Republic of Kosovo – Government of Kosovo
Ministry of Economic Development

ELECTRONIC COMMUNICATION SECTOR POLICY – DIGITAL AGENDA FOR KOSOVA 2013 ÷ 2020

March, 2013

Contents

Acronyms

1/2/3/4Q	$1^{st}/2^{nd}/3^{rd}/4^{th}$ Quarter
ccTLD	country code Top Level Domain
CERT	Computer Emergency Response Team
ECDL	European Computer Driving License
EPAP	European Partnership Action Plan
eSEE Initiative	electronic South Eastern Europe Initiative
EU	European Union
GDP	Gross Domestic Product
GoK	Government of Kosova
gTLD	generic Top-Level Domain
ICANN	Internet Corporation for Assigned Names and Numbers
ICT	Information and Communications Technology
MED	Ministry of Economic Development
PTK	Post and Telecom of Kosova
RAEPC	Regulatory Authority of Electronic and Postal Communications
SME	Small to Medium Enterprises
STIKK	Kosova Association for ICT
TAIEX	Technical Assistance Information EXchange
TID+	Today I Decide Plus

1. Executive summary:

This document contains the Electronic Communications Sector Policy of the Government of Kosova (GoK) as proposed by the Ministry of Economic Development for the medium to long term (provisionally understood to mean the period through December 2016 and, in a more general way, the four-year period immediately following through December 2020).

The Electronic Communication sector Policy – Digital Agenda for Kosova 2013–2020 (hereinafter referred to as "Policy") has been drafted bearing in mind that information and communications technology (hereinafter referred to as "ICT") development is a dynamic and rapidly changing process in numerous areas of public and State activities, and successful involvement of the public sector in the promotion of the positive and minimization of the negative effects of this process would be a significant contribution to the sustainable development of an information society.

The purpose of the Policy is to define the priorities, objectives and tasks of ICT development in order to maximize the social and economic advantages provided by those technologies, primarily the Internet as a very important instrument for economic and social activities, the use of which allows one to provide or receive services, work, access entertainment, communicate and freely express opinions.

Policy treats the Information Society as an open and well educated society, whose members use ICT effectively in all areas of activities.

The strategic objective of the Policy is to improve the quality of life for the Kosova residents as well as the business environment for companies through the use of the opportunities created by the ICTs and to increase the percentage of internet users in Kosova to at least 85 % by the year 2020.

The main objectives of the Policy are:
1. development of the ICT infrastructure (hereinafter referred to as "Priority 1")
2. development of the electronic content and services and promotion of use thereof (hereinafter referred to as "Priority 2")
3. enhancement of the Kosova residents' ability to use the ICTs (hereinafter referred to as "Priority 3");

Taking into account the analysis of the problematic areas undertaken in Chapter 4, as well as suggested Strategic objectives to address those areas and alternatives discussed in Chapter 6 as well as contributions provided by the participating institutions and stakeholders there was formulated Course of actions provided in the Annex to this Policy in the form of the Table. The Table includes objectives, assessment criteria, responsible institutions, and timeframes for implementation of activities.

For Priority 1 "Development of the ICT infrastructure" the following objectives are established:

1.1. The first objective is to ensure a geographically consistent development of broadband electronic communication networks throughout the national territory and to promote the use of electronic communication services (hereinafter referred to as "Objective 1 under Priority 1").

1.2. The second objective is to ensure the security and integrity of the electronic communications networks and services, to increase public and business confidence in the cyberspace (hereinafter referred to as "Objective 2 under Priority 1").

For Priority 2 "Development of the electronic content and services and promotion of use thereof" the following objectives are established:

2.1 The first objective is to encourage the residents to use online public and administrative services, and to ensure the quality of data transmission and the infrastructure of functioning search systems, thus contributing to the development of e-democracy (hereinafter referred to as "Objective 1 of Priority 2").

2.2. The second objective is to use the ICTs to promote the Kosova culture and languages (hereinafter referred to as "Objective 2 under Priority 2").

2.3. The third objective is to promote the development of e-business (hereinafter referred to as "Objective 3 under Priority 2").

For Priority 3 "Enhancement of the Kosova residents' ability to use the ICTs" the following objective is established:

3.1. The objective shall be to encourage Kosova residents to gain knowledge and skills required for successful use of the ICTs and to become involved in the information society, to improve their quality of life and to reduce social exclusion (hereinafter referred to as "Priority 3 objective"), and to create the necessary conditions for that.

In addition to these priorities and objectives to address priorities, a number of objectives and actions required in the previous document "Telecommunications Sector Policy" of 2007 have been addressed (completed) in the Law for Electronic Communications No.04/L-109 approved by Assembly of Kosova on 04th of October, 2012.

2. Introduction

The GoK recognizes that electronic communications are a critical component of a broad range of national economic activity, vital for the establishment and maintenance of international commercial relationships, and crucial to social cohesion and the diffusion of knowledge throughout society. The ICT industry generally constitutes a vibrant sector of the economy in its own right, providing a major source of employment, contributing a significant share of the Gross Domestic Product (in the last 6 years 8%-11% of the GDP), and serving as a catalyst for the creation of a highly skilled "knowledge economy" workforce.

Priorities and objectives defined by the present Policy corresponds to the objectives established by the Chapter 1.4 "Transport and telecommunications" of the program of the Government of the Republic of Kosova 2011 – 2014, i.e. Reform of Legislation in the field of telecommunications, Obtaining the state code for telephony services, and the national domain for internet services, Growth, expansion and improvement of the broadband telecommunications infrastructure, telephony, postal and internet services.

Priorities of the present Policy are linked as well to the actions foreseen within the "Action plan of the Economic Vision of Kosova 2011 – 2014", i.e. to the priority 2. Investments, investing environment and support to private sector; 2.1 Improvement of business environment; and 2.3 Improvement of Legal and Regulatory Drafting Processes and Increased Predictability and transparency Through Creation and Institutionalization of a Consolidated Database for the Economy sector; 2.5 Improved coordination and efficiency, and reduction in cost of developing automated government systems.

Within the context of the Regional Cooperation Council (ex. Stability Pact for South Eastern Europe) – Electronic South Eastern Europe Initiative (eSEE Initiative), Government of the Republic of Kosova by adopting decision in April 2nd of 2007 Nr.02/248 took concrete commitments to implement actions derived from the "eSEE Agenda Plus for development of

Information Society in SEE 2007 – 2012"[1], in the area of ICT which implies that relevant actions should be taken in the defined areas, e.g. Availability of the high speed broadband networks and secure services, Development and accessibility of rich online content and transfer from conventional format, innovation and investments in ICT Research and Education, Inclusive Information Society etc.

European Partnership Action Plan 2012 approved by the Government foresees certain actions which should be taken within the context of Information society and media, including "Review of the Telecommunications Sector Policies and the compilation of the policies for the sector of Electronic Communications" and while doing so relevant documents and legal acts of the European Union should be followed. Therefore present Policy is in compliance with the objectives set out in the Communication from the European Commission of 19 May 2010 to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions "A Digital Agenda for Europe" (COM (2010) 245 final) and aligned with the Communication from the European Commission of 3 March 2010 "A strategy for smart, sustainable and inclusive growth" (COM (2010) 2020 final).

Ministry of Economic Development (MED) as a responsible ministry for electronic communications, based on the Law on Electronic Communications (Article 7) has responsibility and authority to develop the policy and national strategies on electronic communications field.

3. Methodology

In preparing this document participated all relevant public and private stakeholders, and assisted by the EU experts under the TAIEX mission.

