



ReSPA

Regional School
of Public Administration

ReSPA regional comparative
eGovernment study

Annex I: Country profiles

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Annex I: Country profiles

1 Introduction

In this annex we present an eGovernment profile for each country, based on the additional inputs we received from the national respondents and material from the “eGovernance and ICT usage report for South East Europe”², (2010) created by the UNDP and referred to as the eSEE study report.

The country profiles are created so they match the data collected annual from the EU countries and presented in the epractice.eu factsheets³, but adapted to West Balkan conditions through alignment with the eSEE report. In order to save scarce resources and not to duplicate what has already been done, for some elements of each country profile, we have only asked for updates to the eSEE study of 2010.

The information collected in the country profiles should therefore be useful and applicable, not just in the Western Balkans, but also for the European Commission.

2 UNDP: “eGovernance and ICT usage report for South East Europe “. 2nd edition. Sarajevo 2010
http://www.eseeinitiative.org/images/stories/pub/eGovernance_and_ICT_Usage_Report_for_South_East_Europe.pdf

3 <http://epractice.eu/en/factsheets/>

2 Albania

2.1 Legal Infrastructure

The Albanian constitution includes the right of access to information under Article 23. Other laws relevant to the information society are:

- “Law on Telecommunications in the Republic of Albania” No. 8618 (.2000) was amended along with Law No. 9625 (2006), while Law No. 9637 (2006) was abrogated in 2008.
- “Law on Electronic Communications in the Republic of Albania” No. 9918, ratified 2008
- The “Law on Public procurement” No. 9643, came into force in 2007
- Law on “Electronic signature” No. 9880 (2009)
- Law Protection of Personal Data” No. 9887 (2008)
- A unique electronic registry for the registration of all businesses, was established through Law No. 9723 on “the registries of businesses” and “On the National Centre for Registration”
- Albania signed and ratified the Convention for the Prevention of Cybercrime in 2002, and this is reflected in the Penal Code and Penal Procedure Code.
- Access to information is provided through Law No. 8503 (1999)
- “Law on Archives” No. 9154 (2003), includes provisions applied for electronic documents.
- eCommerce Law, No. 10128 (2009)

The legislation relating towards developing an information society in Albania has not changed much in the past years. The most recent change is:

- Decision of CoM No. 292, dated 2.5.2012 For the adoption of the strategy of transition from analogue to digital broadcasting.

2.2 Institutional Framework

eGovernment leadership in Albania is ensured by the minister with specific responsibility for implementing ICT (Minister of Innovation and ICT). The prime minister gives his support too and is driven by a digital agenda.

The responsibility for developing Albanian eGovernment policy and strategy is shared amongst a broad range of government actors (please see Main Actors). Implementation and coordination of the Albanian eGovernment strategy is headed by the National Agency on Information Society tasked with building the eGovernment infrastructure in line with EU personal data protection principles.

In line with this, the creation of a National Cyber Security Agency/ALCIRT - Albanian Computer Incident Response Team has been one of the recent developments.

2.3 Who-is-who

2.3.1 Main responsible for eGovernment

Minister responsible for eGovernment

Mr. Genc POLLO Minister
Ministry of Innovation and ICT
Email: genc.pollo@km.gov.al
Website: www.mitik.gov.al

Head of eGovernment Strategy

The eGovernment strategy in Albania is headed by:

- National Agency on Information Society
- AGJENCIA KOMBËTARE E SHOQËRISË SË INFORMACIONIT
- Rr. Papa Gjon Pali i II, Nr 3,
1003 Tiranë, Shqipëri
Albania
Web: www.akshi.gov.al
- Digital Albania Department under Prime Minister office
Department director's email: sidrit.malevi@km.gov.al

eGovernment executive

Mr. Genc POLLO Minister
Ministry of Innovation and ICT
Email: genc.pollo@km.gov.al
Website: www.mitik.gov.al

2.3.2 Main actors

Developing eGovernment policy/strategy

The following ministries and agencies are responsible for developing Albanian eGovernment strategy and policy:

- Ministry of Innovation and ICT, www.mitik.gov.al
- National Agency on Information Society, www.akshi.gov.al
- Digital Albania Department PM office, www.km.gov.al
- Agency on Research and Innovation Technology , www.akti.gov.al
- National Authority for Electronic Certification, www.akce.gov.al
- Electronic and Postal Communications Authority , www.akep.al
- National council on Radio Television, www.kkrt.gov.al
- National Cyber Security Agency/ALCIRT - Albanian Computer Incident Response Team

Coordinating eGovernment developments

The National Agency for Information Society (www.akshi.gov.al) is responsible for coordinating Albanian eGovernment.

Implementation of the eGovernment strategy and initiatives

eGovernment strategy and initiatives are implemented by the prime minister's department and all agencies below it.

Supporting the development of eGovernment

Supporting the development in eGovernment in Albania are: EU, USAID, World Bank, UNDP, German Society for International Cooperation (GIZ).

The eGovernment sector in Albania is supported by the following national Albanian institutions:

1. The Minister for Innovation and ICT
2. National Agency for Information Society
3. Various different ministries for different areas

Auditing eGovernment implementation

The main institution in Albania for auditing government institution is the Supreme State Audit (SSA) - www.klsh.org.al. At the moment this institution is not able to make any technical audits of the eGovernment systems. However, there is an initiative to start such new audit processes combining the National Agency on Information Society (NAIS) and the SSA together in auditing information systems.

The Albanian government is applying a national law for the state databases and a national authority for databases. The authority was assigned to the NAIS from 24 November 2010. The role of NAIS is to make a complete assessment of the existing databases, and to draft legal and sublegal acts and regulations on: design, development, initiation and stopping, managing and operating procedures for all the national databases.

Presently the Ministry of Innovation and ICT (MITIK) and NAIS are drafting the first regulation on state and national databases followed by the construction of the 'Register of Registers' information system. Conceptually the law on Databases is covering not only the government register, but also private sector such as banks of the second level, mobile companies and every company who is developing a national register for the Government. The decision by the council of ministers on the national authority on state databases gives the rights to the NAIS to perform auditing activities on other institution's systems. In this case standards and procedures are still needed to be draft and approved.

Institutions Related to eGovernance Development

- Albanian Computer Incident Response Team , AI-Cirt
- Electronic Governance Technical Council, composed of all the heads of IT units of all institutions

Responsible for citizens and businesses data protection

The National Commissioner For Data Protection (www.kmdp.al) in Albania. The commissioner is appointed by the Assembly, reports directly to the parliament, and has an independent status.

Government interoperability

Responsible for planning, implementing and operating government interoperability are the Ministry of Innovation and ICT (www.mitik.gov.al) and the National Agency on Information Society (www.akshi.gov.al).

