the countries declines following the enactment of market reforms, the decline in the total GDP


share of electronic communications indicates that electronic communications contributes to the more rapid growth of other economic sectors.

6.2 Recommendations

a) Removing barriers to market entry

Licensing can become a barrier to market entry where it is characterized by delays, inconsistency and unnecessary burdensome regulations and administrative procedures.40

The key recommendations of this Capstone Report are that the system of individual and class licensing in Kosova should be eliminated in favor of an open-entry system based on registration for all networks and services markets of electronic communication sector, except, of course, in cases where scarce resources are needed such as numbers and use of frequencies in the limited bands of the frequency spectrum.

The licensing regime in Kosova shall be replaced by a regime based on notification and registration of electronic communications network operators and service providers. Under such a system, parties intending to engage in any electronic communications activities must notify the regulator of their commencement or intent to commence the activity under procedures to be set in regulations. Similar notifications would be required in cases of the intent and cease operations. However, no requirement for explicit authorization by the National Regulatory Agency before providing services will be required, unless potential operators do not require scarce resources to be used in order to provide services. Where operators require the use of scarce resources (i.e. numbers or radio spectrum) National Regulatory Agency will continue to use specific authorizations as a substitution of individual licenses.

This approach is consistent with the European Union’s Authorization Directive, which states:

i. The least onerous authorization system possible should be used to allow the provision of electronic communications networks and services in order to stimulate the

40 COM (1999) 539- Toward a new framework for Electronic Communications infrastructure and associated services
development of new electronic communications services and pan-European communications networks and services and to allow service providers and consumers to benefit from the economies of scale of the single market.

ii. These aims can be best achieved by general authorization of all electronic communications networks and services without requiring any explicit decision or administrative act by the national regulatory authority and by limiting any procedural requirements to notification only. Where Member States require notification by providers of electronic communication networks or services when they start their activities, they may also require proof of such notification having been made by means of any legally recognized postal or electronic acknowledgement of receipt of the notification. Such acknowledgement should in any case not consist of or require an administrative act by the national regulatory authority to which the notification must be made.

Provision of IP-based communications services including Voice over Internet Protocol- VoIP service shall be covered by general authorizations regime.

Of course, upon notification, an operator or service provider will have to pay an administrative fee to cover the costs of processing the notification and operators or service provider will have to pay an annual sector monitoring fee based on and designed to cover, the administrative costs of regulator operations.

Spectrum licensing and fees will still be required in cases of scarce frequency bands, such as those for GSM, 3G/UMTS or NGMN mobile services and others. However, the availability of a wide ranges of frequencies under transparent and technology neutral conditions are essential to promoting competition and investments. The technology neutral conditions for 900 MHz and 1800 MHz should be adopted by NRA.

Rights of Way (RoW) regimes remain dictated by local authorities. In order to simplify, and shorten delays for the grant of authorizations for RoW we do recommend one-stop shops to be available for operators in Kosova. Charges for granting RoW should be less expensive, and availability of access to ducts and sewers should be regulated by NRA as well.
In order to facilitate market entry NRA shall adopt flexible and liberal rules on the use of numbers. NRA shall ensure that effective number porting processes are in place including VoIP service.

This will require an amendment to the current Law on Telecommunications of Kosova and the issuance of new subsidiary legislation.

b) Quality of Service and Consumer Protection

One of the main functions of the electronic communications regulator is to ensure a specific level of QoS. This is mainly because of the point-to-point nature of a telecom network where networks allocate and distribute limited resources dynamically across multiple subscribers. Broadcasting networks, on the other hand, have different QoS standards because they traditionally have not allocated resources dynamically. But in the converged environment, broadcasting companies will have to be especially sensitive to QoS requirements if they begin to offer telecom services such as voice telephony or Internet service\textsuperscript{41}.

It is recommended that the National Agency for Electronic Communications the Quality of Service criteria shall specify independently of infrastructure and for types of service.

The technical quality of communication services provided to consumers can vary significantly and there is concern in some countries that some operators may degrade the quality of services provided to consumers to low levels and without the knowledge of the consumer.

In basic telecommunication services, in most developing countries, the pricing structure for individual services contains cross subsidization, which introduces inefficient decision making by the consumers as well as the investors and service providers.

The main objective for consumer protection is to enable a consumer to make informed decision.

\textsuperscript{41} See “Regulatory Trends in Service Convergence”- Global ICT Department- The World Bank 2007
The National Regulatory Agency for Electronic Communications and Postal Services of Kosova:

- Shall impose requirements on service providers to make sufficient information publicly available to inform consumers of the quality of services including, where practical, information on the variability in the quality of such service so that the customers can make comparisons between offers, prices, and quality of such services, and make informed choices;
- Shall ensure access to emergency services without respect to the type of communication service involved.
- Shall ask from operators that the time and costs associated with switching services by consumers be minimized

Consumers should have access to fair, easy-to-use, timely, effective and inexpensive dispute resolution and redress mechanisms, including, where possible, alternative dispute resolution services.

The role of regulators in dispute settlement should be made clear. The functions of regulators need to be well publicized.

Communication service providers should implement data security policies and measures to prevent unauthorized transactions and data breaches[^21].

**c) Convergence of Broadcasting and Telecommunications**

Transition to converged technology and service neutral licenses is giving rise to converged Regulators.

