



EAST-HORIZON

**Fostering Dialogue and Cooperation between the EU and EECA in the HORIZON 2020
perspective**

Grant agreement 611063

**D3.3 - Report on Existing Research and Development
Roadmaps in EECA Countries**



VERSIONING AND CONTRIBUTION HISTORY

Each change or set of changes made to this document will result in an increment to the version number of the document. Minor changes will increment the decimal point of the version number. The change log will record this process and will identify for each version number of the document any modification(s), which caused the version number to be raised.

Version	Date	Modification Reason	Modified by
1	28/11/2014	Draft version	PLANET
2	02/12/2014	Inputs from PLANET	PLANET
3	04/12/2014	Updates from PLANET	PLANET
4	05/12/2014	Final review	PLANET



Contents

1	Russian Federation	3
1.1	Overview of ICT Policy Documents	3
1.2	State Programme: Information Society, 2011-2020	3
2	Armenia	8
2.1	Overview of the main trends in the National ICT Sector	8
2.2	Main Policies / Programmes.	8
2.3	Armenia Development Strategy for 2014-2025	8
2.4	eGovernance Development Strategy for Republic of Armenia	9
3	Azerbaijan	10
	Overview of ICT Policy Documents.....	10
3.1	10
3.2	Azerbaijan 2020: A look into the Future	11
4	Belarus.....	13
4.1	Overview of ICT Policy Documents	13
4.2	State Program for Innovative Development of the Republic of Belarus for 2011-2015.....	14
5	Georgia	16
5.1	Overview of ICT Policy Documents	16
5.2	ICT R& D Legislation	16
6	Kazakhstan.....	19
6.1	Overview of ICT Policy Documents	19
6.2	State Programme “Information Kazakhstan -2020”	19
7	Kyrgyzstan.....	21
7.1	Overview of ICT Policy Documents	21
7.2	National Strategy “Information and Communication technologies for the development of Kyrgyzstan”	21



8	Moldova	23
8.1	Overview of ICT Policy Documents	23
8.2	Digital Moldova 2020	23
9	Ukraine	25
9.1	Overview of ICT Policy Documents	25
9.2	Information Society in Ukraine in 2007-2015	25
10	Uzbekistan	27
10.1	Overview of ICT Policy Documents	27
10.2	Concept for Development of Information Technologies in Uzbekistan.	27
11	Conclusions	29



EXECUTIVE SUMMARY

The purpose of this report is to register all current National Research and Development strategies of EECA countries and to showcase each country's major R&D strategy processes, namely their formulation and implementation stage .

With an average timeframe of 20 years, the policy papers featured in the following report demonstrate national roadmaps in the field of ICT R&D and allow us to locate the key challenges for EECA- efforts. The interest of this report on the status of national strategies stems from their fundamental role (based on defining objectives and implementation plans) as preconditions of further development and innovation.

Aims at creating a roadmap that will maximize both the overall EU-EECA cooperation in ICT Research and Development as well as cooperation between organizations in EU and EECA addressing societal and industrial challenges, the report not only lists those policy papers of interest but chooses to analyse further those key policy papers, out of which a series of sub - programmes and policies of derive from.

Specifically, information on the policy's environment diagnosis is provided, so as to deeper comprehend the need of development of the guiding policy (includes details on the national strategic planning and thinking). The report also provides information on action plans drawn on a national level in order to achieve specific goals established by the guiding policy.

The policy papers featured in the report were listed by EECA country experts on ICT. The analytical information provided over National Policies comes from local experts as well as official information uploaded in official Governmental portals and Key National Research organizations.

This report uses three related concepts that need to be distinguished:

- 1) Which are the main ICT policy papers for the country at this time
- 2) Which is the main ICT policy paper that define sectorial strategies and legislations
- 3) What are the key element of the national policy that indicate the country's vision for ICT development (including strategic approaches or followed trends)

General findings on the current status and a regional perspective on national

Strategies are further analysed in EAST HORIZON deliverables of Work Package 2



INTRODUCTION

Information and Communication Technologies (ICT) is a very important tool for

A: the economic development by their role in all the economic activities (Design – manufacturing – trade)

B: addressing the main societal challenges

ICT continuously shows rapid alterations and transformation.

Following and understanding the basic trends in Information and telecommunications new technologies and new applications, their drivers, and their implications nationally and internationally constitute the most important factor for a sustainable National economic growth.

In order to EECA countries to meet national needs and to manage to compete on an international level they ought to define the roadmap to be followed, to create the necessary processes and models as well as define the roles and the functions of both the private sector and the government

Therefore all of them have more or less and under various forms (Legislation – Programmes – Directives etc.) have elaborated roadmaps presented in this report.