Major providers of eGovernance solutions

The biggest providers of eGovernment solutions in Albania are:

- Infosoft - (<http://www.infosoftgroup.com.al/intro.html>)
- CCS +Tetra Solution - (ccs.al and www.tetra.al both companies have the same owner).
- Icube-Info - (www.ikubinfo-software.al)
- BNT – (www.bntelectronics.com)
- Consort – (ccs.al)
- First – (www.First.al)

Active Donors in the Area of eGovernance and ICT

Active donors⁴:

- Ministry of Education and Science
- other ministries have funded different projects with important components on ICT
- The European Commission research and development programmes (FP7, TEMPUS, etc)
- The European Commission Delegation
- The United Nations Development Programme
- The World Bank
- USAID
- The Italian Cooperation Office.

4 UNDP: "eGovernance and ICT usage report for South East Europe ", p. 170

2.4 National Infrastructure

2.4.1 Accessibility

Data published by Electronic and Postal Communications Authority for the first 6 months of 2012.

The total number of registered entrepreneurs in Electronic and Postal Communications Authority (EPCA) in connection with the notice provision of networks / services in accordance with state general authorization regime, networks and services specified until the end of 6 months of the new 2012, turns out to be a total 137.

- Provision of public mobile telephone service - 4 providers;
- Provision of public mobile telephone service (UMTS) (3G) - 2 providers;
- Provision of public fixed telephone service (stable) - 82 providers;
- Providing Internet access service - 115 providers;
- Provision of data transmission services - 47 providers;
- Provision of leased lines - 21 providers;
- Providing service to prepaid cards - 5 providers;
- Fixed telephony penetration at the end of 6 months of the new I-2012 is approximately 11.5%;
- the number of mobile phone subscribers is approximately 187%
- the number of broadband lines per 100 resident at the end of 6 months of the new I-2012 is about 6.7%;
- Number of households have broadband Internet access (broadband) is around 175 thousand or approximately 24% of households;
- The number of business subscribers with broadband internet access for 6 months of the new I-2012 is almost the same value as at the end of 2011 and is estimated to be over 14,000 business subscribers.
- The internet speed used has increased from 1-2 Mbps to 2-4 Mbps.
- Main operators offer higher speeds 4-20 Mbps.
- The length of optic fibre installed by operators is approximately 5700 km.

2.4.2 Utilisation of ICT in public administration

The number of institutions connected to the Government Network is more than 120. The number of users is more than 5500. Number of visitors to the www.e-albania.al portal is more than 1.953.598 (Albanian population is about 2.8 million).

Plans for the near future includes:

1. Building and reconfiguring the physical fibre network that connects all the GoA Institutions. (Planned to finish in 2013)
2. Building network nodes and services point; implement the physical security, administration and monitoring; build the base 'Centralized Electronic Directory Services', start to implement the first Data Centre Services. (Central NOC under implementation. Sites in 2013)
3. Implementing Interoperability Service Layer. (Planned to finish in 2013)
4. Implementing the full Data Centre Services and G2G/G2C/G2B Services. (Planned to finish in 2015)

2.4.3 Utilisation of ICT within education

The project of e-School is still on-going. All schools will be equipped with a computer lab and connected to the Internet.

Recently the Ministry of Education and Science realised the electronic system to fill application forms for public college and universities. The number of students per computer at university is unknown, but non-officially one in three students has a laptop connected to the internet.

2.4.4 Utilisation of ICT within health

The FAA Holding GmbH was assigned by the Albanian government, National Agency on Information Society (NAIS), to provide a feasibility study on the provision of such eGovernment solutions for Albania in the framework of the Austrian soft loan program of the Österreichische Kontrollbank (OEKB). Two priorities are identified for implementation:

- Priority 1: Nationwide Electronic health record
- Priority 2: Hospital Information System (HIS)

Another eGovernment project is the “Integrated Telemedicine and eHealth Program (ITeHP)” founded by the United States Agency for International Development (USAID) and facilitated by the International Virtual e-Hospital Foundation (IVeH). This two year project, valued at \$750,000, is intended to establish a national telemedicine centre of Albania (NTCA) at Mother Theresa Hospital in Tirana, Albania.

By the Minister Order an inter-institutional group (including all relevant stakeholders responsible) has been set up for preparing and composing the national e-health strategy in Albania.

2.4.5 Know-how and human resources

- The number of the students graduated in ICT for the year 2010-2011 has increased by 10%.
- All pupils from the high school entering university know how to use a computer and to navigate to the internet.

2.4.6 Major projects related to eGovernance development

EU Pre Accession assistance Instrument

Under the IPA⁵ programme a project for ICT is finished with the aim to give support to the Ministry of Innovation and ICT (MIICT) and National Agency for Information Society (NAIS) in building an e-government infrastructure in line with EU Personal data protection. The project purpose was to provide technical assistance in the preparation phase for the extension of the e-government /interoperability services in the following fields:

- Development of an information systems data exchange layer for the e-government interoperability framework (e-GIF) as well as the administration system for the state information system;
- Preparation of the services/software engineering approaches for the development of processes, product lifecycles and tools for dynamically composed system that provide e-services and the design of two specific e-services in the fields of citizen to Government.
- Drafting the legal provisions necessary for the e-GIF implementation and e-services;
- Development of the EDRMS for the Albanian line ministries and Prime minister office.
- Development of a new organizational structure for MIICT.

5 Instrument for Pre Accession Assistance

Project components:

- Components 1 : e-government Interoperability framework
- Component 2 : Development of C2g,b2g, G2g e-services platform
- Components 3 : Electronic Document And Records Management Systems
- Component 4: creating a suitable regulatory environment for eGovernment Infrastructure.

The following results have been achieved :

- Technical specifications for the hardware and the software solutions for the Albanian e-Government interoperability Framework and the administration system for the state information system as well as the implementation plan thereof have been prepared;
- Process description, system design and technical specification for the hardware and the software solution for three e-services, e-driving License, e_Address change and e-Admission to the higher education, have been developed.
- System design for the new, service centric government portal was developed together with the plan of a secure, authentic messaging system;
- Feasibility study as well as system requirements and technical specification for and EDRMS to be used within the governmental institutions have been provided.
- Sustainability plan for 3-5 years of exploitation of the information interchange layer, selected e-services, governmental portal and EDRMS has been developed.

Plans for the near future:

- Support to the MICT and to NAIS aimed at developing IT infrastructure and e-Government services in Albania

Project Number EuropeAid/131431/C/SER/AL

Deliver the enterprise service bus, with the three services available for the government and the citizen through the new eGovernment portal www.e-albania.al. The three services are:

1. Changing the address online e-address
2. e-driving License
3. e-Admission to the higher education

Another product of this project is creation of Electronic Document and Records Management Systems, pilot in 3 institution and then for all public institution.