The objective is to rationalize regulatory regime and to separate the transmission aspects from the content. The new proposal is that

[^21]: OECD Policy Guidance for Protecting and Empowering Consumers in Communications Services
• the electronic communications regulatory framework has to do with the transmission network, technology, and associated electronic communications services; while
• the Broadcasting regulatory framework regulating the content;

With a partially converged institutional design, all communications services i.e., telecommunications including radio-communications, and broadcasting, shall be under the umbrella of the National Agency for electronic communications and postal services, while broadcasting regulator will dial with content issues. Like the single sector telecommunications regulator, the converged electronic communications regulator tends to be strong in specialized engineering skills in the communications sector, which is an important core expertise in dealing with complex network issues. This approach does not require any new authority but rather it requires appropriate institutional arrangements of existing authorities. Specific allocation of responsibilities between entities in ICT sectors shall not lead to delays and duplications in decision making.

So, we strongly recommend that National Regulatory Agency for Electronic Communications and Postal Services take over regulation for all electronic communications networks and associated services aspects together with the transmission and distribution aspects of broadcasting services while the Independent Media Commission will regulate the content aspects. In fulfilling their respective obligations two agencies have to improve co-operation between each-other, and with the competition authority, in order to ensure that their decisions are compatible with general competition rules.

d) National Regulatory Agency for electronic communications

The existence of an independent, strong, competent and efficient electronic communications regulatory agency, and correspondingly of a clear, consistent and reasonably stable regulatory policy, are essential prerequisites for the effective management and oversight of the electronic communications sector.
National Agency for Electronic Communications and Postal Services should be enabled to exercise, to the fullest possible extent, its proper regulatory authority, in a manner
consistent with worldwide Best Practices and with the general EU framework for electronic communications regulation.

In order to create good environment for the sector regulation number of key issues should be addressed:

\[ a\) \textbf{NRA independence} \]

- Privatization process in PTK should continue as soon as possible. This process must take into account both the potential benefits and the social consequences of the privatization. But prior to that PTK should finish the current reorganization and restructuring processes, with the overall objectives of enhancing assets and their value, lowering costs and improving efficiency. PTK as a restructured company will have higher market value. Selling just mobile part of PTK (Vala) will be the best option, because telecommunications companies are not interested at all for postal sector. In any case Kosova’s government should withdraw recommendation made to Telecommunications Regulatory Authority to lock-in the current number of mobile licenses in Kosova for five years from the sale of PTK in order to generate a higher return\(^{43}\).

- NRA must be structurally separated from the regulated companies

- political influence over the National Agency should be eliminated

This approach is consistent with the European Union’s Framework Directive, which states:

- \textbf{Structural independence}

- Member States shall guarantee the independence of national regulatory authorities by ensuring that they are legally distinct from and functionally independent of all organizations providing electronic communications networks, equipment or services.

- Member States that retain ownership or control of undertakings providing electronic communications networks and/or services shall ensure effective structural

\(^{43}\) For more opinions regarding PTK privatization see Appendix 3
separation of the regulatory function from activities associated with ownership or control.

– Article 3 (2), Framework Directive (2002/21/EC)

- **Political independence**
  
  • National regulatory authorities responsible for ex-ante market regulation or for the resolution of disputes between undertakings shall act independently and shall not seek or take instructions from any other body in relation to the exercise of these tasks assigned to them under national law implementing Community law.
  
  • This shall not prevent supervision in accordance with national constitutional law.
  – Article 3 (3a), Framework Directive (2002/21/EC), amended November 2009

  • Agency should be able to have its own bank account, and to receive and keep revenues from its regulatory, licensing and authorization processes.

- **Appointment and dismissal of NRA management**

It is very important for Kosova’s institutions to ensure that in the appointment procedures of the Board Members of the NRA are included the Government of Kosova and Kosova’s Assembly. This approach is considered one of the best practices worldwide. Of course Board Members must meet some eligibility and professional criteria’s.

Board Members of NRA may be dismissed only if they no longer fulfill the conditions required for the performance of their duties. The decision to dismiss the members of the Board shall be made public at the time of dismissal. The dismissed Board of the NRA shall receive a statement of reasons and shall have the right to request its publication of that decision.

– Article 3 (3a), Framework Directive (2002/21/EC), amended November 2009

**b) Capacity of the Regulator**

National Regulatory Agency should have adequate resources to perform their tasks. The Board members of the NRA should have power to set wages and make incentive schemes independently from civil service benchmarks for their professional staff, because the current schemes are insufficient to compete with private sector salaries.
c) Enforcement powers of the Regulator

NRA must have power for ex-ante market regulation, which sets forward looking expectations for firm behavior. Ex ante market regulation avoids damage from anti-competitive behavior by anticipating and preventing it. It can provide certainty for market participants, by setting out clear rules in advance, and promotes transparency.

NRA must have powers to collect information from the market participants. Define and analyze relevant markets, and based on the results of those analyses impose regulatory obligations on Significant Market Power (SMP) operators. NRA shall have power to make inspections at the premises of the operators, and impose remedies such as accounting separation and/or Functional Separation of Vertically Integrated Telecommunication companies. NRA should have power to collect information from market participants on network deployment plans as well. However, any party who is the subject of a decision by a national regulatory agency should have the right to appeal to a body that is independent of the parties involved. This body may be a court. Pending the outcome of any such appeal, the decision of the national regulatory agency shall stand, unless the appeal body decides otherwise. So an appeal of the NRA decision shall not automatically suspend the application of the appealed decision. The appeal body must be able to consider the merits of the case and not only procedural matters. The timeframe for an appeal is important given the uncertainty and potentially retroactive effects44.

d) Dispute resolution

NRA shall be able to issue binding decisions to resolve commercial disputes between electronic communications undertakings arising from obligations under the regulatory framework. The maximum timeframe for resolving a dispute may not exceed four months.

e) Transparency and accountability

National Regulatory Agency shall publish detailed accounts showing the costs of operations and daily activities, and forward looking action plans in their official web site. NRA shall

conduct market consultations in order to allow all interested market players to participate actively in the decision-making process. All decisions of the NRA should be available on-line. NRA performance shall be reviewed by an independent body.\footnote{NRA accounts should be reviewed by the General Auditor of Kosova, and in addition by an independent auditor, every year.}

\textit{f) Competitive safeguards}

Even though, Kosova does not have Country Code for Telephony the Number portability regulation shall be approved by NRA, for mobile and fixed services. This regulation is considered one of the main tools for competitive safeguard in electronic communication sector. Regulation should be clear and make mandatory that numbers should be ported within one working day and without any charge for customers.