The process of consultation is been fashioned with representatives of national and regional Institutions, as well as interested national and international stakeholders.

The consultation process is conducted from August of 2012 which was the starting date for drafting this document.

Working Group is established based on the Decision No.2096 of the date 07.09.2012 of the General Secretary of the MED and is comprised from the representatives of the Institutions mentioned below:

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[1] In the Ministerial Conferenc in Tirana held on 07.11.2011 the document „eSEE Agenda Plus - New Deadlines" is approved.

1. Ministry of Economic Development;

2. Ministry of Infrastructure;

3. Strategic Planning Office within the Prime Minister's Office;

4. Electronic Communication and Postal Regulatory Authority;

6. Ministry of Public Administration;

7. Independent Media Commission;

8. Ministry of Finance;

9. Ministry of European Integration.

This Working Group has done the analyzes and has given recommendations, based on the Administrative Instruction No.02/2012 adopted from the Government of Kosova on the procedure, criteria and methodology for the preparation and approval of Strategy documents and plans for their implementation.

Another important key element of the methodology used by working group was cyclical approach towards strategy developments, consisting of three interactively aligned strategy phases which are analysis, strategy development, setting clear objectives and activities. This Working Group worked in regular meetings, conducting analysis and providing relevant information for specific field and issues addressing this document, while indicating specific objectives and activities.

Result: The final draft, drafted by the members of the Working Group.

Special meetings were organized with the following entities:

Agency of Statistics of Kosova; European Union's Office in Prishtina; Telecommunications Operators: IPKO and PTK; STIKK Association; Regulatory Authority of Electronic and Postal Communications .

These entities have provided comments, suggestions and sufficient information within the framework of their responsibilities and based on the applicable legislation.

European Commission Expertise:

MED through the Department of Post Telecommunication and Information Technology has applied for technical assistance from the European Commission, with the aim to assist the MED

to review the Policy of Telecommunication Sector 2007 and the preparation of the new Policy document for Electronic Communications Sector foreseen in the EPAP 2012.

Review of the Telecommunications Sector Policy of 2007 has been part of technical assistance of the TAIEX mission and considered while drafting new policy for Electronic Communications Sector.

For this purpose, MED was assisted by telecommunications field experts engaged through TAIEX instrument..

<u>Public consultations</u>

During this period of public consultations official comments are provided from Telecommunications Operators: PTK and IPKO, as well as from Kosova Association for ICT (STIKK) and Regulatory Authority of Electronic and Postal Communications (RAEPC).

Comments provided by these entities are taken in to consideration while drafting the final version of the Policy.

4. Background

ICTs are one of the most important technologies influencing human life, and daily activities.

In the economic sphere, the availability of a diversity of modern electronic communications networks and services helps business, increase productivity and efficiency by generating more efficient production techniques and lowering the cost of coordinating economic activity within and between businesses.

In the social sphere, widespread access to reliable, fairly priced, good-quality electronic communications networks and services fosters increased citizen awareness and involvement, and facilitates the availability of a wide range of government services.

In the public-sector sphere, there is considerable evidence indicating that electronic communications can be a powerful tool to promote government transparency, accountability and efficiency.

The ICT sector, therefore, including the full range of electronic communications, and information society services, is one of the most important service sectors in Kosova's economy.

The Electronic Communication sector Policy – Digital Agenda for Kosova 2013–2020 addresses following problematic areas: development of the ICT infrastructure, development of the electronic content and services and promotion of use thereof, and enhancement of the Kosova residents' ability to use the ICTs.

Absence of the consolidated institutional framework for ICT based society, i.e. umbrella strategic document, coordinating actions of the public sector within the ICT area makes it increasingly difficult for ICT sector to develop, makes actions of public institutions not harmonized, replicating each other, not efficient and therefore does not create favorable environment for private investment within the sector.

Electronic Communications Sector Status as penetration of the Internet, mobile telephony, and fixed telephony is illustrated by the following graphs:

Graph 1 reflects the state of Internet penetration in terms of the number of lines for households.

Graph 1 – Internet Penetration
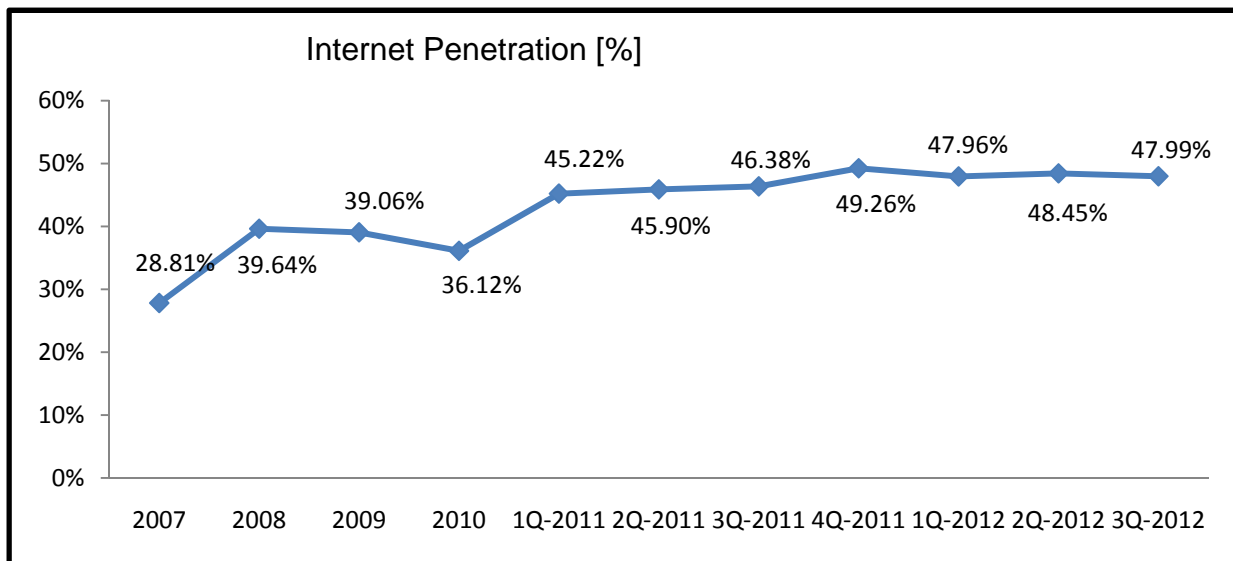
Source: RAEPC: Publication 02/2012, of date 10th of December, 2012.

While chart 2 reflects broadband internet penetration in Kosova compared with countries in the region and with the EUs average.