2.4.7 Important events related to eGovernance

Conferences and other:

- October 2012: Inauguration the centre PROTİK, materials and training Resource centre for Information and Communication Technology
- September 2012: Europe Regional Forum on Broadband-in
- May 2012: Meeting extending to be presented for the National Broadband Plan's
- May 2012: Organized the roundtable: "ICT and e-governance in local government for better governance"
- February 2012 Organized a roundtable "All for a safer internet"
- September 2011: First Forum Monitoring Project for Telecommunications and the Information Society
- May 2011: MITİK signed a new project with UNDP: More Support for Digital Albania
- December 2010: Electronic and Postal Communications Authority (AEPC) is organizing the ceremony of signing the agreement for number portability

2.4.8 Portals

e-albania.al

The E-Albania portal (www.e-albania.al) has been created to be a unique e-service gateway for both G2C and B2B services. All services will be linked and accessible through this gateway.

The portal is not interactive, but contains the entire list of government and e-services links. The National Agency on Information Society is developing a new interactive portal and is scheduled to become available in late 2012. The new portal will provide a full list of the developed electronic services.

Other portals includes:

- National Registration Center (www.qkr.gov.al)
- National Register of Licenses and Permits (www.qkl.gov.al)
- eProcurement platform (www.app.gov.al)

2.4.9 Government wide networks

Albania does not have a single government intranet portal. There are plans by NAIS to develop a unique intranet portal for all Albanian government in 2013.

2.4.10 eIdentification/eAuthentication

Username, password & known facts

The identification and authentication mechanism for the new government gateway will be username, password and known facts. The interoperability platform will check the self-declared data of the subscriber in different government databases see if the data are correct and then provide access to the user.

The first two services that will be provided in 2013, will be change of address and applications for driving license renewal. Later this method will be implemented in categorized services, which is basically every service that does not need enhanced high security id and authorization.

E-trust Platform

Albania is producing electronic identification documents for its citizens. Further, it is planned to add more services to the existing platform in the new renewal contract with the provider ALEAT⁶ who is also responsible for producing the national ID cards and biometric passports. One of the suggestions is to provide alternative electronic ID and authentication for the new government platform that is under development.

The e-trust platform will cover all services and guarantees high security due to the link with the national id card database and PKI system. However, the national PKI system still needs to be certified from the central authorities.

Mobile ID

After the final implementation of the username/password and e-trust platform, Albania is considering adding Mobile ID.

6 http://www.datacard.com/downloads/ViewDownload.dyn?elementId=repositories/downloads/xml/Gov_SS_Albania_NationalID.xml&repositoryName=downloads&index=4

2.4.11 eProcurement

Public eProcurement can be done on-line via the website of the Agency for Public Procurement (www.app.gov.al). The contracting authorities are required to publish all procurement notices and tender dossiers on this website.

Changes of the system are expected to be implemented in 2013.

2.4.12 Knowledge management

Albania does not have a knowledge management portal, programme or project for eGovernment.

2.4.13 ePayment

Tax e-payment platform

The tax e-payment platform will be used for tax payments only. It is a newly developed platform and expected to become operational in November 2012, making it possible for businesses to pay tax online.

Tax e-payment system

The Tax e-payment system is a platform developed by the central tax office and will facilitate tax payments for all businesses and enable them to pay taxes online. The project was initiated by the central tax office in 2011. This year the tax office started to develop the platform, and it is expected to be ready before December 2012.

As for future developments, the tax system will be redesigned and reformed again this year making it a unique platform and technology. The funds are available and the bidding process will be held this year. For this purpose the Albania Government is collaborating with the Austrian Government which has given a soft loan to redesign the tax system where the e-payment module will be integrated.

E-banking

E-banking is used for different operations, such as paying electricity and personal bills. Mobile payment has not been introduced yet.

2.5 Albanian eServices availability

The tables below are composed of data from provided by the UNDP's Electronic South Eastern Europe (eSEE) Initiative⁷, including the 2010 Report "eGovernance and ICT Usage"⁸, the Overview of the status of the implementation of the set of basic eGovernment Services as stated in eSEE Agenda Plus, Annex 1 July 2012⁹, and updates provided by the national respondents for this report.

2.5.1 eServices for Citizens availability

Table 1 Albania, G2C services status

G2C	Provider(s)	Web	Status	Stage	Comments
1. Job search	National Service of Employment	http://www.shkp.gov.al	Done	2	The Municipality of Tirana is planning a regional register for the job search system. The scope of the project is to link professional people with business needs.
2. Social benefits: unemployment, child supplement, health care payments, students supplement	National Social Service	http://www.issh.gov.al	In implementation process	2/3	<i>No updates to previous reports</i> The National Social Service, which is a department within the Ministry of Labour, Social Affairs and Equal Opportunities, provides information on economic assistance, assistance to disabled persons and to abandoned elderly persons. The Institute of Social Insurance has published information on special state benefits, supplementary state benefits, short-term benefits and long-term benefits on its official website: (http://www.issh.gov.al).
3. Personal documents: ID, passport or driving permit	A. Ministry of Interior B. Ministry of Public Works, Transport and Telecommunications	A. http://www.moi.gov.al B. http://www.mpptt.gov.al	Done	2	A. The Ministry of Interior offers some information and links on ID and passports on its official website: (http://www.moi.gov.al). B. The Ministry of Public Works, Transport and Telecommunications has published some information on the regulations pertaining to driver's licenses on its official website: (http://www.mpptt.gov.al). Next year is planned to start a project design for the construction of the EU standards driving permits system. Albania will then start to apply the point system for drivers.

⁷ <http://www.eseeinitiative.org>

⁸ UNDP: "eGovernance and ICT usage report for South East Europe ". 2nd edition. Sarajevo 2010 http://www.eseeinitiative.org/images/stories/pub/eGovernance_and_ICT_Usage_Report_for_South_East_Europe.pdf

⁹ http://www.eseeinitiative.org/images/stories/esee_wg_meetings/eGovernment_Services_Matrix_July_2012.doc

G2C	Provider(s)	Web	Status	Stage	Comments
4. Car registration: new, second hand or imported	Ministry of Public Works, Transport and Telecommunications	http://www.mpptt.gov.al	In implementation process	3/4	<i>No updates to previous reports</i>
5. Public libraries: review of catalogue and ordering	The National Library in Tirana	http://www.bksh.al	In implementation process	3/4	<i>No updates to previous reports</i> The National Library in Tirana has published information on membership and services on its official website: (http://www.bksh.al). It also gives information on how to apply for an ISBN and offers the possibility to download the application forms.
6. Certificates: birth, death and marriage records	City halls		Done	?	<i>No updates to previous reports</i> Residence registration is conducted by offices of Civil Service. Some information can be found on city hall websites (where applicable).
7. Admission to higher education institutions	The Ministry of Education and Science	http://www.mash.gov.al	In implementation process	3/4	<i>No updates to previous reports</i> Enrolment in public universities involves a complicated procedure based on the results of final examinations that pupils obtain at the end of secondary school / gymnasium. The Ministry of Education and Science has published some information on related procedures on its official website: (http://www.mash.gov.al).
8. Residence registration: in case of change of address	Civil Status offices		In implementation process	2/4	<i>No updates to previous reports</i> Residence registration is conducted by offices of Civil Service. Some information can be found on city hall websites (where applicable).