Even though regulation for carrier selection and pre-selection has been available for some time in Kosova there are no service providers that have entered the market. NRA should enforce this regulation since it is considered one of the most important competitive safeguard.

NRA should extend obligation to PTK subsidiary Vala to publish Reference Interconnection Offer (RIO). Also Reference Unbundling Offer (RUO) should be made publicly available in transparent and non-discriminatory way.

NRA must make available a bit-stream access from SMP’s as a wholesale product that consists of the provision of transmission capacity in such a way as to allow alternative operators to control the technical characteristics of the service to the end-user and to offer their own, value-added services.
6.3 Conclusions

Access to electronic communications networks and services at prices affordable for Kosova’s citizens is a precondition for building an inclusive information society, and vital for businesses to achieve their business goals. Without efficient and qualitative electronic communications, Kosova’s economy, and especially small and medium sized enterprises will face a major disadvantage in relation to their regional and global competitors.

Adopting recommendations for four key issues addressed in this paper as part of the proposed new framework for electronic communications will substantially contribute to build proper enabling environment for ICT development. The current framework may be designed to properly back up policy objectives for market liberalization and transition to competition, but the new legislative and regulatory framework will reinforce competition in all market segments of the electronic communications sector by substantially reducing costly and burdensome aspects of the current regulatory regime, recognize the convergence of electronic communications technologies, and obligate the regulator to act as a supervisor of competition in the interests of consumers. However regulation will be more oriented toward areas where policy objectives cannot be achieved relying just on competition principles.

Current policies for electronic communications sector are very clear in Kosova, but in order to achieve policy goals and objectives it is necessary to create a regime that is able to adapt quickly and be flexible enough in order to adapt to developments in technology and market structure in those four key aspects. This project has explained and illustrated how fixing them can lead to sector and economic growth. Implementation of these solutions will help to unlock the potential of the ICTs across the economy of Kosova. Better management of frequency spectrum, further market liberalization and a more open regime for market entry, and successful PTK privatization should bring at least one billion EUR investments in the electronic communications sector in Kosova in the next five years.
List of References:


10. ITU World Telecommunication Regulatory Database www.itu.int


15. USAID, Assessment of the Kosovo Information and Communications Technologies (ICT) Sector (2007) 

16. Cullen International, Study on the Regulation of Broadcasting Issues under the New 
    www.cullen-international.com/cullen/cipublic/studies;

17. Michele Ledger, Cullen International, Regulatory Convergence? (2009), 

18. TRA Guide for Potential Entrants to Telecommunications Sector (Regulation, Policy and 
    Licensing), http://art-ks.org/index.php?id=102


20. Regulation on granting license for the right to use radio frequencies, http://www.art-ks.org/docs/regulation/Regulation_on_Granting_the_License_for_the_Right_to_Use_Radio_Frequenciesfull111.pdf

21. OECD policy guidance for Protecting and empowering Consumers in Communication services

EXECUTIVE SUMMARY

Mr. Adams is a policy, legal, and regulatory specialist and a multi-functional strategist with 20 years’ experience advising US and international companies, public-private enterprises, and U.S. and non-U.S. governments on public policy, and legal, regulatory, and transactional matters in telecommunications, information and communications technology (ICT), and Internet markets. He combines deep functional subject matter expertise in public and comparative international law with hands-on experience in the telecommunications sector in countries in the Middles East, Africa, Eastern Europe, and Asia. He has helped establish and has advised telecommunications regulatory bodies in more than 10 countries and has provided strategic regulatory advice to network operators and service providers in the Middle East and Africa seeking to expand their markets.

EDUCATION:

- L.L.M., International Law & Economics, Georgetown University School of Law, Washington, D.C.
- Program of Instruction for Lawyers, Harvard Law School, Cambridge, MA (International Commercial and Antitrust Law), J.D., Northeastern University Law School, Boston, MA
- B.A. (English), Clark University, Worcester, MA

EXECUTIVE SUMMARY

Veronica has worked full time on European telecommunications regulation for the last ten years.

- From May 2000 to July 2002, she worked as an expert for Ericsson business consulting subsidiary advising fixed and mobile telecommunications operators, service providers, venture capital firms, content and application developers on market entry strategies, regulatory and financial issues.
• Since August 2002, she has been working as a consultant at Cullen International, a company providing advisory and information services in the field of telecommunications, multimedia and electronic commerce regulation. The clients include major telecommunications operators, equipment manufacturers, IT companies, online service providers, regulatory authorities and national governments.
  • Veronica is in charge of CEE Telecom regulatory advisory service that covers 12 new EU Member States and three candidate countries: Croatia, Former Yugoslav Republic of Macedonia and Turkey.
  • She is also managing a three-year (2008-2010) European Commission project of monitoring regulatory and market developments for electronic communications and information society services in Enlargement countries.
  • Has been involved in several studies for the European Commission covering regulatory regimes in the 15 Member States for Premium Rate Services, broadcasting, Voice over IP services.