1 Russian Federation

1.1 Overview of ICT Policy Documents

Main policy documents concerning ICT policy adopted/published since 2010-2011

Title of document	Date	Organisation	Legal status
1. Russian State program "Information Society (2011-2020 years)"	December 2, 2011.	Ministry of Mass Communications of the Russian Federation	Government Decree № 2161-p
2. Progress Report on the implementation and effectiveness evaluation Russian State program "Information Society (2011-2020 years)"	March 1, 2014	Ministry of Mass Communications of the Russian Federation	Official Ministry Report
3. "On the main directions of improving governance"	May 7, 2012	President of the Russian Federation	Decree number 601
4. Forecast for Scientific and Technological Development of the Russian Federation for the period up to 2030	January 2014	Ministry of Education and Science of the Russian Federation	Prognostic report
5. «The Development Strategy of Information Technology Industry in the Russian Federation for 2014 - 2020, and the Prospect for 2025»	November 1, 2013	Ministry of Mass Communications of the Russian Federation	Government Decree № 2036-p

1.2 State Programme³: Information Society, 2011-2020

From the listed Policy documents / Programmes identified by national experts and other sources the “State Program Information Society 2011-2020” constitutes the existing Roadmap for the ICT sector development on a national level, and thus it is briefly presented below:

State programme : Information Society, 2011-2020

The State Programme Information Society for 2011-2020 was developed by the Ministry of Communications and Mass Media and the Ministry of Economic Development. The agency responsible for implementing the state programme is the Communications Ministry.

³ <http://government.ru/en/docs/3369/>



The Programme is aimed at giving individuals and companies' opportunities to use the benefits of information and communication technology through providing equal access to information sources, development of digital content, introduction of innovative technology and dramatic improvement of the government regulation of information security.

This state Programme aims to lead to the emergence of a broad scope of opportunities for using ICT for industrial, research, educational and social purposes. These opportunities are to be available to every citizen regardless of their age, health condition, place of residence or other factors. ICT will be made available to users through building a correspondent infrastructure, creating digital content and training the users.

STATE PROGRAMME SIX SUB-PROGRAMMES					
Quality of life & conditions for doing business	E-government & effective state governance	The Russian market for ICT	The basic infrastructure of the information society;	Security in the information society;	Digital content and cultural heritage.
GOALS & OBJECTIVES					
1. Developing services to simplify the procedures between citizens and the government through the use of IT; 2. Converting to online delivery of all state and municipal services; 3. Developing the digital government services access infrastructure; 4. Developing innovative high-tech services; increasing transparency in the government and	1. E-government and effective state governance: 2. Shaping a common legally significant space for digital interaction; 3. Developing interdepartmental data management systems and creating a single system of data elements, reference databases and	1. Creating stimuli for domestic ICT development projects; 2. Developing science and technology, and training qualified personnel for the ICT industry, to give Russia a competitive edge in this area; economic and financial development through the use of ICT tools;	1. Developing TV and radio; 2. Developing the basic information society infrastructure; 3. Raising the awareness of the public and business community of the opportunities offered by the information society; 4. Training people in using ICT, 5. Popularizing the	1. Fighting the use of ICT potential for the purpose of damaging Russia's national interests; 2. Ensuring technological independence of the ICT industry; 3. Developing information protection technology to protect people's privacy and family,	1. Preserving Russia's multi-ethnic cultural heritage; 2. Safeguarding cultural heritage monuments and ensuring greater penetration of scientific, cultural and artistic phenomena in everyday life by digitizing such materials,

<p>court operation;</p> <p>5. Creating a digital data management system for the healthcare industry and introducing individual digital patient records;</p> <p>6. Developing innovative ICT solutions for improving the quality of research and education services; developing innovative high-tech services in the area of digital content and cultural heritage.</p>	<p>classifiers used by state and municipal information systems; more effective use of ICT solutions by regional and municipal governments (e-regions and e-municipalities);</p> <p>4. Creating a spatial data infrastructure in Russia;</p> <p>5. Providing a regulated access to R&D materials;</p> <p>6. Supporting the conversion of the government's accounting work into digital format;</p> <p>7. Developing special</p>	<p>3. Generating socioeconomic statistics required by various members of the information society;</p> <p>4. Developing a network of high-tech industry parks.</p>	<p>opportunities and advantages of the information society.</p>	<p>as well as to protect limited access data;</p> <p>4. Upholding Russia's sovereign rights in the information society.</p>	<p>improving data processing methods and remote access to digital content;</p> <p>3. Developing digital content processing tools.</p>
--	--	---	---	---	---



	<p>information and IT systems to support the operation of state government and management bodies, including protected network segments on the Internet and protected inter-agency e-document flow.</p>				
--	--	--	--	--	--



2 Armenia

2.1 Overview of the main trends in the National ICT Sector

Main policy documents concerning ICT policy adopted/published since 2000-2013

Title of document	Date	Organisation responsible	Legal status
Electronic Government Armenia Strategy Development	11 January, 2006	GoA, ITDSC	Strategy
Government of Republic of Armenia Decree, No35, On Approving the Information Technology Sector Development Concept Paper	August 28, 2008	GoA	Development Concept Paper
Annex to the Republic of Armenia Government Protocol Decree N47, Concept Paper on Migrating too Digital Radio and TV Broadcasting System	November 12, 2009	GoA	Concept Paper
The Law of the Republic of Armenia on National Academy of Sciences of the Republic of Armenia	April 14, 2011	GoA	Law
Armenia Development Strategy for 2014-2025	March 27, 2014	GoA	Decree

2.2 Main Policies / Programmes.

From the listed Policy documents / Programmes identified by national experts and other sources the “Armenian Development Strategy for 2014-2015” and the “eGovernance Development Strategy” constitute the existing Roadmap for the ICT sector development on a national level, and thus it is briefly presented below

2.3 Armenia Development Strategy for 2014-2025

The Armenian Development Strategy was created under serious consideration of

Developments and new realities induced by the global financial and Economic downturn. Under this scope the Government of the Republic of Armenia has revised the Sustainable Development Program (SDP) adopted in 2008 aiming to ensure a coordinated post-crisis strategic framework for the development of state policies.