2.5.2 eServices for Businesses availability

Table 2 Albania, G2B services status

G2B	Provider(s)	Web	Status	Stage	Comments
1. Tax payment: registration, payment and analysis	General Directorate of Taxes	http://www.tatime.gov.al	Done	3/4	The tax payment platform has been developed and is in testing phase. It will be operational in late 2012.
2. Environment and construction permits; obtaining a license	Ministry of Public Works, Transport and Telecommunications	http://www.mpptt.gov.al	In implementation process	2	Environment licences are still not implemented electronically. The project scope document and design, has been done and the process is in the procurement phase. The developing phase is predicted to start in 2013.
3. Electronic cadastre and related registers of ownership	Immovable Property Registration Office	http://www.zrpp.gov.al	In implementation process	3	The project of electronic cadastre and land ownership is in the developing phase. The main database is up and running and the initial registration process started in 2011. The roll out plan to extend the register in the regional registration offices is under implementation. Is predicted to be finished in 2013. For this purpose there is a Task force Group headed by the Prime Minister.
4. Healthcare and pension: payments and examinations	General Directorate of Taxes	http://www.tatime.gov.al	In implementation process	3/1	<p>The Ministry of Health is investing constantly to modernise and develop the internal information system. Recently a big procurement procedure has been realized to develop the entire health system.</p> <p>The employee social and health insurance contributions declaration can be completed electronically using a computer, this only applies to VIPs or large businesses, via the official website of the General Directorate of Taxes (http://www.tatime.gov.al). The social and health insurance contributions declaration template can also be downloaded from the site.</p>
5. Enterprise registration	National Business Registration Centre (NRC)	http://www.gkr.gov.al	Done	3/4	<p><i>No updates to previous reports</i></p> <p>Businesses can apply on-line for their registration via the official website of the National Business Registration Centre (NRC) (http://www.gkr.gov.al). The next step is to present all of the necessary documents required for the registration process to the National Business Registration Centre (one of its branches). If the application is correct and the folder of documents is complete, the business representative is then provided with a unique dossier number in order to follow on-line the status of the registration.</p>

G2B	Provider(s)	Web	Status	Stage	Comments
6. Company income registration	General Directorate of Taxes	http://www.tatime.gov.al	In implementation process	4	<i>No updates to previous reports</i> A company's income tax is calculated according to the company's previous year's profits. The monthly instalments for the company's income tax that has to be paid can be seen by logging onto the official website of the General Directorate of Taxes (http://www.tatime.gov.al). Payment orders for bank transactions can also be generated.
7. VAT	General Directorate of Taxes	http://www.tatime.gov.al	Done	3/4	VAT declaration is now online
8. Customs declarations	Albanian Customs	http://www.dogana.gov.al	Done	4	<i>No updates to previous reports</i>
9. Single Window for one-time filing all required information on a foreign trade transaction	Albanian Customs	http://www.dogana.gov.al	In implementation process	?	<i>No updates to previous reports</i> Albanian Customs publishes legislation on imports, exports and transit customs regimes on its official website: (http://www.dogana.gov.al).
10. Public procurement	Agency for Public Procurement	http://www.app.gov.al	Done	4	<i>No updates to previous reports</i> Contracting authorities are required to publish all procurement notices and tender dossiers on the website. Changes of the system are expected to be implemented in the next year.
11. Registry of mortgages of legal persons	Bank of Albania	Not available	Done	?	<i>No updates to previous reports</i>
12. Submitting statistical data to State Statistical System (incl. harmonization with EUROSTAT requirements)	The Institute of Statistics (INSTAT)	http://www.instat.gov.al	?	?	<i>No updates to previous reports</i> The Institute of Statistics (INSTAT) has a website where citizens may find statistical data, but there is no option for the submission of statistical data. There is no interoperability between different systems (companies for example have to present their yearly balance to both the tax office and the National Registry Centre).

2.5.3 eServices for Government availability

Table 3 Albania, G2G services status

G2G	Provider(s)	Web	Status	Stage	Comments
1. Treasury and programmatic budgeting	Ministry of Finance and Department of Donor Coordination (DEBASKON) in the Prime Minister's office	www.minfin.gov.al www.km.gov.al	Done	?	<i>No updates to previous reports</i> On-going developments of sub-systems: Integrated planning strategic IPSIS, EAMIS the foreign donor coordination system, enhancement of audit platform
2. Support systems for implementation of EU funds	Ministry of Finance	www.minfin.gov.al	In implementation process	5	Report from the ministry of Finance, they have finished the project.
3. Integrated control of borders	Ministry of Foreign Affairs / Police and Customs		Done	?	<i>No updates to previous reports</i> Border control system integrated with Interpol.

2.5.4 Availability of other eServices for Government

Table 4 Availability of other eServices for eGovernment in Albania

	Name	Description
1	e- Acts	All legal acts and decisions of the Council of Ministers are done in the system, paperless.
2	EU-Measures	National System for Legal Approximation
3	e-Matric	Government Plan and Program
4	e-licensing	QKL- National Centre for Licensing

2.5.5 G2G services concerned with learning, training or management

Individual G2G services within eLearning, eTraining, eManagement etc. relevant for this study does not exist in Albania.

3 Bosnia and Herzegovina

3.1 Legal Infrastructure

Bosnia and Herzegovina started introducing eGovernment with the adoption of the Information Society Development Policy and Strategy by the Council of Ministers (CoM) of BiH in November 2004. The documents were complemented with the action plan consisting of a number of precise projects and goals and, at that time, it seemed that the preconditions to approach a more serious development of information society in general and specifically eGovernment were set. The Policy, Strategy and Action plan were devised by the Bosnian UNDP team, but although adopted and declaratively supported, the vast majority of envisioned policies and actions has never been implemented, because state institutions lacked internal capacities to implement them. The project targeting the 2004-2010 timeframe was ultimately a failure.