EDUCATION: MSc International Economics and Business, Stockholm School of Economics, Sweden
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Appendix 1

Licensing of new entrants to Kosovo telecommunications sector

The TRA recognizes that potential entrants to the Kosovo telecommunications market must be concerned with, amongst other matters:

- Qualifications of licensees
- The nature of licensing to be applied to entrants
- The nature and level of fees to be charged by the TRA

Qualifications

All licensees must be Kosovo domiciled or appropriately registered branches of foreign entities. Kosovo domiciled entities may be, however, foreign owned.

A licensee must locate substantially all infrastructure associated with the provision of services in Kosovo, within Kosovo. It shall further maintain all operational activities associated with the provision of services within Kosovo, in Kosovo. The licensee shall be free to outsource or sub-contract to third parties any of the above elements, provided that such elements are provided or carried out, within Kosovo. The TRA shall have the power to waive the requirements only in the event that direct benefit to users of service can be evidenced and assured.

Nature of licensing

There will be two types of operating licenses to provide services and to establish and operate telecommunications networks:

- **Individual licenses** for networks and services which require access to scarce resources, (such as radio frequency spectrum or numbers) or which fall into one of the license categories specified in section 22 of the Telecommunications Law. In general, the TRA must be satisfied that an applicant for an individual license has sufficient resources, skills and expertise to put the scarce resources underlying an individual license to efficient use. Individual licenses must also be awarded in manner that will facilitate the promotion of competition among licensed operators and serve the interests of subscribers and users in Kosovo.

- **Class licenses** for all other licensees, such as an Internet Service Provider license and a Value Added Service license. In general, the application process in relation to these fully liberalized services, which do not involve scarce resources, will be simple and facilitate ease of entry into the market.

A telecommunications license is personal and may not be assigned to a third party without the prior written consent of the TRA.

Specific Licenses to be offered

The TRA will offer and, if appropriate applicants are found, award licenses in the following areas, to the timetable indicated in each case. If suitable applicants for licenses are not found then the TRA may vary the timetable for award and again offer licenses:
1. Mobile telecommunications license

Additional GSM license. The license, if issued, will be accompanied by a separate frequency license to use necessary radio access frequencies.

The licensee must compete with PTK by means of its own radio access infrastructure. The licensee may, however, for a period, supply services by roaming onto the PTK network, and, may share certain elements of infrastructure with PTK.

The licensee may provide its own fixed backhaul network elements, associated with the provision of mobile telecommunications. For this purpose the licensee may use radio (separately licensed), utilize the ducts and facilities of PTK, or, purchase services from other licensed operators.

Under the mobile telecommunications license, the licensee may provide both domestic and international services to customers that connect approved mobile equipment to its network. It may connect its network to networks outside Kosovo by means of circuit based services purchased from appropriately licensed operators, for the purpose of facilitating the provision of international services to its mobile customers in Kosovo.

The TRA retains the right to offer further mobile telecommunications licenses, for the provision of mobile telecommunication services, including third generation (3G) mobile services, pursuant to national telecom sector policy objectives and availability of appropriate frequency spectrum.

2. Mobile virtual network operator (MVNO) license

One or more Individual licenses may be granted, at the discretion of the TRA, pursuant to national telecom sector policy objectives.

Individual licenses will permit the provision of mobile services to end users through technical interconnection with, and access to, the radio-communications facilities of Mobile licensees under which the MVNO creates a separate network identity, takes a significant measure of control over the supply of service, and enters into contracts with users of the services in its own name.

3. VSAT License

One or more Individual licenses may be granted at the discretion of the TRA.

The only restriction on the number of licenses shall be the availability of appropriate radio frequency spectrum and co-ordination arrangements with neighboring states.

4. Paging license

One or more Individual licenses may be granted.

The only restriction on the number of licenses shall be the availability of appropriate Radio frequency spectrum.

5. Public access mobile radio service license
One or more Individual licenses may be granted. The only restriction on the number of licenses shall be the availability of appropriate radio frequency spectrum.

**6. National fixed service license**

One or more Individual licenses may be granted. Individual licenses will be issued to provide for the provision of any ‘fixed’ service within Kosovo by means of a network constructed by the licensee. Recipients of licenses must have provided details, prior to award, of network construction and technology use intentions.

In addition, licensees may deploy alternative technologies to gain access to customers.

Radio frequencies may be allocated, if available and considered appropriate by the TRA, to facilitate any radio based access or point-to-point link deployment.

Licensees shall have the right of connection to other licensed networks that are licensed in Kosovo, and shall not be given exemption from zoning or planning requirements.

**7. International facilities license**

One or more Individual licenses may be granted.

Individual licenses will be issued to provide for termination/landing/establishment in Kosovo, by the licensee, of physical means of provision of international connectivity.

Activities such as the landing of fiber optic cables and international radio links are to be covered by such a license.

Licensees shall have the right of connection to other licensed networks that are licensed in Kosovo, but the provision of services by means of the established facilities shall be by means of the International Services License.

**8. International Services License**

One or more Individual licenses may be granted.

Individual licenses will be issued to provide for the provision by the licensee of international services, both voice and data, employing physical traffic-aggregation plant deployed in Kosovo by the licensee. Such plant may be connected to other telecommunications networks for the provision of service.

Licenses will be withdrawn if the licensee does not continue to meet physical traffic aggregation plant criteria. For the avoidance of doubt, simple international re-sale is not permitted.