The strategy provides an opportunity to the government to unite national capacities in developing the country's long-term development vision, taking into consideration the accumulated experience, current conditions and global development challenges.

With a horizon reaching year 2025 it documents the country's enlarged group of socio-economic development priorities, objectives, main development obstacles and restrictions, key reforms to achieve priority objectives and policy tools, as well as main risks. The overarching goal of the government long-term strategy is permanent increase of welfare of society.

In regard to ICT the below objectives are set

- Continuation of establishment of technoparks, incubators and other IT infrastructures
- Being implemented through PPP toolsets
- Support to universities in implementation of modern curricula and acquisition of necessary laboratories, through promotion of their cooperation with private sector
- Implementation of favorable tax policy promoting export potential in the sector
- Implementation of state-support programs for SMEs and start-ups involved in the IT Sector, including access to markets, professional trainings and ensuring access to information
- Direct support to IT companies offering innovative products or services.

2.4 eGovernance Development Strategy for Republic of Armenia

The foundation of this document has been based on "Development of National e-governance strategy for Armenia Project (EuropeAid 119860/C/SV/multi) conducted by investissement Development Conseil sa (Paris, France). The goal of this project was to produce a national eGovernance strategy as well as a detailed action plan of implementation. The strategy creates the ground for the formation of the necessary legislation.

The strategy aims to put the ICT field in the centre of the Armenian economy and Society and it is expected to create:

- A strong , democratic society in Armenia
- Transparent and accountable Government
- A non divided digital society
- A society with good education, health services and governances supported by information and communication technology
- Improved access to public services

Overall the strategy provides the methodology which is to be followed, namely a special highly controlled management methodology, PRINCE2, a detailed implementation plan with defined deliverables, a concrete work pattern for legislation development.



3 Azerbaijan

3.1 Overview of ICT Policy Documents

Main policy documents concerning ICT policy adopted/published since 2010-2011

Title of document (in English)	Date	Organisation responsible	Legal status
On approval of the National Strategy on development of the information society in Republic of Azerbaijan in 2014-2020	02 April, 2014	Ministry of Communications and High Technologies, Cabinet of Ministers	The order of the President of Azerbaijan Republic
Approval of the Action Plan in connection with declaration of 2013 the Year of information communication technologies in Azerbaijan	28 March, 2013		The order of the President of Azerbaijan Republic
On Ensuring the activities of the Electronic Security Center under the Ministry of Communications and Information Technologies of the Republic of Azerbaijan	05 March 2013	Ministry of Communications and High Technologies	The decree of the President of Azerbaijan Republic
Establishment of the University of Information Technology	01 February, 2013		The decree of the President of Azerbaijan Republic
"2013 The Year of information communication technologies in Azerbaijan".	16 January, 2013		The decree of the President of Azerbaijan Republic
"On creation of the High-Tech Park"	05 November, 2012		The decree of the President of Azerbaijan Republic
The decree on approving Development Concept "Azerbaijan 2020: A Look into the Future"	29 December, 2012		The decree of the President of Azerbaijan Republic
"Azerbaijan 2020: A Look into the Future"	Approved by decree of The President on 29 December, 2012		Development Concept
On Approval of " Rules of use of information technologies, information systems and their means of support in Customs"	03 August 2012		Decision of the Cabinet of Ministers

Approval of the Statute of the State fund for Development of IT	15 March 2012	Ministry of Communication and High Technologies.	The decree of the President of Azerbaijan Republic
On approval of Action Plan for 2011-2015 on Implementation of the State Program on poverty reduction and sustainable development in Azerbaijan Republic in 2008-2015	28 June, 2011	Cabinet of Ministers	The order of the President of Azerbaijan Republic
“On some measures in the sphere of provision of e-services by state agencies”	23 May, 2011	Cabinet of Ministers	The decree of the President of Azerbaijan Republic
On approval of the Statute and structure of “Azerkosmos” public corporation	23 December, 2010		Decision of the Cabinet of Ministers
On approval of State Programme on development of information technologies in Azerbaijan Republic in 2010 - 2012 (“Electron Azerbaijan”)	11 August 2010	Ministry of Communication and High Technologies.	The order of the President of Azerbaijan Republic

3.2 Azerbaijan 2020: A look into the Future

From the listed Policy documents / Programmes identified by national experts and other sources the “Azerbaijan 2020: A Look into the Future” constitutes the existing Roadmap for the ICT sector development on a national level, and thus it is briefly presented below:

“Azerbaijan 2020: A Look into the Future”⁶

The main strategic view of the concept is to take account of the current opportunities and resources and attain a stage characterized by sustainable economic growth and high social welfare, effective state management and supremacy of the law, the full ensuring of all human rights and freedoms and the active status of the civil society in the country’s public life.