The documents mentioned in the UNDP 2010 Report “eGovernance and ICT Usage”¹⁰ regarding Bosnia and Herzegovina (BiH) were adopted in 2004, and they need to be revised. The documents that were developed for the period between 2006 and 2010 included:

- The “Policy of Information Society Development”
- The “Strategy of Information Society Development in BiH”
- “Action Plan for Information Society Development in BiH”

As far as state level legislation is concerned, the documents not included in the UNDP report are:

- Law on Personal Data Protection
- Law on Electronic Legal and Business Transactions
- Law on Amendments to the Law on Identity Cards of Citizens of Bosnia and Herzegovina
- Decision on Basics of Electronic Signature Usage and Providing Certification Services
- Decision on Designation of state level authorities in charge of information security of the systems for editing, transmission and storage of classified data
- Decision on e-Business and e-Government of the Council of Ministers of BiH
- Law on Central Register and Data Exchange

Apart from the legal acts mentioned in the UNDP report, the authorities in the Republic of Srpska adopted the documents, as follows:

- Strategy for the Development of Electronic Government
- Law on Electronic Document of RS
- Law on Information Security RS
- Regulation on the Authority for Electronic Certification of the Republic Administration Authorities
- Book of Rules on Certification Authorities Register
- Book of Rules on contents and maintenance of the register of certification authorities responsible for issuance of valid electronic certificates
- Book of Rules on protective measures for electronic signature and advanced electronic signature and the lowest amount of mandatory insurance and implementation of organisational and technical measures for protection of the certificates
- Book of Rules on Technical Regulations required to enable connection between the register of issued and register of revoked certificates issued/revoked by the certification authorities in the Republic of Srpska

10 UNDP: “eGovernance and ICT usage report for South East Europe “. 2nd edition. Sarajevo 2010 http://www.eeeinitiative.org/images/stories/pub/eGovernance_and_ICT_Usage_Report_for_South_East_Europe.pdf

In the field of Information Society, Federation of Bosnia and Herzegovina applies state-level legal framework.

The partly independent Brcko District¹¹ has adopted:

- Law on Electronic Document,
- Law on Electronic Signature

The near future

The Ministry of Transport and Communications of BiH is working to establish offices for monitoring and accreditation of the issuer of electronic signatures. This will allow the recognition of certificates throughout BiH and will be a full implementation of the Law on Electronic Signature.

In early 2013 the Council of Ministers and the corresponding entity-level governments will adopt the Interoperability Framework of BiH that is completely in line with EIF¹² 2.0.

In the field of security and cyber-crime the Ministry of the Security of BiH, and the corresponding entity-level ministries are preparing legal acts that will allow for the creation of a state level CERT (Computer Emergency Readiness Team) body.

Apart from the legal framework of the BiH Council of Ministers, Federation of BiH has drafted a 'Law on Electronic Document' for the Federation of BiH.

3.2 Institutional Framework

State level

In 2010, a Department for the maintenance and development of e-Business and e-Government in the General Secretariat of the Council of Ministers of BiH was established at the state level. Their main task is the development and improvement of eGovernment services in the state-level institutions.

Entity of Federation BiH

The General Secretariat of the Government of the Federation of BiH has the following mandates:

- Proposals to draft and introduce IT projects involving several bodies and coordination thereof
- IT support in applying joint IT projects
- Analysing, standardising and upgrading information and services provided by the Federal authority organs through web
- Implementation of the strategic partnership contract with Microsoft and preparation of future contractual relations
- Representation of the Federal authority organs in the IT sector at the state level
- Drafting the standards and recommendations in the IT area
- Promotion and introduction of open code based software
- IT support (preparation of small-scale IT projects, procurement of IT equipment etc.) for the Government and the Government's Offices

11 Brcko District of Bosnia and Herzegovina is a specific administrative unit in Bosnia and Herzegovina. In the Bosnian Constitution it is said that it "exists under the sovereignty of Bosnia and Herzegovina and is subject to the responsibilities of the institutions of Bosnia and Herzegovina as those responsibilities derive from this Constitution, whose territory is jointly owned by (a condominium of) the Entities, is a unit of local self-government with its own institutions, laws and regulations". Therefore, Brcko District is in fact a municipality and in most issues independent from the entities and the state. The Brcko District can independently decide what legislation and services to adapt: from state level they use statistical, promotional and some other services, from entities they also use some benefits and services; but in the field of e-Government specifically, they took responsibility to develop and manage it independently. E.g. the Brcko District have a project proposal to develop a one-stop shop e-Government portal.

12 European Interoperability Framework, http://ec.europa.eu/isa/documents/isa_annex_ii_eif_en.pdf

Plans for the near future

Plans for the near future includes the establishment of the Agency for Information Society Development of FBiH.

3.3 Who-is-who

3.3.1 Main responsible for eGovernment

Minister responsible for eGovernment

State level	Entity of Federation of Bosnia and Herzegovina (FBiH)	Entity of the Republic of Srpska (RS)
<p>Mr. Damir Hadžić Minister of Transport and Communications of Bosnia and Herzegovina Tel. + 387 33 284 750 Fax. + 387 33 284 751 damir.hadzic@mkt.gov.ba</p>	<p>Mr. Enver Bijedić Minister of Transport and Communications of FBiH Tel. + 387 36 550 025 Fax.+ 387 36 550 024 fmpiksa@bih.net.ba</p>	<p>Mr. Jasmin Komić Minister of Science and Technology of RS Tel: + 387 51 338 731 Fax.+ 387 51 338 856 mnk@mnk.vladars.net</p>

Head of eGovernment Strategy

State level	Entity of Federation of Bosnia and Herzegovina (FBiH)	Entity of the Republic of Srpska (RS)
<p>Mr. Željko Knežević Assistant Minister in Communications and Informatization Department of the Ministry of Transport and Communications of BiH Tel. + 387 33 707 652 Fax. + 387 33 707 691 zeljko.knezevic@mkt.gov.ba</p>	<p>Mr. Mirko Škrbić Advisor to Minister of Transport and Communications of FBiH Tel. + 387 36 550 025 Fax.+ 387 36 550 024 fmpiksa@bih.net.ba</p>	<p>Mr. Jasmin Komić Minister of Science and Technology of RS Tel: + 387 51 338 731 Fax.+ 387 51 338 856 mnk@mnk.vladars.net</p>

eGovernment executive

State level	Entity of Federation of Bosnia and Herzegovina (FBiH)	Entity of the Republic of Srpska (RS)
<p>Mrs. Ivana Šimić Head of Department for development and maintenance of e-Government system in Secretary General of the Council of Ministers of BiH Tel. + 387 33 707 679 Fax. + 387 33 282 661 ivana.simic@vijeceministara.gov.ba</p>	<p>Mr. Mirko Škrbić Advisor to Minister of Transport and Communications of FBiH Tel. + 387 36 550 025 Fax.+ 387 36 550 024 fmpiksa@bih.net.ba</p> <p>Mr. Hasmir Selimovic Head of IT Department at the Secretary General of Government of FBiH Tel. + 387 33 212 875 Fax. + 387 33 667 269 Hasmir.Selimovic@fbihvlada.gov.ba</p>	<p>Mr. Srđan Rajčević Director of the Agency for Information Society Development of RS Tel: + 387 51 258 400 Fax.+ 387 51 258 401 s.rajcevic@aidrs.vladars.net</p>