**9. Internet Service Provider (ISP) licenses and Value Added Service (VAS) licenses**

Class licenses for these services and other services that require a class license will be granted as soon as practicable.
Licenses will be issued to any qualified entity that intends to provide services to third parties. The ISP license will contain a provision that prohibits the offer by the ISP or any other party of the supply of international voice services unless an International Service License is also taken. Voice calls over the Internet that are originated by ISP customers cannot presently be policed and no obligation to prevent its use will be imposed on ISPs.

**Charges to licensees by the TRA**
Except in its formation period, the TRA shall be financially independent.

The TRA will charge license application, initial and renewal fees. The level of application and initial fees will be notified within any documentation related to invitations to apply for licensees. This has been also presented in the table below.

<table>
<thead>
<tr>
<th>Types of licenses issued by the Telecommunications Regulatory Authority</th>
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</thead>
<tbody>
<tr>
<td><strong>license</strong></td>
</tr>
<tr>
<td><strong>Mobile Telecommunications license</strong>&lt;br&gt;This license allows provision of mobile Telecommunications service by its own network</td>
</tr>
<tr>
<td><strong>Paging Service license</strong>&lt;br&gt;This license allows the commercial use of paging services to subscribers</td>
</tr>
<tr>
<td><strong>VSAT license</strong>&lt;br&gt;This license grants the use of Very Small Aperture Terminal, a digital satellite data network with small antenna diameter, for private use only</td>
</tr>
<tr>
<td><strong>Public Access Mobile Radio Service license</strong>&lt;br&gt;This license allows the use of Public Access Mobile Radio in dispatch applications (e.g. by truck and taxi fleets.)</td>
</tr>
<tr>
<td>License Type</td>
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<tr>
<td>-------------------------------------------------</td>
</tr>
<tr>
<td><strong>International Telecommunications Facilities license</strong></td>
</tr>
<tr>
<td>This license authorizes the termination/ landing/ establishment of international connectivity and obligation and right to connect to other Kosovo licensed networks</td>
</tr>
<tr>
<td><strong>International Telecommunications Service license</strong></td>
</tr>
<tr>
<td>This license allows the provision of international voice and data services with requirement to deploy physical traffic aggregation structure</td>
</tr>
<tr>
<td><strong>National Fixed Services license</strong></td>
</tr>
<tr>
<td>This license allows the provision of national fixed voice and data services by its own network.</td>
</tr>
<tr>
<td><strong>Internet Service Provider license</strong></td>
</tr>
<tr>
<td>This license allows the provision of internet services but not including voice.</td>
</tr>
<tr>
<td><strong>Value Added Services license</strong></td>
</tr>
<tr>
<td>This license allows the provision of services over an exiting network (e.g. card services)</td>
</tr>
</tbody>
</table>

The TRA will charge annual license fees based in the case of an individual license on the gross annual turnover of the licensee resulting from the license, provided that the fees do not exceed one percent (1%) of such gross annual turnover.

The TRA will charge fees for class licenses at levels specified in the license.

The TRA will charge for any specific services that it provides and will advise the basis of charge before the provision of the services.

In circumstances of defaults or other acts or omissions specified by the
Telecommunications Law or a license, the TRA will, amongst or associated with other remedies, impose fines on licensees. Such fines shall not be considered to be a normal source of revenue.

The TRA will establish fees at levels that are reasonable in relation to

- the cost of administration and regulation of the licensed service, and
- the value of the licenses in the market, with due regard to the fact that scarce resources must be used efficiently.

Appendix 2

General authorization regime and administrative charges

Article 3 of the Authorisation Directive (2002/20/EC) establishes a general authorisation regime for the provision of electronic communications networks and/or services. Member States may require undertakings to notify the intention to commence the provision of electronic communication networks or services and to submit information required to allow the national regulatory authority (NRA) to keep a register or list of providers. However, there is no requirement to obtain an explicit decision by the NRA before the start of activities.

Under article 12 of the Directive, any administrative charges should be imposed in an objective, transparent and proportionate manner. The charges should cover only the administrative costs incurred in the management, control and enforcement of the general authorisation scheme. These may include costs for international cooperation, harmonisation and standardisation, market analysis, monitoring compliance and other market control, as well as regulatory work involving preparation and enforcement of secondary legislation and administrative decisions, such as decisions on access and interconnection.

The table below shows whether:

- provision of electronic communications networks and/or services requires submission of a notification to the NRA or the ministry, and if yes, the procedure
- administrative charges for the provision of electronic communications networks and/or services have been set by the Member States or candidate country.

The table does not address fees (under article 13 of the Authorisation Directive) for individual rights of use for numbers or radio spectrum.
<table>
<thead>
<tr>
<th>Country</th>
<th>Notification requirement(s) to NRA and/or Ministry</th>
<th>Administrative charges</th>
<th>Relevant legislation</th>
</tr>
</thead>
</table>
| Bulgaria | Yes – to CRC | None | For 2010:  
- 0.2% - for undertakings with annual gross revenue above BGN 100,000 (€51,020), after deducting transfer payments to other operators for interconnection and access, transit, roaming, VAS and copyright to radio and TV programmes  
- 0% - for undertakings with annual gross revenue below BGN 100,000 (€51,020) after the above mentioned deductions. | Electronic Communications Act (ECA) of May 22, 2007 introduced the general authorisation regime. Administrative charges are approved annually. Before Sep. 30 of each year, CRC submits proposed charges for approval to the Council of Ministers. Administrative charges for 2010 were published in State Gazette No 1 of Jan. 5, 2010. |