Its main task in is to speed up the diversification of the economy, to maintain the high pace of the development of the non-oil sector in the future regardless of the level of oil revenues, to increase competitiveness and to develop export possibilities.

In the Development Concept “Azerbaijan 2020: Look into the Future”, an export-oriented economic model is taken as a basis, and it is planned that increasing the

⁶ http://www.president.az/files/future_en.pdf



competitiveness of the economy and improvement of the structure will boost non-oil exports. Along with the speedy development of the non-oil industry, the promotion and expansion of innovative activity will create favorable grounds for the formation of an economy based on knowledge in the country.

The expansion of opportunities for using ICT and communication services, the creation of a reliable security system aimed at developing information and communication technologies, the formation of national standards, as well as the launch of totally digital broadcasting across the country and the halting of analog broadcasting, and the total use of e-government services constitute main priorities in the formation of Azerbaijan as a modern state.

ICT Priority tasks within the framework of the Concept:

- Transition to an information society,
- Establishment of an economy based on knowledge with the development of ICT
- Expansion of ICT use of in state and local government bodies,
- Development of electronic services,
- Development of the activities of the National Centre for Electronic Security,
- Meet of society's demand for information products and services
- Strengthening of competitive and export-oriented ICT potential
- Development of space industry
- Use of new technologies in the telecommunications network
- Package satellite transmission of national radio and TV programmes will be arranged.
- Elimination of digital difference between regional countries,
- Provision of cheap and high quality broadband Internet through the creation of a strong and sustainable information infrastructure,
- Development of e-commerce and e-market system,
- Development of legislation in order to protect and ensure the security of participants in ecommerce deals, and speed up the country's integration into global information space.
- Creation of digital rights management system based on the provision of services in the format of online television and one stop shops.
- Expansion of the use of ICT in the regions

4 Belarus

4.1 Overview of ICT Policy Documents

Main policy documents concerning ICT policy adopted/published since 2010-2011

Title of document	Date	Organisation responsible	Legal status
Electronics and Photonics, 2011-2015	June 09, 2010	National Academy of Science of Belarus, Ministry of education, Ministry of industry, State Military Industrial Committee	State programme of scientific researches
On approval of the priority directions of scientific and technological activities in the Republic of Belarus for 2011-2015	July 22, 2010	Council of Ministers	Decree of President of the Republic of Belarus No. 378
Strategy for the development of the information society in the Republic of Belarus for the period up to 2015	August 09, 2010	Ministry of Communications and Informatization	Strategy
Programme of Social and Economic Development of the Republic of Belarus for 2011-2015	April 11, 2011	Ministries and State Committees of the Republic of Belarus	Programme
Innovative Development of the Republic of Belarus for 2011-2015	May 26, 2011	State Committee on Science and Technology, Ministries of the Republic of Belarus	State Programme
Radio Electronics-2, 2011-2015	February 1, 2011	Ministry of Industry, State Military Industrial Committee,	State Scientific and Technical Programme
Information Protection-2, 2011-2015	February 1, 2011	Operative and Analytical Centre under the President of the Republic of Belarus	State Scientific and Technical Programme
Information Technologies, 2011-2015	February 1, 2011	National Academy of Science of Belarus	State Scientific and Technical Programme
CALS-ERP	February 1, 2011	Ministry of Industry	State Scientific and Technical

Technologies, 2011-2015			Programme
Informatics and Space Technologies, 2011-2015	February 1, 2011	National Academy of Science of Belarus	State Complex Target Scientific and Technical Programme
Accelerated Development of Services in Information and Communication Technologies for 2011-2015	March 28, 2011	Ministry of Communications and Informatization	National Programme
On some issues of the informatization	December 2, 2013	Council of Ministers	Decree of President of the Republic of Belarus No. 531
On approval of the Instruction on the procedure of establishing and maintaining a national fund of project documents and the national data bank of analogous objects concerning the construction.	March 26, 2014	Ministry of Architecture and Construction	Resolution of the Ministry of Architecture and Construction No. 14
On approval of the list of measures for informatization	April 10, 2014	Ministry of Communications and Informatization	Resolution of the Ministry of Communications and Informatization No. 4
On approval of the Instruction on the procedure of functioning a single settlement and information space in the Republic of Belarus	June 10, 2014	Board of the National Bank of the Republic of Belarus	Resolution of the Board of the National Bank of the Republic of Belarus No. 393

4.2 State Program for Innovative Development of the Republic of Belarus for 2011-2015

From the listed Policy documents / Programmes identified by national experts and other sources the “State Program for Innovative Development of the Republic of Belarus for 2011-2015” constitutes the existing Roadmap for the ICT sector development on a national level, and thus it is briefly presented below:

State Program for Innovative Development of the Republic of Belarus for 2011-2015