Graph 2 – Internet Penetration in Kosova compared with countries in the region of southeast Europe
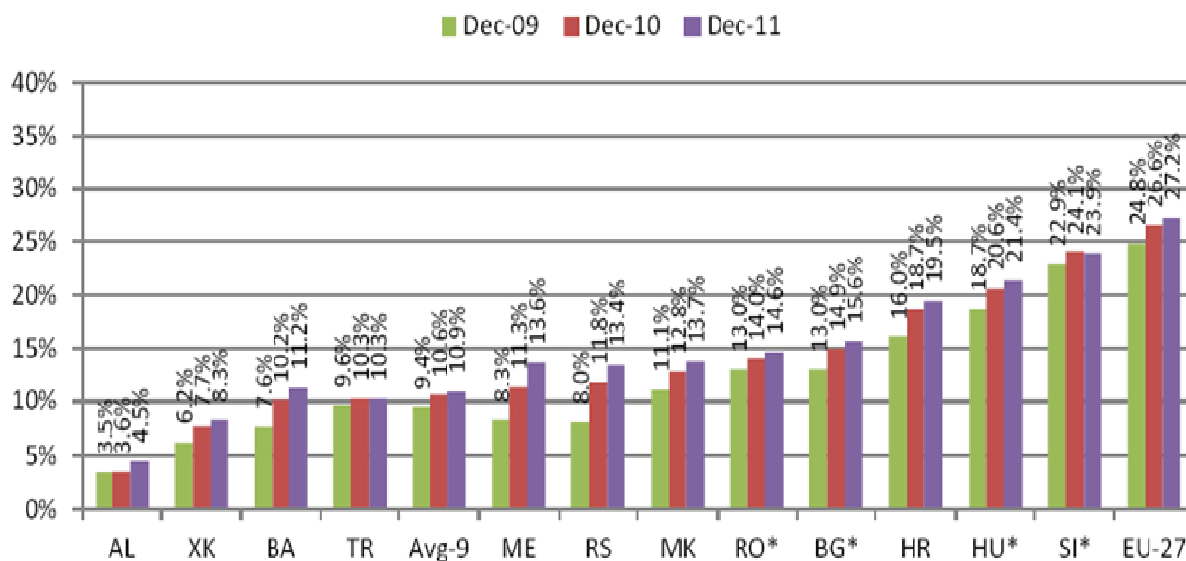
Source: Cullen International, Report 2, July 2012

Chart 3 reflects the state of the fixed penetration in terms of the number of lines per capita.

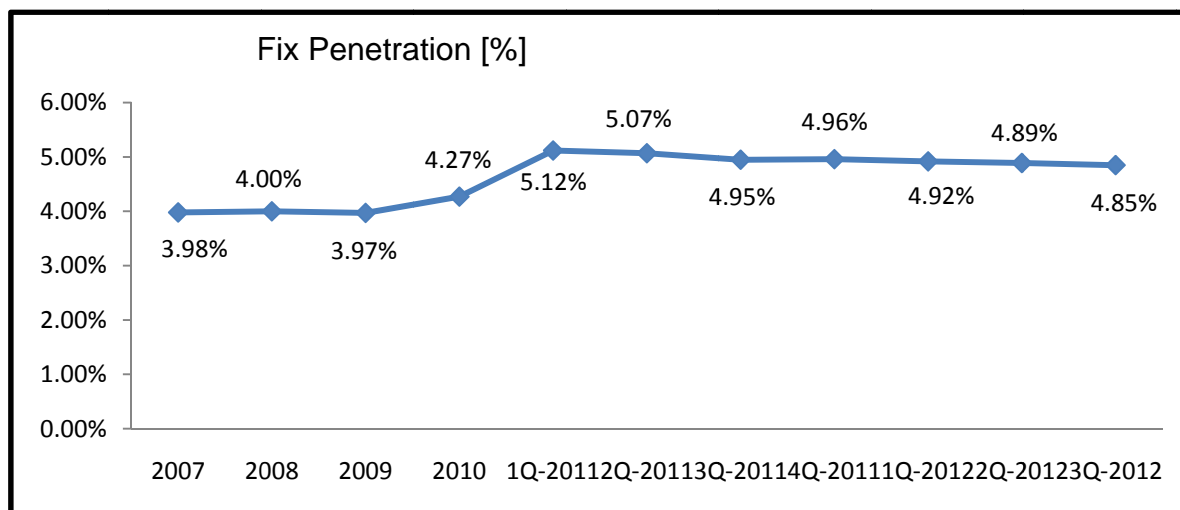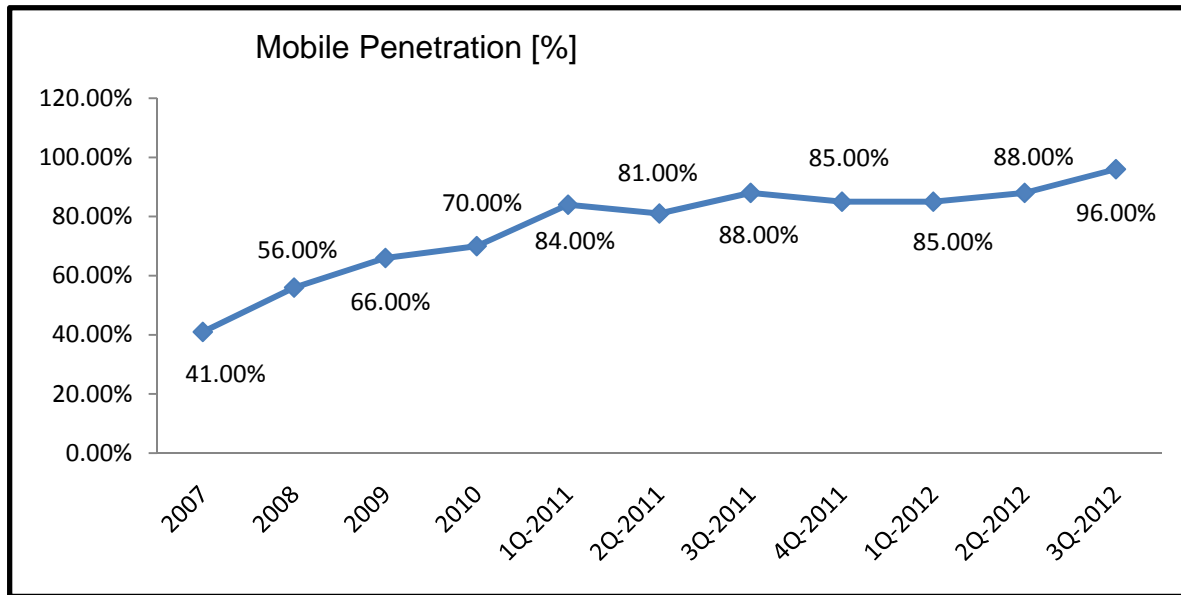Figure 3 – Fixed penetration

Source: RAEPC: Publication 02/2012, of date 10th of December, 2012.

Chart 4 reflects the state of mobile penetration in Kosova.

Figure 4 – Mobile penetration

Mobile Penetration [%]

Source: RAEPC: Publication 02/2012, of date 10th of December, 2012

Electronic Communications Sector Policy - Digital Agenda for Kosova 2013-2020 addresses the following problematic areas: ICT infrastructure development; development of the electronic content and services and promotion of use thereof; and Enhancement of the Kosova residents' ability to use the ICTs.

4.1. Problematic area: ICT infrastructure development

The future of economic, social and other activities is unimaginable without use of the Internet. For Kosova, universal access to broadband internet with the minimum speed of 512 kbps at a competitive price is a must. However, the development of infrastructure in the country has been uneven, and business is reluctant to develop it in remote areas. In Kosova people go online mostly using the wireless technologies (rural areas), number of people using the existing networks of copper wires of telephone lines is limited due to the low coverage (only urban). According to Eurostat in 2011 EU average of households using broadband internet connection, comprised 67,3 %. In order to ensure broadband connection coverage, the public sector needs

to take actions in order to bridge digital divide since only geographically consistent development of broadband networks brings additional benefits to the economy and society as a whole. Government shall explore innovative and creative options, including public private partnership, alternative funding mechanisms, etc., for the deployment of Internet broadband services to schools and other academic institutions, public health institutions, and cultural institutions such as libraries. Government and public institutions should seek to use financial support provided by multilateral financial institutions, e, g World Bank, European Bank for Reconstruction and Development, European Investment Bank, with the aim to finance projects aimed to bridge the digital divide between not competitive and competitive areas. If deemed needed Ministry of Economic Development should prepare and adopt broadband deployment action plan with the aim to deliver broadband access to the residents, SME and farmers living in not competitive areas[2].