Notification must be sent to CRC prior to starting of activity, in a standard form, with identification data of electronic communications provider, description of electronic communications networks and services, geographic coverage, contact person and data, estimated starting date of activity.  
Within 14 days, CRC confirms the registration.  
Any change in the notification must be submitted to CRC within 14 days. |

| Croatia | Yes – to HAKOM | None | For 2010: 0.29% of revenues in 2009 Determined by the NRA based on its annual financial plan and set as a percentage of total revenue of the previous year. | Article 16, 31-34 of the new Electronic Communications Act of June 19, 2008 (Official Gazette 73/2008) in force since July 1, 2008.  
Ordinance on the manner and conditions for the provision of electronic communications networks and services (Official Gazette No. 154/08)  
Ordinance on payment of charges related to the activities of HAKOM (Official Gazette No. |

Notification must be submitted to HAKOM at least 15 days before starting activities.  
Within 8 days, HAKOM must issue a certificate that proves the registration of the notified activities. |
<table>
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<tr>
<th>Country</th>
<th>Notification requirement(s) to NRA and/or Ministry</th>
<th>Administrative charges</th>
<th>Relevant legislation</th>
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<td></td>
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<td>One-off</td>
<td>Annual</td>
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<td></td>
<td>850</td>
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<tr>
<td>Cyprus</td>
<td>Yes – to OCECPR</td>
<td>€850</td>
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<td></td>
<td>Undertakings notify their intention to provide electronic communication networks or services and submit all information required to allow OCECPR to keep a register or list of providers</td>
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<td>Czech Republic</td>
<td>Yes – to CTU</td>
<td>CZK 1,000</td>
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<td></td>
<td>Within one week of the notification, CTU confirms the registration.</td>
<td>(€38.58)</td>
<td></td>
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<tr>
<td>Estonia</td>
<td>Yes – to ETSA (Technical Surveillance Authority) from Jan 1, 2008. (Previously, to ENCB).</td>
<td>None</td>
<td>None</td>
</tr>
<tr>
<td>Country</td>
<td>Notification requirement(s) to NRA and/or Ministry</td>
<td>Administrative charges</td>
<td>Relevant legislation</td>
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<td>A written notice to ETSA including information listed in article 4 of the Electronic Communications Act. Within 7 working days, ETSA confirms the receipt and provides, on request, an overview of the rights and obligations of the communications provider under the general authorisation.</td>
<td>None</td>
<td>Act 100 of 2003 on Electronic Communications, articles 74–77</td>
</tr>
<tr>
<td>Hungary</td>
<td>Yes – to NHH Provider of electronic communications services must notify to NHH prior to starting service provision. Within 8 days after notification, NHH registers the provider and sends a confirmation of registration.</td>
<td>HUF 2000 (€7.38) Maximum 0.35% of annual net revenue</td>
<td></td>
</tr>
<tr>
<td>Latvia</td>
<td>Yes – to PUC Candidate submits a written notification to PUC no later than on the first day of the provision of regulated electronic communications services or networks (PUC Regulation on general authorisation). Applicants who need frequencies or numbering resources submit an</td>
<td>None</td>
<td>Law on Electronic Communications of Oct. 28, 2004 (with amendments) Law on Regulators of Public Services of Nov. 7, 2000 (with amendments) Rules for General Authorization of Dec 15, 2007 Cabinet Regulation No.1068 on fees for utility</td>
</tr>
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<tr>
<th>Country</th>
<th>Notification requirement(s) to NRA and/or Ministry</th>
<th>Administrative charges</th>
<th>Relevant legislation</th>
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<tr>
<td></td>
<td>application to PUC. PUC has to reply no later than in 6 weeks (in case of frequencies) or 3 weeks (in case of numbering). If an applicant applies for frequencies that may only be allocated through a beauty contest or auction, it may take up to 8 months.</td>
<td>LTL 83 (€24)</td>
<td>services regulation of Dec 28, 2004, with amendments. PUC Regulation on general authorisation of Dec 12, 2007. PUC Regulation on the right of use of radio frequencies of Jul 1, 2009.</td>
</tr>
<tr>
<td>Lithuania</td>
<td>Yes – to RRT An undertaking, wishing to engage in the electronic communications activity, must submit to RRT a notification. The notification form is provided as Annex 1 of RRT order No. 176. Within 7 days from the receipt of the notification, RRT should enter the undertaking in the list of electronic communications networks and services providers.. A standard confirmation is issued upon request, after the one-off registration fee has been paid. Undertakings engaged in the electronic communications activity, shall regularly, every three months, submit to RRT information about the electronic communications</td>
<td>LTL 250 (€72) per month/activity</td>
<td>RRT decision of Dec. 12, 2004 No. 1V-600 replaced by RRT decision of Aug 10, 2005 No. 1V-708, applicable as of Sep. 1, 2005. Then the following updates were introduced: update of Dec. 23, 2005 update of April 13, 2006 update of Dec. 22, 2006 update of Aug.16, 2007 update of Jan. 8, 2008. Description of general terms and conditions for engaging in telecommunications activities, adopted on April 8, 2005 and updated on Nov. 24, 2006, April 13, 2007 and on Jan. 7, 2008. Article 3, §6 of the Law on Electronic</td>
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LTL 83 (€24) | LTL 250 (€72) per month/activity |
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<th>Country</th>
<th>Notification requirement(s) to NRA and/or Ministry</th>
<th>Administrative charges</th>
<th>Relevant legislation</th>
</tr>
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<tbody>
<tr>
<td></td>
<td>activity being carried out. Information required is specified in Annexes 2-4 of RRT order No. 176.</td>
<td>One-off Annual</td>
<td>Communications of April 15, 2004 (in English).</td>
</tr>
<tr>
<td>Macedonia</td>
<td>Yes – to AEC Within 21 days from the receipt of notification, AEC issues a written confirmation to the registered entity.</td>
<td>None Set at up to 0.5% of annual gross revenue from the provision of public electronic communications networks and services but not to exceed €250,000. Based on the revenue level, providers are divided into five categories.</td>
<td>Law on Electronic Communications Regulation on the methodology of calculating the annual remuneration for supervision of the market for electronic communications (Dec. 29, 2006, with amendments of Jan. 11, 2007, Feb. 14, 2007 and Dec 27, 2007). Regulation on the content and form of notification, necessary documentation and confirmation of registration (November 11, 2009) Guidelines on the form, content and manner of submission of reports for total yearly income of operators of public communication networks and providers of public communication services (Feb. 2, 2007, amended July 2008)</td>