The main objectives of national ICT policy have been captured in the Strategy for the development of the information society in the Republic of Belarus for the period up to 2015 (2010) and the National Programme of Accelerated Development of Services in Information and Communication Technologies for 2011-2015 (2011). According to the Strategy, the main goal of developing ICT sector is to promote sustainable socio-



economic, political and cultural development of Belarus, improve the citizens' quality of life and create broad opportunities for satisfying the individual's needs and allowing free personal development. The Strategy has the following objectives:

- promoting development of the information society based on innovations
- development of ICT industry to anticipate the growing information needs of citizens, business and the State
- developing national information industry and attracting investment in national production of ICT, information resources and electronic services
- improving the education system to train high-quality human resources
- development of a system of information security to protect the national interests of Belarus in the global information space

In addition to these objectives, the National Programme of Accelerated Development of Services in ICT adds the following ones to be implement:

- creating an enabling environment for e-services and access to national information resources throughout the country and involving all participants of information exchange into information interaction
- creation and development of state system of providing electronic services
- improving the quality and accessibility of health services and service of health care system
- developing e-services in the employment and social protection, improving the quality of the organizations of the Ministry of Labour and Social Security on the base of ICT
- widespread adoption of e-learning elements
- developing e-services for domestic and international trade and promoting international trade as a part of the Belarusian economy
- Increasing the representation of the Government, civil society organizations and national business in the Internet, development of national Internet content.

5 Georgia

5.1 Overview of ICT Policy Documents

Main policy documents concerning ICT policy adopted/published since 2010-2011

Title of document	Date	Organisation responsible	Legal status
Law of Georgia On the Creation of the Legal Entity of Public Law (LEPL) – Data Exchange Agency	17.07. 2009, # 1536-RS Tbilisi, Georgia	Ministry of Justice of Georgia	Legislation
e-signature legislation	24.11.2010, №145/01 Tbilisi, Georgia	Ministry of Justice of Georgia	Legislation
Law of Georgia On Unified State Registry of Information	25/05/2011 Tbilisi, Georgia	Ministry of Economy and Sustainable Development of Georgia	Legislation
Law of Georgia on Information Security	01.07.2012 Tbilisi, Georgia	Ministry of Justice of Georgia	Legislation
The Law of Georgia on Electronic Communications	20.11.2013 # 1591 Tbilisi, Georgia	The Georgian National Communications Commission	Legislation

5.2 ICT R& D Legislation

In the case of Georgia, the listed policies submitted by national experts, are basically legislation bills drafted on the needs of the ICT R&D national sector. For the need of this report and for a better understanding of the Georgian ICT roadmaps information is provided on all the above legislative bills.

Since the end of 2000 the State Department for Informatisation elaborated a number of draft laws on e-commerce (with sections on digital signatures, digital documents and electronic commerce). These proposals were either incompatible with the international

standards, or included unsuitable requirements regarding licensing of digital signature providers, concern for consumer data privacy, etc.²³

Law of Georgia on the Creation of the Legal Entity of Public Law (LEPL) –: The purpose of this Law is the establishment of the LEPL – Data Exchange Agency (hereinafter “Agency”) under the Ministry of Justice (MOJ) of Georgia, and the determination of main principles of its functioning, organizational-legal setup, powers and main functional directions

e-signature legislation: Statute for the conducting the electronic signature in tax administration and capital issues system (GPSS) implies: to provide for legislative construction and definitions; to authorize the use of electronic signatures instead of written ones and provide for the legal effect of such usage; to provide for authority for encouraging the conduct of governmental and private sector business using electronic media and provide for powers and duties of the Georgia Information Technology Policy Council; to provide for pilot projects; to provide for the Electronic Commerce Study Committee and its membership, allowances, duties, and powers; to provide for an effective date; to repeal conflicting laws; and for other purposes.

Law of Georgia On Unified State Registry of Information: The purpose of this Law is to facilitate establishment of a unified state registry of registers, databases, services and information systems within the public sector of Georgia, as well as, pursuant to the principle of technological neutrality in receipt, transmission and interoperability of information in the public sector, regulate basic principles of establishment, use and alteration of registers, databases, services and information systems, standardize rules on maintenance of registers, databases, services and information systems, and define main directions of state information policy on registers, databases, services and information systems.

Law of Georgia on Information Security:

The purpose of this Law is to facilitate effective and efficient enforcement of information security, provide information security rights and obligations in public and private sector, and define state control mechanisms for implementation of information security policy.

The Law of Georgia on Electronic Communications: The present law shall establish legal and economic grounds for the pursuit of activities by means of electronic communications networks and facilities in the territory of Georgia as well as principles for the development and regulation of competitive environment in this sector, define the functions of the national regulatory authority (the Georgian National Communications Commission), specify the rights and obligations of natural persons and

²³ http://www.rciproject.com/itprofiles_files/ICT%20Country%20Profile%20Georgia_2013_1.0.pdf



legal entities owning, using or providing services by means of electronic communications networks and facilities.