At the same time one of the often cited reasons for investment shortfalls are high costs in today's difficult financial climate. However, several studies[3] suggest that up to 80% of total investment costs are related to civil infrastructure works. Moreover, a substantial part of this high cost (possibly up to 30%) can be attributed to inefficiencies in the roll-out process, for example because of a lack of coordination of civil engineering projects, insufficient re-use of existing infrastructure, a lack of cooperation between utilities. Faster roll-out can be further impeded by lengthy, no transparent and often cumbersome procedures for clearing rights of way and obtaining all necessary permits at national or local levels.

Experience from European Union Member States shows that practical measures can be taken to make investment happen in a much more efficient, less costly – and at the same time competition enhancing – way. Costs can be significantly reduced by a series of simple and relatively inexpensive measures, such as a more intensive use of existing ducts, including those belonging to other utilities (e.g. transport, sewerage, energy, etc.) or a better coordination of civil engineering projects. Moreover some of the inefficiencies in the process can be removed by means of improved information and by lowering the administrative burden for companies willing to invest.

It is important therefore to foresee steps to be taken to achieve costs savings as part of efforts to complete the aim of the present Policy with regards to deployment of the electronic communications infrastructure.

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[2] - notcompetitivearea – areaof thecountry, city or village whole or part where access to broadbansinfrastructureisnotprovidedorprovidedbyoneelectroniccommunicationsnetworkorserviceprovider.
[3] WIK, 2008, Francisco Caio's report, 2008, Analysys Mason, 2008

Policy orientations and objectives should also refer to the availability and efficient use of the spectrum necessary for the establishment and functioning of the electronic communications market in Kosova. Spectrum is a key public resource for essential sectors and services, including mobile, wireless broadband, and regulatory measures on spectrum therefore have economic, safety, health, and public interest, cultural, scientific, social, environmental and technical implications. Timely strategic planning and coordination of spectrum use creates new opportunities for innovation and employment creation, and simultaneously contributing to economic recovery and social cohesion. The Europe 2020 Strategy, has given the huge potential of wireless services to promote a knowledge-based economy, develop and assist sectors relying on information and communications technologies and overcome the digital divide. As underlined in the Digital Agenda for Europe, wireless broadband is an important means to boost competition, consumer choice and access in rural and other areas where deployment of wired broadband is difficult or not economically viable. Increased wireless broadband opportunities are crucial to provide the cultural sector with new distribution platforms, thereby paving the way for the successful future development of that sector and economy as a whole.

The number of information and network security breaches is growing fast. This causes a lot of financial losses and creates new risks and threats for the development of the information society. It is necessary to contribute to the development of a secure information society by properly regulating public relations in this field. It is vitally important to amend legal acts, so that the existing legal system does not impede the technological progress, but, on the contrary, contributes to it: they must suit the existing public relations and properly protect users, increase their confidence in information technologies, and encourage the use of advanced and secure ICT. Specific actions should be taken in order to increase, at a national level, the society's awareness of the potential risks in the field of network and information security and of the means of elimination of such risks, including children protection from the illegal content in cyberspace. Security incidents that influence proper functioning of networks and services, interrupts communications privacy or steals confidential information should be properly managed at the national level by the world-wide adopted incidents management system – Computer Emergency Response Team (CERT). As cyber-attacks to the national critical information infrastructures could have dramatic effect to its functionality and cause big financial losses, dedicated security requirements for those infrastructures should be prepared to keep those infrastructures security on a higher level.

4.2. Problematic areas: development of the electronic content and services and promotion of use thereof

The majority of online public and administrative services are complex services, i.e. the information necessary to provide public and administrative services is held by several public authorities and bodies, which introduce online public and administrative services. Presently, too few public services have been transferred to the cyberspace in Kosova and the use thereof not frequent enough. Fewer main public and administrative services (declaration of income or assets, job search, issue of personal documents, the declaration and the payment of salary taxes and pension contributions, e-banking, VAT Declaration, etc.) have been transferred into the electronic medium in Kosova compared to the EU states. According to 9th Benchmark Measurement (http://ec.europa.eu/information_society/newsroom/cf/item-detail-dae.cfm?item_id=6537), on full online availability of the main public and administrative services the EU average reached 82 % in 2010 (compared with 69 %in 2009). At the same time it should be taken into account, that Internet is becoming a major channel for the provision of services. Posing barriers for some citizens to access them – websites that are not built with accessibility features – leads to social exclusion and a negative economic impact. Therefore while taking steps towards transposition of the administrative services into the Internet it should be ensured that public sector websites (and websites providing basic services to citizens) are fully accessible.

It is important to ensure the survival of the Kosova languages in the global information society, which is dominated by the English language. The ICTs may help disseminate information on the Kosova culture as widely as possible and thus contribute to the preservation and reinforcement of the European cultural diversity as well as to the spread of national self-expression. For commemorative institutions, such as libraries, archives, museums and other bodies protecting the Kosova cultural heritage, the ICTs open up new opportunities ensuring the preservation of their stocks of significant research studies as well as educational and artistic resources that perish with time, also their integration into the space of electronic cultural heritage and worldwide dissemination.

A number of Kosova small and medium businesses are reluctant to use new technologies fearing complicated e-business processes related to the operations of various business operators. These companies avoid additional costs resulting from the introduction of new

technologies, doubt their advantages and often lack the requisite human resources to develop the ICTs and e-business. Apart from that, residents and businesses pursuing online business often encounter uncertainties relating to their rights and legal protection. At present, Kosova has no active models for digital distribution of audiovisual content and there is no copyright administration on the web, because there is no collective copyright management aligned with technological progress necessary to enhance the system's transparency and supervision. On the other hand, Kosova consumers do not have access to foreign audiovisual content websites where they could obtain legal copies. Due to the said reasons, there is no single EU market in electronic content (information, e-services) and the segmentation restricts the demand for cross-border e-services as well as e-commerce and operations. For the said reasons, Kosova residents have underused the opportunities provided by e-commerce: small number of the population buy goods or services online (EU average: 34 % - http://epp.eurostat.ec.europa.eu/tgm/table.do?tab=table&init=1&language=en&pcode=tin00067&plugin=1), although higher number browse for information on goods or services (EU average: 51 %).

4.3. Problematic area: Enhancement of the Kosova residents' ability to use the ICTs

Considerable number of Kosova's residents uses a computer or the internet on a daily basis: the internet is used to declare taxes, to access bank services, to search for professional or entertainment content. Yet, some target groups of the Kosova population do not use a computer or the internet or use them scarcely. As ever more daily tasks are carried out online, all residents of Kosova need enhanced digital skills to participate fully in society. Moreover, disabled persons face particular difficulties in benefiting fully from new electronic content and services. According to the Kosova's Agency of Statistics (hereinafter referred to as "Agency of Statistics"), the following groups use the ICTs scarcely:

a. The elderly. Low percentage of older people over 65 use computers and the Internet, compared with the percentage of those who use computers and the Internet within the age group 16-24 years.

b. Rural population. In 2011, 47.38% of rural households had access to the internet (compared to 69.76% of households in urban areas).

c. Low-income residents. Also, the low percentage of low-income households have access to the internet, compared with the percentage of households with incomes over € 1000.