</tr>
<tr>
<td>Malta</td>
<td>Yes – to MCA Within 2 working days of receipt of a correctly completed notification form, MCA will update the Register of Authorized</td>
<td>None Annual fixed fees (per authorization category): 1. Public communications networks €11,645 2. Publicly available telephone</td>
<td>Legal Notice 412 of 2004 - Part 5 and Eleventh Schedule</td>
</tr>
<tr>
<td>Country</td>
<td>Notification requirement(s) to NRA and/or Ministry</td>
<td>Administrative charges</td>
<td>Relevant legislation</td>
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<tr>
<td></td>
<td>Undertakings.</td>
<td>services €11,645</td>
<td>Article 10 (notification) and article 183 (administrative charges) of the Telecommunications Law of July 16, 2004</td>
</tr>
<tr>
<td></td>
<td>3. Television and radio distribution services €11,645 plus €0.35 per subscriber</td>
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<td></td>
<td>4. Other publicly available electronic communications services €2,325</td>
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<td>5. Non-public electronic communications services €2,325</td>
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<tr>
<td></td>
<td>6. Private electronic communications networks and/or private electronic communications services €230</td>
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<tr>
<td>Poland</td>
<td>Yes – to UKE</td>
<td>Annual revenue-related fees (for authorization categories 2, 3, 5, 6):</td>
<td></td>
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<tr>
<td></td>
<td>An operator should use a template defined by the Minister responsible for telecommunications.</td>
<td>• 1.5% of the first €23.3m of total gross revenue or part thereof</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Within 7 days from the notification, the president of UKE issues a certificate with the register number under which the notification was registered.</td>
<td>• 1% of the second €23.3m of the total gross revenue or part thereof</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Activities can be started</td>
<td>• 0.5% of any remaining gross revenue.</td>
<td></td>
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<td>For authorization category 3, annual fee per subscriber: €0.35.</td>
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<tr>
<td>Country</td>
<td>Notification requirement(s) to NRA and/or Ministry</td>
<td>Administrative charges</td>
<td>Relevant legislation</td>
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<tr>
<td></td>
<td>upon receipt of this certificate.</td>
<td>Following administrative charges where set.</td>
<td>(effective Jan. 1, 2005), with amendments by:</td>
</tr>
<tr>
<td></td>
<td></td>
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<td>Order of the Minister of Infrastructure of Dec. 28, 2005 (effective Jan. 1, 2006)</td>
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<td>Order of the Minister of Infrastructure of Dec. 11, 2008 (effective Jan. 1, 2009)</td>
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<td>Order of the Minister of Infrastructure of Dec. 18, 2009 (effective Jan. 1, 2010).</td>
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<td></td>
<td>Order of the Minister of Transport changing the application form regarding requests for an entry into the register of telecommunications operators or for changes to existing entries of March 9, 2007 (effective April 7, 2007)</td>
</tr>
<tr>
<td>Romania</td>
<td>Yes – to ANCOM</td>
<td>None</td>
<td>Section II on general principles and §47 on the monitoring fee of the</td>
</tr>
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<td></td>
<td>Notification must be sent to ANCOM by filling in</td>
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<td></td>
<td></td>
<td>Set by NRA around Sep-Oct as % of annual revenue (not exceeding 0.5%) and is to be paid next year.</td>
<td></td>
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<tr>
<td>Country</td>
<td>Notification requirement(s) to NRA and/or Ministry</td>
<td>Administrative charges</td>
<td>Relevant legislation</td>
</tr>
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<td>the standard form, with attached copy of the registration certificate, copy of the constitutive act, identity card of the requester and authorisation to independently carry out certain economic activities (for natural persons), and description file for networks and services. The notification must be made no later than the starting day of activity. Any change in the notification must be communicated within 10 days to ANCOM. Within 30 days, ANCOM must reply to the notification. Detailed instructions for notification procedure.</td>
<td>Companies that had a turnover of less than €100,000 are not required to pay the monitoring tariff. Following administrative charges where set.</td>
<td>Government Emergency Ordinance No. 79 of June 13, 2002 on the general regulatory framework for communications Emergency Ordinance 70/2006 on amending and completing certain normative acts in the fields of electronic communications and of postal services of Oct. 2, 2006 adopted with modifications by Law No. 133/2007 Decision 113/2006 of April 11, 2006 established the general authorisation regime, including the current notification procedure. A public consultation on a draft decision introducing a few amendments to the current notification forms and procedure has been launched by ANCOM until March 12, 2010.</td>
</tr>
<tr>
<td>Slovak Republic</td>
<td>Written notification with the details specified in Section 14 of the Act on electronic communications must be submitted before provision of electronic communications networks and/or services. Additional notification for</td>
<td>€16.50</td>
<td>Act. 610/2003 on electronic communications, art. 6 and 14. TUSR General Authorisation No 1/2008 on provision of electronic communication services effective from Dec 15, 2008. The new general authorisation takes into</td>
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<td>0.08% of annual turnover (with minimum of €33.19).</td>
<td>...</td>
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<tr>
<td>Country</td>
<td>Notification requirement(s) to NRA and/or Ministry</td>
<td>Administrative charges</td>
<td>Relevant legislation</td>
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<tr>
<td></td>
<td>all subsequent changes.</td>
<td></td>
<td>account the latest amendment of the Act 610/2003 on electronic communications. Act No. 145/1995 Coll. on administration fees</td>
</tr>
<tr>
<td>Slovenia</td>
<td>Yes – to APEK</td>
<td>None</td>
<td>Electronic Communications Act – ZEKom, Section 5 (consolidated version - ZEKom-UPB1 from Feb. 15, 2007, unofficial English translation of ZEKom-UPB1) Rulebook on calculation method for notification charges, radio frequency and numbering fees (with amendments) Regulation on the value tariff of a point unit for 2008 in respect of the payment of notification fees and fees for the use of frequencies and numbers Regulation on the value tariff of a point unit for 2009 in respect of the payment of notification fees and fees for the use of frequencies and numbers, Official Gazette 16/2009 of Feb. 27, 2009 Regulation on the value tariff of a point unit for 2010 in respect of the payment of notification fees and fees for the use</td>
</tr>
</tbody>
</table>