6 Kazakhstan

6.1 Overview of ICT Policy Documents

Main policy documents concerning ICT policy adopted/published since 2010-2011

Title of document	Date	Organisation responsible	Legal Status
On creating special economic zone "Park of Innovation Technologies"	2011	Ministry of transport and communications (MTC of RK)	Government Decree № 193
Program for Information and Communication Technology Development in the Republic of Kazakhstan, 2010 - 2014.	September 29, 2010	Ministry of Communications and Information	Government Decree № 983
State Programme "Information Kazakhstan - 2020".	January 8 2013	Ministry of Transport and Communications	Government Decree № 464

6.2 State Programme "Information Kazakhstan -2020"

From the listed Policy documents / Programmes identified by national experts and other sources the "State Program "Information Kazakhstan – 2020" constitutes the existing Roadmap for the ICT sector development on a national level, and thus it is briefly presented below:



State Programme “Information Kazakhstan – 2020”⁵³

The State Program “Information Kazakhstan – 2020” was approved by the President on January 8, 2013. The main purpose of the Program is creation of conditions for transition to the information society.

The key objectives of the Programme are:

- Ensuring efficiency of the state administration system
- Ensuring accessibility of information and communication infrastructure
- Establishment of information environment necessary for social, economic and cultural development of society
- Development of the national information space

Implementation of the State Program “Information Kazakhstan – 2020” should result in achievement of the following key indicators:

- Kazakhstan should be ranked among the top 35 countries of the World Bank’s Doing Business Survey
- The country should be ranked among the top 25 world countries in terms of the UN e-government readiness index
- Accessibility of information and communication infrastructure in the households of the country should reach 100%
- The number of Internet users should reach 75% by 2020
- The embracement of population with digital TV broadcast should reach 95%
- The share of the ICT sector in the country’s GDP should reach 4%
- The share of healthcare organizations connected to the unified national scientific and education network should reach 100%
- The share of scientific and education institutions connected to the unified national scientific and education network should reach 100%
- The computer literacy level should reach 80%
- The share of electronic mass media should reach 100% of the total number of mass media registered in Kazakhstan
- The share of trade turnover of the local Internet shops should reach 40% of the total turnover of goods and services paid online
- The share of public services rendered online should reach 50%
- The share of online public services should reach 80% of the total number of public services

⁵³ <http://ortcom.kz/en/program/program-infokaz/text/show>

7 Kyrgyzstan

7.1 Overview of ICT Policy Documents

Main policy documents concerning ICT policy adopted/published since 1994

Title of document	Date	Organisation responsible	Legal status
Conception of legal information in Kyrgyz Republic	October 17, 1997	Ministry Transport & Communication KR	Government Decision, strategy
Conception of Development Informatization KR	February 14, 1998	Ministry Transport & Communication KR	Government Decision, strategy
Electronic payments	November 6, 1999	Jogorky Kenesh	Law
Development and financing of a telecommunication network in KR	2000	Government of Kyrgyz Republic	Government Decision, strategy
National Programme of Informatization	March 13, 2001	Ministry Transport & Communication KR	Government Decision, strategy
Situation about a State Computer Network KR	July 21, 2001	Ministry Transport & Communication KR	Government Decision, strategy
The Programme of Development ICT KR	November 8, 2001	Ministry Transport & Communication KR	Government Decision, strategy
The National Strategy 'Information and Communication Technologies for Development in the Kyrgyz Republic for 2002-2010 ICT provides opportunities to achieve CDF objectives, accelerate economic development and reduce poverty	March 10, 2002	President of Kyrgyz Republic	Law
On creation of the High-Tech Park	June 16, 2011	Ministry of transport and Communication	The decree of the President of Kyrgyz Republic

7.2 National Strategy "Information and Communication technologies for the development of Kyrgyzstan"

From the listed Policy documents / Programmes identified by national experts and other sources the "The national strategy on Information and communication technologies for the development of Kyrgyzstan constitutes the existing Roadmap for the ICT sector development on a national level, and thus it is briefly presented below "



National strategy “Information and communication technologies for the development of Kyrgyzstan”

The national strategy “Information and communication technologies for the development of Kyrgyzstan” was approved by the Decree of the President of the Kyrgyz Republic of March, 10, 2002 #54. It names incorporating ICT for effective and transparent management in state bodies and institutions of self-governance as one of the main priorities⁵⁴.

National Strategy sets out main priorities, objectives and tasks, main principles, provisions and directions of the national ICT policy. The National Strategy is viewed as one of the important areas for development within the framework of implementation of the Complex Development Framework up to 2010 (CDF hereinafter)

Potential benefits from ICT development include: achievement of an effective management; increased labour productivity; availability of new export opportunities, in particular in the area of software exporting and delivery of ICT services; provision of information to the farmers on agricultural markets and weather conditions; creation of the primary consultative medical assistance; expansion of distance education capabilities; improved cooperation between the regions; improved quality of state services rendered to population. It is necessary to achieve an increase in ICT sector share in GDP to 5% by 2010.

The National Strategy also describes organizational, economic and financial mechanisms of its implementation. The mechanisms are based on the principles of program and targeted approach based on competition, regular monitoring and transparent execution in the light of the speech made by the President of the Kyrgyz Republic, A.Akaev, during the First National ICT Summit held on April 27-28, 2001 in Bishkek.