3.3.2 Main actors

Developing eGovernment policy/strategy

State level	Entity of Federation of Bosnia and Herzegovina (FBiH)	Entity of the Republic of Srpska (RS)
<p>Ministry of Transport and Communications of BiH www.mkt.gov.ba</p> <p>Mr. Željko Knežević Assistant Minister in Communications and Informatization Department of the Ministry of Transport and Communications of BiH Tel. + 387 33 707 652 Fax. + 387 33 707 691 zeljko.knezevic@mkt.gov.ba</p>	<p>Ministry of Transport and Communications of FBiH www.fmpik.gov.ba</p> <p>Mr. Mirko Škrbić Advisor to Minister of Transport and Communications of FBiH Tel. + 387 36 550 025 Fax.+ 387 36 550 024 fmpiksa@bih.net.ba</p>	<p>Ministry of Science and Technology of RS www.mnk.vladars.net</p> <p>Mr. Jasmin Komić Tel. + 387 51 338 731 Fax. + 387 51 338 856 mnk@mnk.vladars.net</p>

Coordinating eGovernment developments

State level	Between state and entity levels:	Entity of Federation of Bosnia and Herzegovina (FBiH)	Entity of the Republic of Srpska (RS)
<p>Public Administration Reform in Bosnia and Herzegovina Coordinator's Office www.parco.gov.ba</p> <p>Mrs. Semih Borovac State Coordinator for Public Administration Reform Tel. +387 33 565 760 Fax. +387 33 565 761 Semihaborovac@parco.gov.ba</p>	<p>Public Administration Reform in Bosnia and Herzegovina Coordinator's Office www.parco.gov.ba</p> <p>Mrs. Semih Borovac State Coordinator for Public Administration Reform Tel. +387 33 565 760 Fax. +387 33 565 761 Semihaborovac@parco.gov.ba</p>	<p>General Secretariat of the Government of the Federation of B&H www.fbihvlada.gov.ba</p> <p>Mr. Hasmir Selimovic Head of IT Department at the Secretary General of Government of FBiH Tel. + 387 33 212 875 Fax. + 387 33 667 269 Hasmir.Selimovic@fbihvlada.gov.ba</p>	<p>Agency for Information Society Development of RS www.aidrs.org</p> <p>Mr. Srđan Rajčević Director of the Agency for Information Society of Republic of Srpska Tel. +387 51 258 400 Fax. +387 51 258 401 s.rajcevic@aidrs.vladars.net</p>

Implementation of the eGovernment strategy and initiatives

State level	Entity of Federation of Bosnia and Herzegovina (FBiH)	Entity of the Republic of Srpska (RS)
<p>Individual institutions on the state level (Decentralised approach)</p>	<p>Individual institutions on the entity level (Decentralised approach) Note: FBiH government recently adopted initiative to establish Agency for Information Society Development of FBiH</p>	<p>Agency for Information Society Development of RS and individual entity-level institutions (hybrid approach) http://www.aidrs.org/</p> <p>Mr. Srđan Rajčević Director of the Agency for Information Society of Republic of Srpska Tel. +387 51 258 400 Fax. +387 51 258 401 s.rajcevic@aidrs.vladars.net</p>

Supporting the development of eGovernment

State level	Entity of Federation of Bosnia and Herzegovina (FBiH)	Entity of the Republic of Srpska (RS)
<p>Secretary General of the Council of Ministers of BiH, www.vijeceministara.gov.ba <i>Note: providing infrastructure for e-Government (application and technological)</i> Mrs. Ivana Šimić Head of Department for development and maintenance of e-Government system in Secretary General of the Council of Ministers of BiH Tel. + 387 33 707 679 Fax. + 387 33 282 661 ivana.simic@vijeceministara.gov.ba</p> <p>Agency for Identification Documents Registers and Data Exchange of B&H <i>Note: electronic registers, e-services and network broadband capacity</i> Mr. Srđan Nogo Tel. +387 33 561 550 Fax. +387 33 561 554 srdjan.nogo@iddeea.gov.ba</p> <p>Civil Service Agency of BiH, www.ads.gov.ba <i>Note: trainings, capacity building</i> Mr. Kemal Bajramović Head of IT Group Tel. + 387 33 284 707 Fax. + 387 22 284 710 kemal.bajramovic@ads.gov.ba</p>	<p>Secretary General of the Council of FBiH, www.fbihvlada.gov.ba <i>Note: providing technical infrastructure for eGovernment</i> Mr. Hasmir Selimovic Head of IT Department at the Secretary General of Government of FBiH Tel. + 387 33 212 875 Fax. + 387 33 667 269 Hasmir.Selimovic@fbihvlada.gov.ba</p> <p>Civil Service Agency of FBiH, www.adsfbih.gov.ba <i>Note: trainings, capacity building</i> Mrs. Samra Ljuca Expert Advisor for Training Tel. + 387 33 251 750 Fax. + 387 33 251 764 samra.ljuca@adsfbih.gov.ba</p> <p>Public Administration Institute of FBiH Government http://www.fbihvlada.gov.ba/bosanski/ministarstva/zavod_za_javnu_upravu.php <i>Note: trainings, capacity building, research</i> Mr. Izmir Hadžić Tel. + 387 33 213 151 Fax. + 387 33 668 956 izmirh@pris.gov.ba</p>	<p>Civil Service Agency of RS, www.adu.vladars.net <i>Note: trainings, capacity building</i> Mr. Dalibor Čopić Senior Expert for Projects Planning and Training Tel: + 387 51 348 954 Fax:+ 387 51 348 956 d.copic@adu.vladars.net</p> <p>Agency for Information Society Development of RS www.aidrs.org <i>Note: trainings, capacity building, providing support in planning, organizing, implementing and coordinating e-Government projects and initiatives</i> Mr. Srđan Rajčević Director of the Agency for Information Society of Republic of Srpska Tel. +387 51 258 400 Fax. +387 51 258 401 s.rajcevic@aidrs.vladars.net</p>

Auditing eGovernment implementation

Public Administration Reform in Bosnia and Herzegovina Coordinator's Office in the area related to Action plan 1 - pillar e-Government www.parco.gov.ba