Persons with disabilities should be able to fully participate in the Information Society, including having access to digital material (books and other publications), in line with the obligations of the UN Convention on the Rights of persons with disabilities [4]. Beyond web accessibility, accessibility of electronic communications (notably the 112 emergency number) and audiovisual services (notably digital TV) is particularly relevant. Improving ICT accessibility will help members of disadvantaged social groups to participate on an equal footing in the digital society and to have equal opportunities in terms of social interaction, employability, daily life and protection in case of emergencies. Special ICT devices for the disabled are more costly and scarily available than the regular equipment; moreover, the information provided on the web must meet the special accessibility standards to be usable by people with special needs. Although Kosova has developed the draft legislation ensuring adaptability of the information environment in order to enhance social integration of the disabled through the use of ICTs, involvement of these people in the information society has been a difficult process. With regards to the accessibility of electronic communications, relevant legal provisions were transposed into the Draft Law on Electronic Communications. After the Draft Law will be adopted it will be crucial to implement those provisions so that to ensure accessibility of electronic communications in practice.

With the labor market radically changing it is clear that new skills will be needed for the jobs of tomorrow. According to the Digital Agenda 90% of jobs in the near future require ICT skills of some level. Shortages of adequate skills in some sectors or occupations already co-exist with unemployment across the country. Number of young people studying and choosing careers in ICT is decreasing also in Europe and is not keeping up with growing demand. In that context of overall lack of the ICT sector employees, Digital Agenda is stressing that women are under-represented at all levels in the ICT sector. In order to realize full equal opportunities and to empower them to participate fully in the information society, higher participation of young women and women returners in the ICT workforce should be promoted.

Today e-learning is not sufficiently present in education and training policies and legal framework of Kosova. Although Kosova has developed the strategy on e-learning further steps

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[4] - http://www.un.org/disabilities/convention/conventionfull.shtml

could be taken in order to implement the goals foreseen. However, the benefits of e-learning are enormous: it enables people to acquire skills anywhere, anytime; it empowers teachers to adopt new practices, to tailor interventions on the basis of personal learning needs and to individualize assessment. It also caters for self-regulated and informal learning, accommodates different learning styles, innovative collaborative learning practices, and supports more efficient workforce training, at a global scale, improving delivery, reducing training costs and time-to-competencies. Therefore it is important that Kosova would mainstream e-learning in national policies for the modernization of education and training, including curricula, assessment of learning outcomes and the professional development of teachers and trainers.

4.4. Other problematic areas:

4.4.1. Recognizing the importance for the state in the international level to be granted with the right of possessing an international telephone dialing code ("country code") and an impact on the economy of Kosova as a whole especially in the international market competition level, it is the general policy goal that Kosova should seek, and should be granted, an international telephone dialing code ("country code") at the earliest possible date.

4.4.2. The creation of a Country Code Top Level Domain (ccTLD, also known as an "Internet country code") for Kosova is an important aspect of promotion and facilitation of commercial exploitation of the Internet. It is the general policy goal that Kosova should seek, and should be granted ccTLD under the formal procedures for acquiring a ccTLD for Kosova through the Internet Corporation for Assigned Names and Numbers (ICANN) and the United Nations ISO 3166 Maintenance Agency (ISO 3166/MA) at the earliest possible date.

Nevertheless, a number of initiatives can be taken pending such resolution, which would simplify operational issues regarding ccTLD acquisition and management in the post-status period. In particular, the RAEPC is directed at the earliest possible date to take the necessary initiatives in accordance with the obligations laid down by ICANN.

Taking into account ICANN`s developed the New generic Top-Level Domain Program aiming to increase competition and choice by introducing new gTLDs into the Internet's addressing system the RAEPC is directed to analyze and prepare the actions for application by Kosova to the ICANN for the allocation of the gTLD ".ko" and ".ks" as soon as the call for new applications will be announced by the ICANN.

Activities of the RAEPC regarding the country code and gTLD shall be closely coordinated with the MED.

4.4.3. Ensuring users' rights relating to electronic communications networks and services the public telephone network operators should make caller location information available to authorities handling emergencies, to the extent technically feasible, for all calls made to the single emergency call number 112. To facilitate the provision of caller location information and eCall services the actions should be taken by respective state institutions taking into account Commission Recommendation 2003/558/EC on the processing of caller location information in electronic communication networks for the purpose of location-enhanced emergency call services[5] and Commission Recommendation 2011/750/EU on support for an EU-wide eCall service in electronic communication networks for the transmission of in-vehicle emergency calls based on 112 ('eCalls')[6].

It is a policy of GoK that Integrated Information System for emergency services should be advanced further in order to meet all necessary requirements of those services.

Municipalities play significant role within the area of construction of the ICT infrastructure, while issuing relevant permits, sharing relevant public infrastructure which could be used for the deployment of the broadband network infrastructure, etc. During the public consultation process with stakeholders, i.e. IPKO, PTK, indicated concerns related to obtainment of the permits on Municipal level which makes overall process of expansion of the broadband infrastructure in the Republic of Kosova more slow and costly. Present Policy foresees certain actions which should be taken in Municipal level; however the Government does not has power to influence the decisions of Municipalities directly. Therefore there should be found the mechanisms to cooperate with Municipalities in order to reach goals of the Policy.

To contribute to the development of ICT has approved the "National Strategy for Information Society 2006-2012", "Electronic Governance Strategy 2009-2015" and recently the Law on Electronic Communications is approved which transposes EU regulatory framework for electronic communications of 2002 and 2009.

Within the electronic South East Europe Initiative (eSEE Initiative) and in coperation with the Academy for eGovernance of Estonia the very firs steps are already made in order to implement

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[5]http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2003:189:0049:0051:EN:PDF
[6]http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2011:303:0046:0048:EN:PDF

this project TID+, which will contribute to improving the participation of electronic citizens in making public policy government.

The project "Teacher's training and certification with ECDL" of Ministry of Education, Science and Technology (MEST) is in the process of implementing. Still now, MEST has certified more than 1940 teachers (from more than 10000 trained teachers). This program is implemented by the American University (AUK) and will last for two years, and about 27 thousand teachers in the Republic of Kosova are obliged to pass it.

There are programs for continuous learning of government officials in the sphere of ICTs through "Kosova Institute for Public Administration". Any national Academic Research Network is established at the moment, but, the National Research Council has prepare "The National Research Programme of the Republic of Kosova" within the priorities of which is the priority: Cross-horizontal Research in Information and Communication Technologies. In the context of implementing of this Programme, Ministry of Education, Science and Technology every year undertakes recently has published an Invitation for competition to Kosova's institutions of science and to kosovarian researchers to compete to acquire scientific grants in some categories, where one of the scientific priority areas is Interdisciplinary Research in the field of ICT. These programs have a financial value of € 1-2 Millions.

Central e-Gov portal www.rks-gov.net was introduced in 2009 as a getaway for some services and useful links of other entities.

There is a program for digitalization of cultural and historic heritage commence developed in cooperation between Ministry of Culture and British Embassy. Embassy in Prishtina, have created an electronic database regarding cultural heritage of Kosova, and a programme of digitalization of cultural artifacts is underway. The database will include information on all cultural monuments and the value of various cultural properties in Kosova. The database has been designed and digitalization of an inventory of about 2,700 items has in the implementing phase.

Mostly all decisions that require public discussion, and their drafts, available for online discussion are going through public consultation.

Describing the level of participation of citizens and businesses, as a part of e-Government services there may be said that still less e-Government services offered and the dominant way of using the e-Services is one way interaction, i.e. the obtaining of information, downloading forms, initiation of an application, and very little two way interaction.

5. Objectives

The strategic objective of the Policy is to improve the quality of life for the Kosova residents as well as the business environment for companies through the use of the opportunities created by the ICTs and to increase the percentage of internet users in Kosova to at least 85% by the year 2020.