The National Strategy determines the basics of funding of ICT development that would provide for a rational use of funds for the sake of development and modernization of projects and mass media in various sectors and regions, and increase transparency and targeted nature in using funds.

Main priorities of the National Strategy are:

- public administration and local self-government (e-governance) - effective, transparent and accountable public administration through utilization of ICT;
- Education - human capacity building and training of staff in ICT;
- Electronic economy (information business, electronic commerce, regional business center in Central Asia).⁵⁵

⁵⁴ <http://unpan1.un.org/intradoc/groups/public/documents/APCITY/UNPAN016400.pdf>

⁵⁵ <http://unpan1.un.org/intradoc/groups/public/documents/APCITY/UNPAN012317.pdf>

8 Moldova

8.1 Overview of ICT Policy Documents

Main policy documents concerning ICT policy adopted/published since 2010-2011

Title of document	Date	Organisation responsible	Legal status
Digital Moldova 2020	2013	Ministry of Information Technologies and Communication of Moldova	Strategy
“Electronic Moldova” (2005)	2005	Ministry of Information Technologies and Communication of Moldova	National Strategy for Information Society Action Plan
Technological Transformation Strategic Program “e-Transformation”	2011	e-Gov Center	Strategy
Open Government Action Plan	2012	e-Gov Center	Action Plan

8.2 Digital Moldova 2020

From the listed Policy documents / Programmes identified by national experts and other sources the “Digital Moldova 2020” constitutes the existing Roadmap for the ICT sector development on a national level, and thus it is briefly presented below

Digital Moldova 2020⁵⁶

The Ministry of Information Technology and Communications finalized the drafting process of the National Strategy for Information Society Development - Digital Moldova 2020 Strategy that is aimed at ensuring a systematic and foreseeable development of the country, having at its core the principles highlighted in “Digital Agenda for Europe”.

The Strategy exposes the vision and development objectives of the information society in the Republic of Moldova, identifies the constraints, proposes solutions, traces the necessary actions, implementation stages and establishes the monitoring and evaluation frameworks for reaching this objective.

The goal of the project resides in creation of favorable conditions for development and large-scale use of ICT potential by public institutions, business sphere and citizens through minimal intervention of state, but having a maximal effect, concentrating its efforts on three main areas:

- Infrastructure and access;
- Digital content and electronic services;
- Capacities and use.

⁵⁶ http://www.mtic.gov.md/moldova_digitala_eng/



By implementing this Strategy shall be improved the governance itself, alongside with the services for population and business, corruption shall be diminished and economy competitiveness shall grow.

The policy document has three implementation stages:

- Organizational stage, adjusting legal and regulatory frameworks, strengthening the capacities and launching the programs (2013-2014);
- Stage of supported development of infrastructure, generation and intense digitization of content and services (2015-2017);
- Stage of total ICT absorption by intense use and generation of digitized content and continuously developing electronic services based on infrastructure and policy instruments.

With the successful implementation of the Strategy objectives, in 2020 the Republic of Moldova shall become a country with an advanced information society, in which the use of information technology and communications, extended access to modern electronic communications infrastructure, rich digital content and advanced information services shall contribute to increase of governance act, improve economic competitiveness and ensure population welfare.

The Minister of Information Technology and Communications, Pavel Filip for the first time presented the National Strategy for Information Society Development Digital Moldova 2020 Strategy during the ministerial session at Moldova ICT Summit 2013.

9 Ukraine

9.1 Overview of ICT Policy Documents

Main policy documents concerning ICT policy adopted/published since 2010-2011

Title of document (in English)	Date (of approval, publication, etc.)	Organisation responsible (Ministry, etc.)	Legal status (Law, Government Decision, strategy (white) paper, action plan, etc.)
On Scientific and Scientific and Technical Activities	13 December 1991 (last update 08 September 2011)	Verkhovna Rada	Law
On Scientific and Technical Information	25 June 1993 (last update 27 March 2014)	Verkhovna Rada	Law
On the Concept of the National Programme of Informatization	1998 (last update 04 July 2013)	Verkhovna Rada	Law
On Priority Areas of Science and Technology Development	11 July 2001 (last update 16 October 2012)	Verkhovna Rada	Law
On the Main Principles of the Information Society in Ukraine for 2007-2015	2007	Verkhovna Rada	Law
On Protection of Personal Data	01 June 2010	Verkhovna Rada	Law
On Approval of the Action Plan to Realize the Tasks Set by the Law of Ukraine "On Main principles of the Information Society in Ukraine in 2007-2015"	2007	Cabinet of Ministers	Edict
On Approval of the Concept of E-governance Development in Ukraine	13 December 2010	Cabinet of Ministers	Edict

9.2 Information Society in Ukraine in 2007-2015

From the listed Policy documents / Programmes identified by national experts and other sources the "Information Society in Ukraine in 2007-2015" constitutes the existing Roadmap for the ICT sector development on a national level, and thus it is briefly presented below

On Main principles of the Information Society in Ukraine in 2007-2015⁵⁷

⁵⁷ <http://nkrzi.gov.ua/index.php?r=site/index&pg=90&language=en>



The National Program of Informatization (NPI) is a complex of interrelated individual tasks (project) of Informatization, directed to the implementation of government policy and creation of the modern information infrastructure of Ukraine due to concentration and rational using financial, material and technical and other resources, industrial and scientific and technical capacity of the state, as well as coordinating the activities of state agencies, local governments, enterprises, institutions and organizations of all forms of property and citizens in the field of information.