Mrs. Semiha Borovac

State Coordinator for Public Administration Reform

Tel. +387 33 565 760

Fax. +387 33 565 761

Semiha.borovac@parco.gov.ba

Institutions Related to eGovernance Development

State level	Federation of Bosnia and Herzegovina (FBiH)	Republic of Srpska (RS)	Sector for IT Brcko District BiH
<p>General Secretariat of the Council of Ministers of BiH TRg BiH1 Sarajevo Tel. +387 33 707 679 www.vijeceministara.gov.ba</p>	<p>General Secretariat of the Government of the Federation of Bosnia and Herzegovina Alipašina 41 Sarajevo Tel. +387 33 556- 615 www.fbihvlada.gov.ba</p>	<p>General Secretariat of the Republic of Srpska Trg Republike Srpske br.1 Banja Luka Tel. +387 51 339 289 www.vladars.net</p>	<p>Government Brcko District BiH Bulevar Mira 1 76100 Brcko District BiH Tel. +387 33 556- 615 www.bdcentral.net</p>

Responsible for citizens and businesses data protection

Personal Data Protection Agency in Bosnia and Herzegovina www.azlp.gov.ba

Mr. Ismet Mehanović

Head of IT Division,

Tel. + 387 33 726 268

Fax. + 387 33 726 251

ismet.mehanovic@azlp.gov.ba

Government interoperability

Responsible for planning, implementing and operating government interoperability

Between state and the entities	State level	Entity of Federation of Bosnia and Herzegovina (FBiH)	Entity of the Republic of Srpska (RS)
Working Group for Interoperability (yet to be established)	<p>Ministry of Transport and Communications of BiH www.mkt.gov.ba Mr. Željko Knežević Assistant Minister in Communications and Informatization Department of the Ministry of Transport and Communications of BiH Tel. + 387 33 707 652 Fax. + 387 33 707 691 zeljko.knezevic@mkt.gov.ba</p> <p>Secretary General of the Council of Ministers of BiH www.vijeceministara.gov.ba Mrs. Ivana Šimić Head of Department for development and maintenance of e-Government system in Secretary General of the Council of Ministers of BiH Tel. + 387 33 707 679 Fax. + 387 33 282 661 ivana.simic@vijeceministara.gov.ba</p>	<p>Federal Ministry of Justice, www.fmp.gov.ba Mr. Ivan Matešić Tel. +387 33 213 152 Fax. +387 33 213 155 ivan.matesic@fmp.gov.ba</p> <p>Public Administration Institute of FBiH Government www.fbihvlada.gov.ba/bosanski/ministarstva/zavod_za_javnu_upravu.php Mr. Izmir Hadžić Tel. +387 33 213 151 Fax. +387 33 668 956 izmirh@pris.gov.ba</p>	<p>Agency for Information Society Development of RS www.aidrs.org Mr. Srđan Rajčević Director of the Agency for Information Society of Republic of Srpska Tel. +387 51 258 400 Fax. +387 51 258 401 s.rajcevic@aidrs.vladars.net</p>

Major providers of eGovernance solutions

- General Secretariat of the Council of Ministers of BiH
TRg BiH1
Sarajevo
Tel. +387 33 707 679
www.vijeceministara.gov.ba
- General Secretariat of the Republic of Srpska
Trg Republike Srpske br.1
Banja Luka
Tel. +387 51 339 289
www.vladars.net

Active Donors in the Area of eGovernance and ICT

The most active donors in the area of eGovernance and ICT in Bosnia and Herzegovina are:

- The Embassy of the Kingdom of Norway in BiH
- The Embassy of the Kingdom of the Netherlands in BiH
- The United Kingdom Department for International Development (DfID)
- OSCE Mission in BiH
- German Society for International Cooperation GIZ
- SIDA (Swedish International Development Cooperation Agency)
- European Union to Bosnia and Herzegovina/Pre-accession Assistance (IPA)

3.4 National Infrastructure

3.4.1 Accessibility

The latest basic indicators date related to accessibility for Bosnia and Herzegovina are from 2009. There are no updates to UNDP 2010 report regarding accessibility in Bosnia.

Accessibility data¹³:

- Internet penetration: 37%.
- Type of Internet connection:
 - dial-up & ISDN 26.85%
 - broadband (ADSL, cable, wireless) 73.15%
- Penetration of telecommunications networks:
 - fixed 24.66%
 - mobile 99%
 - Mobile network territorial coverage: 87%
- Percentage of households that possess a computer: 51%
- Internet penetration in households: 60%
- Percentage of companies with Internet connection: 30%

3.4.2 Utilisation of ICT in public administration

There are no updates to the UNDP 2010 report regarding utilisation of ICT public administration in Bosnia and Herzegovina.

The major indicators related to the Utilisation of ICT in public administration mentioned in the UNDP report are from 2009:

- Usage of computers by government officials/public servants in their daily duties: 95.75%.
- Number of officials who have at least e-mail access and use it as a communications tool: 8,634.
- Percentage of central level government institutions that use some networking services (resource sharing, e-mail, etc): 75%.
- Percentage of central level government institutions that are connected to the Internet: 100%.
- Percentage of local administration that uses some networking services (resource sharing, e-mail, etc): 72%.
- Percentage of local administration connected to the Internet: virtually 100%.
- Percentage of officials that use public e-mail addresses: 86%.

13 UNDP, 2010

- Investment by government institutions in ICT solutions (hardware, software and services):
 - 2,951,652 Euros (hardware)
 - 1,509,156 Euros (software)
 - 1,283,351 Euros (services)

3.4.3 Utilisation of ICT within education

Through the Ministry of Education and Culture of the Republic of Srpska (from 2008) and the Federal Ministry of Education (from 2009), and in cooperation with Microsoft, the project “Partners in Learning” is promoting new technologies in education. The first phase of this project is aimed at improving the teaching staff by planned training programs for the use of technology in teaching, making a series of textbooks and other teaching materials that will allow for better and more effective cooperation and exchange of experiences between teachers in BiH and in the region. In the second phase it is planned to invest in programs related to the school as well as programs geared towards students.

The Ministry of Education and Culture of the Republic of Srpska has implemented an eEducation portal (www.eobrazovanje.com) with all relevant information about primary, secondary and university education.

3.4.4 Utilisation of ICT within health

Health care is the responsibility of the entity-level governments. In the Federation of Bosnia and Herzegovina, the Ministry of Health has initiated an information project in two cantons: Canton Sarajevo and Herzegovina-Neretva Canton. This project involves software linking all health institutions: community centres, health centres, hospitals, clinical centres and pharmacies with health insurance and public health departments. The main product will be the introduction of the electronic health card, electronic orders and prescriptions. Electronic health card will have a bar code, RFID chip or magnetic recording, and it should contain information about both the insurance status, but also the patient’s medical records.

In the Republic of Srpska, the Ministry of Health and Social Protection initiated a project to build a single health information system, whose implementation is underway.

Plans for the near future

The introduction and use of new a e-health card is expected during 2013 in the Federation of Bosnia and Herzegovina.

3.4.5 Know-how and human resources

The Civil Service Agencies in Bosnia and Herzegovina and the Public Administration Reform Coordinator’s Office has implemented a project of certifying 2.400 civil servants from all government levels in computer skills according to ECDL standard, in the period of 2011-2012. The project is worth EUR 620,000.