The information society must be developed on the basis of the following strategic objectives which are based on the problems identified in above chapters:

1. Development of the ICT infrastructure (hereinafter referred to as "Priority 1")

2. Development of the electronic content and services and promotion of use thereof (hereinafter referred to as "Priority 2")

3. Enhancement of the Kosova residents' ability to use the ICTs (hereinafter referred to as "Priority 3")

6. Alternatives considered

Course of actions established by this Policy do not go beyond the international commitments taken by the Government of Kosova by contra signing the "eSEE Agenda +" and "European Partnership Action Plan 2012" and adopting above mentioned documents on the national level.

The alternative would be not to foresee the course of actions corresponding to "eSEE Agenda +" and "European Partnership Action Plan 2012" within this Policy. This alternative implies that Republic of Kosova would not follow its international commitments. Therefore this alternative should not be supported because it would not meet the already taken international commitments.

Working group (established by the decision of Ministry of Economic Development – No.2096 of date 07.09.2012) did not identified other alternatives except of described above.

7. Recommended Course of Action

Taking into account the analysis of the problematic areas undertaken in Chapter 4, as well as suggested Strategic objectives to address those areas and alternatives discussed in Chapter 6 as well as contributions provided by the participating institutions and stakeholders there was formulated Course of actions provided in the Annex to this Policy.

Below is presented Course of actions which was considered to be the most effective way of achieving the objectives identified in Chapter 5.

The following objectives for Priority 1 "Development of the ICT infrastructure" shall be established:

1.1. The first objective is to ensure a geographically consistent development of broadband electronic communication networks throughout the national territory and to promote the use of electronic communication services (hereinafter referred to as "Objective 1 under Priority 1").

1.2. The second objective is to ensure the security and integrity of the electronic communications networks and services, to increase public and business confidence in the cyberspace (hereinafter referred to as "Objective 2 under Priority 1")

The following objectives and tasks for Priority 2 "Development of the electronic content and services and promotion of use thereof" shall be established:

2.1 The first objective is to encourage the residents to use online public and administrative services, and to ensure the quality of data transmission and the infrastructure of functioning search systems, thus contributing to the development of e-democracy (hereinafter referred to as "Objective 1 of Priority 2").

2.2. The second objective is to employ the ICTs to promote the Kosova culture and languages (hereinafter referred to as "Objective 2 under Priority 2").

2.3. The third objective is to promote the development of e-business (hereinafter referred to as "Objective 3 under Priority 2").

The following task for Priority 3 "Enhancement of the Kosova residents' ability to use the ICTs" implementation shall be established:

3.1. The objective shall be to encourage Kosova residents to gain knowledge and skills required for successful use of the ICTs and to become involved in the information society, to

improve their quality of life and to reduce social exclusion (hereinafter referred to as "Priority 3 objective"), and to create the necessary conditions for that.

At the moment ICT sector is not measured in terms of Statistics, i.e. Statistic System does not developed on the national level. This implies that there is a risk that progress of implementation of Policy cannot be measured as well as the existing stand point.

The mitigation for such risk would be the Kosova Agency of Statistics would ensure collection of the data, preparation and provision of the statistical information on the Policy assessment criterions listed in the Annex of the Policy namely:

1. Residents who use the internet on a regular basis (percentage of total national population).

2. Residents using devices that allow access to electronic services (percentage of total national population).

3. Residents who do not use the internet (percentage of total national population).

4. Residents working in the ICT sector (percentage of the total national population).

5. Persons aged 16–74 who use the internet for learning purposes (percentage of the total national population).

6. Residents who use online public and administrative services (percentage of total national population).

7. Residents that can access their health records online from any place (percentage of the total national population).

8. Residents that use online services related to the Kosova cultural heritage (percentage of the total national population).

9. Residents that use online services related to the Kosova languages (percentage of the total national population).

10. Residents who have bought (ordered) products or services online (percentage of the total population).

11. Enterprises using enterprise resource planning systems connected to partner systems (percentage of all enterprises in the country).

12. Enterprises using customer relations management systems (percentage of all enterprises in the country).

13. Enterprises that have purchased (ordered) goods or services on e-networks (percentage of all enterprises in the country).

14. Enterprises that have sold goods or services on e-networks (percentage of all enterprises in the country).

15. Residents that have an opportunity to obtain access to broadband networks (percentage of total national population).

16. Households having possibility to use broadband internet (percentage of total households).

17. Enterprises having possibility to use broadband internet (percentage of all enterprises).

8. Next steps for implementing the strategy – Policy implementation and accountability

The implementation of the Policy shall be coordinated by the Ministry of Economic Development (hereinafter referred to as "Policy coordinator").

Implementation of the Policy's tasks shall be the responsibility of the public authorities listed in the annex to the Policy.

Information society development covers horizontal processes in a large number of sectors of the economy and public administration, thus the Policy shall be implemented in line with the Plan of Policy implementation measures (action plan, hereinafter – Plan) in coordination with the public authorities and bodies responsible for the implementation of the Policy's tasks (hereinafter referred to as "competent authorities"). The Plan lays down the specific measures necessary for Policy implementation. Competent authorities in their annual working plans submitted to the Government and Parliament respectively for approval should include concrete measures and activities arising from the Policy document.

Ministry of Economic Development on annual basis shall review measures taken, the performed work, the achieved results, problems in measure implementation, any measures that have not been implemented, and any changes in the values of the assessment criteria.

The Policy coordinator:

- shall analyze the information received from the authorities responsible for the implementation of the Policy's tasks concerning the measures necessary for Policy implementation and shall submit proposals and recommendations on the compliance of these measures with the Policy's priorities, objectives and tasks;

- shall oversee the implementation of the Policy's priorities, objectives and tasks, and by 1 January 2017, shall carry out an interim review of the tasks set out in the Policy and of the

changes in the values of their assessment criteria and, where necessary, shall initiate Policy revision;

- in its annual activity report, shall supply information on Policy implementation to the Government. If necessary, the progress of the implementation of policies will be discussed at meetings of the National Forum for Development of the Information Society, which will be created after the adoption of this Policy.

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9. Annexes

Annex to the Electronic Communications Sector
Policy – Digital Agenda for Kosova 2013–2020

CRITERIA FOR THE ASSESSMENT OF IMPLEMENTATION OF THE INFORMATION SOCIETY DEVELOPMENT POLICY AND THEIR TARGET VALUES

No	Strategic objective and priorities	Objective	Task	Assessment criterion	2013 indicator	2016 indicator	2020 indicator	Authority responsible for implementation of the criterion
0.	Criterion for assessment of the strategic objective is to improve the quality of life for the Kosova residents as well as the business environment for companies through the use of the opportunities created by the ICTs			residents who use the internet on a regular basis (percentage of total national population)	57	70	85	Ministry of Economic Development
1.	Criteria for the assessment of Priority 1: ICT infrastructure development	1.1. To ensure a geographically consistent development of broadband electronic communication networks throughout the national territory and to promote the use of electronic communication services		residents that have an opportunity to obtain access to broadband networks (percentage of total national population)	75	95	100	Ministry of Economic Development, Electronic Communication and Postal Regulatory Authority
			1.1.1. To ensure the development of broadband electronic communication networks in the areas where the market has failed to	households having possibility to use broadband internet (percentage of total households)	48.5	70	80	Ministry of Economic Development, Electronic Communication and Postal Regulatory Authority