Within 7 days from the receipt of notification APEK completes the registration.

Set in proportion to revenue:

- All operators are divided into four categories according to revenue.
- Each category is assigned a specific number of ‘point units’ ranging from 100 for small operators to 400,000 for large operators (with annual revenue of more than €16.7m).
- The value of a ‘point unit’ is annually decided by the government.
- The following values for the ‘point unit’ were set:

<table>
<thead>
<tr>
<th>YEAR</th>
<th>POIN UNIT</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>€1.18</td>
</tr>
<tr>
<td>2009</td>
<td>€1.24</td>
</tr>
<tr>
<td>2010</td>
<td>€1.24</td>
</tr>
<tr>
<td>Country</td>
<td>Notification requirement(s) to NRA and/or Ministry</td>
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<td>--------------------------------------------------</td>
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<td></td>
<td></td>
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<tr>
<td>Turkey</td>
<td>Yes – to ICTA</td>
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</tbody>
</table>

The operator completes a notification form prepared by ICTA before starting operations. If the notification is for a service that does not require the allocation of a resource, the operator is deemed authorised to start on the date of registration of the notification by ICTA. Within 15 days, ICTA sends a statement confirming the notification and specifying the rights and obligations of the operator.

### Appendix 3

**Privatization Trap**

There is an economic trap created by the revenue incentives that often drive government when it privatizes a state-owned enterprise (SOEs). To maximize the revenue received at sale of an SOE, governments are often tempted, or urged by prospective buyers, to grant extended monopolies or other exclusive rights in expectation of a higher selling price. These grants, whether they are included in the contract of sale or not, become government obligations.

- Thus, once a monopoly or dominant SOE is privatized in this manner, it becomes much harder to further liberalize the market because of concerns that the new, private owner will argue that any

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new entry will impair the value of its contract. Additionally, if vertical and horizontal separation and overall regulatory reform are delayed until after privatization, it becomes significantly harder to impose such modernizations after sale because the buyer has calculated existing economies of scope into its offer. Attempts at such reforms, therefore, can also lead to contract impairment disputes.

• As a result, the growth of the market that can otherwise be expected to flow from liberalization and structural reform will be significantly delayed. (Structural reform, of course, must be accompanied by building co-ordination incentives into the regulatory framework to recreate lost scope economies.) The deadweight loss resulting from supra-competitive or monopoly pricing during the exclusivity rights period ultimately may outweigh any revenue premium realized at sale as a result of their grant. This is called the “privatization trap.”

• Telecommunications is a central input for firms in the IT and ICT sectors, all of which depend upon low-cost, high-quality telecommunications facilities and services. Thus, when a telecommunications SOE is privatized using uneconomic grants designed to maximize the gain on sale, the allocation inefficiencies resulting from having fallen into the privatization trap likely will ripple across a far broader section of the economy, and to much more detrimental effect, than when other SOEs are privatized.

• Governments should avoid the privatization trap and decline to privatize in excess haste, or without properly balancing short-term, revenue-on-sale considerations against longer-term – and longer-lasting – goals of market liberalization and structural reform. The cost to consumer welfare, and thus to overall economic development, of falling into the privatization trap may prove to be far more expensive, and damaging, than the value of any short-term gain.

• It is understood that Government recommends to Telecommunications Regulatory Authority to lock-in the current number of mobile licenses in Kosova (e.g., two facilities-based mobile operators and one MVNO) for five years from the sale of PTK in order to generate a higher return. Also, it is understood that no pre-sale structural reforms of PTK will be imposed. Furthermore, it is unclear whether the initiative to bring the sector legal and regulatory framework into line with the “full competition” regime of the relevant EU acquis communautaire will be allowed to proceed in a timely manner.

• It is submitted that this approach may be highly unwise and, in the end, could cost Kosovo far more than the value of any sales premium the Government might obtain if it follows its current approach.