The main objective of the National Program of Informatization is to create the necessary conditions for citizens and society with timely, accurate and complete information by using of information technology, information state security. The program have the following main tasks:

- Formation of the legal, organizational, scientific, technical, economic, financial, teaching and humanitarian conditions of informatization development
- Application and development of modern information technology in the respective spheres of public life in Ukraine
- Formation of system of the national information resources
- Creation of the national network of information providing for science, education, culture, health care, etc.
- Creation of national systems of information and analytical support of state and local governments
- Efficiency of domestic production through extensive use of information technology
- Formatting and maintaining of the information products and services market
- Ukraine`s integration into the global information space

The concept of the National Program of Informatization is an integral part of the national program of information and includes characteristic modern state information, its strategic objectives and basic principles, expected outcomes of this Program.

10 Uzbekistan

10.1 Overview of ICT Policy Documents

Main policy documents concerning ICT policy adopted/published since 2012-2014

Title of document	Date	Organisation	Legal status
"On measures for further implementation of information and communication technologies in the real economy".	03.04.14№ PP - 2132	Cabinet of Ministers	Edict of President
On approval of the updated structure of the State Committee for Communications, Information and Telecommunication Technologies Republic of Uzbekistan	30.10.2013, № PP -2058	Cabinet of Ministers	Edict of President
On measures for implementation of the investment project "Development of National Geographic Information System"	25.09.2013 № PP -2045	Cabinet of Ministers	Edict of President
On measures for further implementation and development of modern information and communication technologies	21.03.2012, № PP -1730	Cabinet of Ministers	Edict of President
On additional measures to improve the skills of employees of state and economic management of the state bodies in the sphere of information and communication technologies	27.03.2014, № 73	Cabinet of Ministers	Government Decision
On measures to organize the activities and formation of material and technical basis of Inho University (Korea) in Tashkent	27.03.2014, № 72	Cabinet of Ministers	Government Decision
On measures to implement the system of the development of information and communication technologies assessment in the Republic of Uzbekistan	31.12.2013 № 355	Cabinet of Ministers	Government Decision
On measures on organization of the Center for Development of the system "E-government" and the Center for information security under the State Committee communication, information and telecommunication technologies of Uzbekistan	16.09.2013, № 250	Cabinet of Ministers	Government Decision

10.2 Concept for Development of Information Technologies in Uzbekistan.

From the listed Policy documents / Programmes identified by national experts and other sources the "Concept for development of Information Technologies in Uzbekistan" constitutes the existing Roadmap for the ICT sector development on a national level, and thus it is briefly presented below:

Concept for Development of Information Technologies in Uzbekistan⁵⁸

⁵⁸ <http://new.unctad.org/upload/Bangkok/Uzbekistan.PDF>



The Coordination Council for Development of Computerization and ICT, which is the highest interagency body for coordination of development of computerization and ICT, approved the amended "Concept for Development of Information Technologies in Uzbekistan" in its decision on May 12, 2005 (Minutes of the Meeting #11). According to the Concept, the following focal areas have been identified as key directions for country's development goals in information technologies:

- Development of national ICT infrastructure
- Electronic education
- Establishment and development of information and knowledge market
- Electronic government
- Electronic commerce
- Electronic healthcare
- Improvement of legal framework

Effectiveness of measures to be taken in implementation of the approved Concept will be assessed by the set of specific quantitative indicators, and it was envisioned to conduct a study on "Assisting the Government of Uzbekistan in the Formulation and Implementation of Information and Communication Technologies for Development Policy" which is a joint project of United Nations Development Programme (UNDP) and Government of the Republic of Uzbekistan. The Project started its activities in May 2005, and it is the practical realization of UNDP's objective - to assist the Government of the Republic of Uzbekistan in development of ICTs as well as implementation of tasks envisioned in the government decisions pertaining to

ICT sector.

Based on the level of electronic readiness of the country and to ensure comparability with similar studies conducted by the UNDP in the framework of Digital Development Initiative Programme2 , this review tracks the indicators of ICT development in the following sections:

- Access to global information resources
- ICT in education
- Public use of ICT
- Electronic government
- Electronic commerce
- Government's ICT Policy



11 Conclusions

As it was shown above all the countries have understood the importance of ICT Research and Development Roadmaps and have more or less and under various forms (Legislation – Programmes – Directives etc.) have elaborated roadmaps.

However although these roadmaps have been drafted and adopted by all EECA with details on R&D ICT policy and measures it is more important to examine the actual level of their implementation by analysing and monitoring the financial means , administrative tools, Programmes etc. which have been created to support the implementation .

This task goes beyond the purpose of this report.

An update on the progress of these roadmaps will be conducted towards the end of the project.