No	Strategic objective and priorities	Objective	Task	Assessment criterion	2013 indicator	2016 indicator	2020 indicator	Authority responsible for implementation of the criterion
			ensure this infrastructure development and service provision	enterprises having possibility to use broadband internet (percentage of all enterprises)	75	90	98	Ministry of Economic Development, Ministry of Trade and Industry
			1.1.2. To upgrade the public internet access infrastructure of libraries	public internet access points with an internet connection speed of 10 Mbps or higher (percentage of all internet access points)	26	70	100	Ministry of Education Science and Technology, Ministry of Economic Development
			1.1.3 To upgrade the public internet access infrastructure of schools	public internet access points for pupils with an internet connection speed of 10 Mbps or higher (percentage of all schools)	-	50	100	Ministry of Education Science and Technology, Ministry of Economic Development
			1.1.4. To encourage competition on the broadband electronic communications market, to enhance the effectiveness of market regulation, and to make efforts to provide all Kosova residents with access to the internet at a speed higher than 30 Mbps by the year 2020	Residents having possibilities to use 30 Mbps or faster internet connection (percentage of total national population)	-	70	100	Electronic Communication and Postal Regulatory Authority, Ministry of Environment and Spatial Planning, Ministry of Economic Development, Ministry of the Interior, Municipalities

No	Strategic objective and priorities	Objective	Task	Assessment criterion	2013 indicator	2016 indicator	2020 indicator	Authority responsible for implementation of the criterion
			1.1.5.To introduce new measures and amend existing procedures with the aim to contribute to more simple, fast and cost effective way of deployment of electronic communications infrastructure on the territory of the Kosova.	Reviewed legal acts related to the development of the project, construction and completion of electronic communications network infrastructure with the aim to simplify the processes and procedures (percentage of total number of legal acts)	-	100	100	Ministry of Environment and Spatial Planning, Municipalities
				Create a centralized and comprehensive database/information access points concerning the permits, town planning requirements etc.	-	100	100	Doing Business Task Force (DBTF), Municipalities: Directorate of Planning, Urbanism and Construction; Directorate of Geodesy and Cadastre; Municipal Technical Committee; Kosova Energy Corporation; Water Authority; Emergency department of Ministry of Internal Affairs, Ministry of Environment and Spatial Planning

No	Strategic objective and priorities	Objective	Task	Assessment criterion	2013 indicator	2016 indicator	2020 indicator	Authority responsible for implementation of the criterion
				Create a one-stop-shop for all the necessary permits;	-	100	100	Doing Business Task Force, Municipalities: Directorate of Planning, Urbanism and Construction; Directorate of Geodesy and Cadastre; Municipal Technical Committee; Kosova Energy Corporation; Water Authority; Emergency department of Ministry of Internal Affairs, Ministry of Local Government Administration, Municipalities, Ministry of Economic Development, Ministry of Infrastructure
				Electronic communications infrastructure (internal wiring) installed in newly built blocks of apartments (where more 4 or more) ensures that it is technically possible to provide each household with the broadband connection over 100 Mbps (percentage of total newly built blocks of apartments);	-	100	100	Ministry of Environment and Spatial Planning

No	Strategic objective and priorities	Objective	Task	Assessment criterion	2013 indicator	2016 indicator	2020 indicator	Authority responsible for implementation of the criterion
				Rules for installation of electronic communications network infrastructure are adopted	-	100	100	Ministry of Economic Development
				Framework enabling operators to benefit from clear announcements of the planned civil engineering works in a given territory and timeframe in terms of examine possibilities of parallel deployment or co-deployment of electronic communications network infrastructure is established;	-	100	100	Doing Business Task Force, Directorate of Planning, Urbanism and Construction; Directorate of Geodesy and Cadastre; Municipal Technical Committee; Electricity Authority, Water Authority, Ministry of Environment and Spatial Planning, Emergency department of Ministry of Internal Affairs, Ministry of Local Government Administration, Municipalities, Ministry of Economic Development, Ministry of Infrastructure

No	Strategic objective and priorities	Objective	Task	Assessment criterion	2013 indicator	2016 indicator	2020 indicator	Authority responsible for implementation of the criterion
				Possibility to lay new ducts or other electronic communications networks infrastructure when public works are undertaken (e.g. such as road construction or maintenance works) is systematically provided (percentage of total number of public works undertaken);	-	40	100	Doing Business Task Force, Directorate of Planning, Urbanism and Construction; Directorate of Geodesy and Cadastre Municipal Technical Committee; Electricity Authority, Water Authority, Ministry of Environment and Spatial Planning, Emergency department of Ministry of Internal Affairs, Ministry of Local Government Administration, Municipalities, Ministry of Economic Development, Ministry of Infrastructure
				Make information on which underground and over ground infrastructures (which could be used for the deployment of the electronic communications networks) exist, on its location and ownership available on line (percentage of total territory of Kosova)	-	40	100	Ministry of Infrastructure, Ministry of Economic Development, Ministry of Local Government Administration, Municipalities

No	Strategic objective and priorities	Objective	Task	Assessment criterion	2013 indicator	2016 indicator	2020 indicator	Authority responsible for implementation of the criterion
				Establish prices for the sharing of the public infrastructures on the local level which may be used for the deployment of the public electronic communications networks, e.g. local roads, sewers, water supply, heating, etc. (percentage of total number of local infrastructures)	-	100	100	Ministry of Infrastructure, Ministry of Economic Development, Ministry of Local Government Administration, Municipalities, Electronic Communication and Postal Regulatory Authority
				Establish prices for the sharing of the public road infrastructure, in particular road corridors and installed ducts	-	100	100	Ministry of Infrastructure, Electronic Communication and Postal Regulatory Authority
				Establish prices for the sharing of the gas infrastructure, in particular ducts	-	100	100	Ministry of Economic Development, Electronic Communication and Postal Regulatory Authority
				Establish prices for the sharing of the electricity infrastructure, in particular poles and ducts	-	100	100	Ministry of Economic Development, Electronic Communication and Postal Regulatory Authority

No	Strategic objective and priorities	Objective	Task	Assessment criterion	2013 indicator	2016 indicator	2020 indicator	Authority responsible for implementation of the criterion
			1.1.6. To plan the demand of radio frequencies and to coordinate radio frequencies for new radio communications technologies	Amendments for issued licenses performed until the end of 2012 by adjusting conditions for use of assigned radio frequencies for new radio communications technologies in wireless broadband	-	100	100	Electronic Communication and Postal Regulatory Authority
				Coordinating of the conditions for radio frequency usage and assignment procedures for wireless broadband in 790-862 MHz band performed	80	98	100	Electronic Communication and Postal Regulatory Authority, Ministry of Economic Development
			1.1.7. to prepare for creation of a Country Code Top Level Domain (ccTLD, also known as an "Internet country code") for Kosova	To analyze and prepare the actions for application by Kosova to the ICANN for the allocation of the gTLD ".ko" and ".ks"	-	100	100	Electronic Communication and Postal Regulatory Authority
		1.2. To ensure the security and integrity of the electronic communications networks and services, to increase public and business confidence in the cyberspace	1.2.1. To develop an infrastructure for personal ID card support and use that would guarantee reliable personal identification and verification in the cyberspace	residents using personal ID cards for verification of personal identity in the cyberspace (percentage of total national population)	–	30	50	Ministry of Internal Affairs

No	Strategic objective and priorities	Objective	Task	Assessment criterion	2013 indicator	2016 indicator	2020 indicator	Authority responsible for implementation of the criterion
			1.2.2. To create an infrastructure for the management of electronic documents, thus ensuring the authenticity, integrity and preservation of electronic documents	national and local authorities and bodies exchanging electronic documents using the infrastructure (percentage of all national and local authorities and bodies)	–	100	100	Ministry of Economic Development, Ministry of Justice, Ministry of Internal Affairs
			1.2.3. Introduce new and amend existing legal acts with the aim of development of advanced legal framework which ensures security and integrity of the electronic communications networks and services;	Adopted and amended legal acts (Percentage form legal acts)	-	100	100	Ministry of Economic Development, Ministry of Justice, Ministry of Internal Affairs
			1.2.4. Establish national CERT responsible for investigation of security incidents of electronic communications networks and services;	National CERT is established and fully operational	-	100	100	Electronic Communication and Postal Regulatory Authority, Ministry of Economic Development
			1.2.5. Promote the culture of safe usage of electronic communications network, services and information systems;	Information related to electronic communications networks, services and information systems security is publicly available and regularly updated	-	100	100	Electronic Communication and Postal Regulatory Authority, Ministry of Education, Ministry of Internal Affairs

No	Strategic objective and priorities	Objective	Task	Assessment criterion	2013 indicator	2016 indicator	2020 indicator	Authority responsible for implementation of the criterion
				Tools for residents related to the enhancing of capabilities to protect from the security threats and safeguard privacy are publicly available free of charge	-	100	100	Electronic Communication and Postal Regulatory Authority, Ministry of Internal Affairs
			1.2.6. Fight with the illegal content on internet establishing a hotline system and educate the society (especially children);	Hotline and awareness centres are established and fully operated	-	100	100	Ministry of Economic Development, Ministry of Internal Affairs
			1.2.7. Deploy security measures, risk management, incident control of electronic communications networks, information systems with the aim to ensure security and reliability of the information systems of public sector and national critical information infrastructures;	Residents that have notified security problems while communicating with governmental and municipality institutions over the Internet (percentage of total national population)	-	1	1	Ministry of Internal Affairs, Ministry of Public Administrations, Electronic Communication and Postal Regulatory Authority

No	Strategic objective and priorities	Objective	Task	Assessment criterion	2013 indicator	2016 indicator	2020 indicator	Authority responsible for implementation of the criterion
2.	Criteria for assessment of Priority 2: development of the electronic content and services and promotion of use thereof	2.1. To encourage the residents to use the online public and administrative services, and to ensure the quality of data transmission and the infrastructure of functioning search systems, thus contributing to the development of e-democracy		residents who use online public and administrative services (percentage of total national population)	-	20	40	Ministry of Public Administration, Ministry of Internal Affairs, Ministry of Local Government Administration, Ministry of Economic Development
			2.1.1. To maximize the transfer of public and administrative services into the electronic medium, thus ensuring integrated reorganization of service provision, to achieve centralized provision of services, and to encourage public sector authorities to procure the ICT resources as services	public and administrative services transferred to the cyberspace amount to this level of maturity of full availability online of the main public and administrative services (%)	-	40	70	Ministry of Public Administration, Ministry of Internal Affairs, Ministry of Local Government Administration, Ministry of Economic Development
				residents that can access their health records online from any place (percentage of the total national population)	–	50	100	Ministry of Health, Ministry of Economic Development

No	Strategic objective and priorities	Objective	Task	Assessment criterion	2013 indicator	2016 indicator	2020 indicator	Authority responsible for implementation of the criterion
			2.1.2. To inform residents about access to the legal information published on the internet, to encourage them to submit comments and proposals on-line and thus participate in public decision making	draft legislation on which drafters received proposals from the public (percentage of total draft legislation)	–	10	15	Ministry of Justice
			2.1.3.To launch the TID+ project under the umbrella of eSEE cooperation		-	100	100	Ministry of Public Administration, Prime Minister Office, Ministry of Economic Development
		2.2. To employ ICTs in the promotion of the Kosova culture and languages		residents that use online services related to the Kosova cultural heritage (percentage of the total national population)	–	15	20	Ministry of Culture Youth and Sports, Ministry of Education Science and Technology
				residents that use online services related to the Kosova languages (percentage of the total national population)	–	20	25	Ministry of Culture Youth and Sports, Ministry of Education Science and Technology

No	Strategic objective and priorities	Objective	Task	Assessment criterion	2013 indicator	2016 indicator	2020 indicator	Authority responsible for implementation of the criterion
			2.2.1. To digitize the Kosova cultural heritage and use that as a basis to create publicly accessible digital products, thus ensuring preservation and spread of digital content in the cyberspace	availability of digitized cultural heritage on the internet (percentage of all available digital products)	-	45	65	Ministry of Culture Youth and Sports, Ministry of Education Science and Technology
			2.2.2. To introduce local-languages digital products in the ICTs with the aim to ensure full functioning of the local languages (both in the written and oral forms) in all the areas of public life	developed and publicly available resources, measures and e-services of the local languages and writings (percentage of the total products introduced in ICTs)	-	25	40	Ministry of Culture Youth and Sports, Ministry of Education Science and Technology
		2.3. To promote e-business development		residents who have bought (ordered) products or services online (percentage of the total population)	-	20	40	Ministry of the Economic Development
			2.3.1. To encourage small and medium businesses to adopt and use ICTs in order to improve the efficiency and competitiveness of their operations	enterprises using enterprise resource planning systems connected to partner systems (percentage of all enterprises in the country)	–	10	20	Ministry of the Economic Development

No	Strategic objective and priorities	Objective	Task	Assessment criterion	2013 indicator	2016 indicator	2020 indicator	Authority responsible for implementation of the criterion
				enterprises using customer relations management systems (percentage of all enterprises in the country)	-	15	30	Ministry of the Economic Development
			2.3.2. To create favorable conditions for e-business development, i.e. to revise legal documents and provide legal certainty that would increase consumer confidence, reduce national regulatory barriers and guarantee consumer rights protection	enterprises that have purchased (ordered) goods or services on e-networks (percentage of all enterprises in the country)	-	30	50	Ministry of the Economic Development
				enterprises that have sold goods or services on e-networks (percentage of all enterprises in the country)	-	15	35	Ministry of the Economic Development
3.	Criteria for assessment of Priority 3: enhancement of the Kosova residents'	3.1. To encourage Kosova residents to gain knowledge and skills for successful use of the ICTs and to		residents using devices that allow access to electronic services (percentage of total national population)	57	75	85	Ministry of Education Science and Technology, Ministry of Labour and Social Welfare

No	Strategic objective and priorities	Objective	Task	Assessment criterion	2013 indica tor	2016 indica tor	2020 indica tor	Authority responsible for implementation of the criterion
	ability to use the ICTs	create the conditions necessary for that	3.1.1. To enable the target groups of the Kosova population that until now, for different of reasons, have not used computers and the internet and have had no need for them, to gain the required knowledge and apply it in various areas of activity	residents who do not use the internet (percentage of total national population)	43	30	20	Ministry of Education Science and Technology, Ministry of Labour and Social Welfare
			3.1.2. To reduce the inconsistency between the demand and supply of ICT specialists with the aim to achieve the EU average of ICT sector employees	residents working in the ICT sector (percentage of the total national population)	-	2.3	3.2	Ministry of Education Science and Technology, Ministry of Labour and Social Welfare, Ministry of the Economic Development
			3.1.3. To establish flexible learning conditions of a new quality in order to enable personalized teaching and learning in the cyberspace	persons aged 16–74 who use the internet for learning purposes (percentage of the total national population)	-	15	20	Ministry of Education Science and Technology, Ministry of Labour and Social Welfare
			3.1.4. To create a teaching and learning portal and to prepare teaching programme for the public servants enabling to gain skills in online public administration functions	Public servants certified according to ECDL (European Computer Driving License) system (percentage of the total number of civil servants)	-	30	80	Ministry of Public Administration, Ministry of Education Science and Technology