The Civil Service Agency of Bosnia and Herzegovina in cooperation with AECID (Agencia Española de Cooperación Internacional para el Desarrollo) has organised a series of eGovernment training for civil servants of state-level institutions from Bosnia and Herzegovina. This project had a value of EUR 80,000 and has been implemented by Spanish experts in 2010. About 200 civil servants (managerial and IT) has received training in e-Government leadership, change and project management.

The Civil Service Agency had further organised and financed a series of introduction courses on electronic administration and e-Government for about 100 employees of the state-level institutions. The training were held in 2011.

Finally the Civil Service Agency, in partnership with Microsoft, is providing courses on the use of advanced Microsoft technologies (Microsoft Servers, Exchange, Share Point Portal, etc...) for IT professionals

working on the implementation and development of eServices in BiH. Training and workshops are arranged in 2012 and 2013.

Plans for the near future

Under the eLearning project currently being implemented with GIZ (German Agency for International Development), the Civil Service Agency of Bosnia and Herzegovina is planning to start delivering eGovernment related training and webinars sessions as of 2014.

3.4.6 Major projects related to eGovernance development

Development of Interoperability Framework of BiH, ongoing, (PARCO Public Administration Reform in Bosnia and Herzegovina Coordinator's Office).

- Public Key Infrastructure implementation on Citizen Identification System (IDDEEA). Locations responsible for issuing IDDEEA documents was realized in 2009. The requests for issuance of documents are submitted in the organisational units of Mols in the place of residence¹⁴.

Plans for the near future

- Development of a common Document Management System (DMS) for all state-level institutions, by General Secretariat of the Council of Ministers of BiH
- Implementation of three e-Services: Issuing of personal documents (ID card, Driving license and travel documents), Registration of vehicles (new, used and imported vehicles) and Registration of change of the permanent residence (Change of address), by IDDEEA
- Implementation of a common platform for e-Services: authentication and identification, payment of services, integration with basic registers, by PARCO
- New e-ID for B&H citizens. The project is planned to begin as of March 2013 by IDDEEA.

3.4.7 Important events related to eGovernance

- 10-11 July 2012 in Sarajevo. e-SEE Working Group and b-SEE Taskforce Meetings, www.rcc.in

3.4.8 Portals

Citizen portals

There are two G2C portals in BiH:

- **eSrpska** (www.esrpska.org)
E-Government portal of the entity of the Republic of Srpska listing eGovernment services the entity public administration provides.
- **eBiH** (website not available yet)
This project is in the implementation phase. The eGovernment portal of BiH will provide a list of state eGovernment services.

Business portal

The eSrpska portal also provide a list of eGovernment services for businesses.

¹⁴ <http://www.iddeea.gov.ba/index.php?lang=en>

3.4.9 Government wide networks

- **IDDEEA**

IDDEEA internal portal offer internal access to all authorised users from the responsible authorities (Ministries of the Interior, Ministry of Foreign Affairs, Ministries of Civil Affairs, Central Election Commission etc).

- **MojPortal**

Intranet portal of the Council of Ministers gives internal access to all authenticated users from each institution connected to e-Government network.

3.4.10 eIdentification/eAuthentication

State level: IDDEEA

e-ID (as of March 2013), digital signatures, PKI and single sign-on solutions to be ready and in production. The service covers:

1. Personal documents: ID card, passport or driving licence
2. Car registration: new, used or imported
3. Residence registration: when changing the address

Entity level: Ministry of administration and local self-governments of RS

Digital signatures, PKI, and single sign-on solutions. The services cover:

- Certificates: birth, death and marriage records

3.4.11 eProcurement

As of September 1, 2011 all public procurement notices in BiH are submitted and published electronically on BiH's public procurement portal "Go-Procure" available at:

www.tenderi.gov.ba

The Public Procurement Agency is implementing a project to upgrade the "Go-Procure" system to allow for eTendering features such as publishing tender documents and giving clarifications online. The system will contain both case transactions and include personalisation. Expected end of the project is in 2013.

Additionally the system "WisPPA" is a functioning G2G service available on <https://wisppa.javnenabavke.gov.ba/> which serves as contract reporting facility for contracting authorities in public procurement procedures. All contracting authorities in BiH are obliged by law to send a report on contracts following public procurement procedures. The Public Procurement Agency is able to provide wide range of statistical data regarding public spending in BiH.

3.4.12 Knowledge management

The Council of Ministers of Bosnia and Herzegovina has a portal (available at: interoperabilnost.vijeceministara.gov.ba) where all relevant data related to the project "Design and establishment of the interoperability framework and standards for data exchange" can be found.

Future plans

Future plans include active notification of public by use of the portal concerning:

- Projects to be implemented in the field of interoperability (Drafting of the business Process Repository, Meta-dictionary Creation, Data Dictionary, establishment of a library, XML documents scheme)
- Reports on established electronic services
- Development of the module for collaboration with citizens aiming to establish higher quality of electronic services and monitoring user satisfaction.

3.4.13 ePayment

There are options for payment of application submission for identity card, passport, birth certificates, renewal of driver's license, vehicle registration and other interactions, thus enabling citizens to submit their application forms on-line – 24/7. Citizens are also able to pay fees by credit or debit cards for the necessary forms (TD, ID, DL, certificate of vehicle ownership, certificate of vehicle registration, registration sticker, and license plates); penalties (for traffic and other violations); and fees for various services or taxes.

From March 2013 a new payment system is envisioned to be developed for IDDEEA eServices motion in Q3.

3.5 Bosnia and Herzegovina eServices availability

The tables below are composed of data from provided by the UNDP's Electronic South Eastern Europe (eSEE) Initiative¹⁵, including the 2010 Report "eGovernance and ICT Usage"¹⁶, the Overview of the status of the implementation of the set of basic eGovernment Services as stated in eSEE Agenda Plus, Annex 1 July 2012¹⁷, and updates provided by the national respondents for this report.

3.5.1 eServices for Citizens availability

Table 5 Bosnia and Herzegovina, G2C services status

G2C	Provider(s)	Web	Status	Stage	Comments
1. Job search	A. Agency for Labour and Employment of BiH B. Institute for Employment of the Federation of BiH C. Institute for Employment of Republika Srpska D. Institute for Employment of Brcko District E. Employment intermediary F. Employment intermediary G. Employment intermediary	A. www.arz.gov.ba B. www.fzzz.ba C. www.zzrs.org D. - E. www.posao.ba F. www.profil.ba G. www.boljiposao.com	Done	3/5	Both entities' employment agencies developed job search portals. FBiH entity job search portal is available on www.fzzz.ba . RS entity job search portal is available on www.zzrs.org .

15 <http://www.eseeinitiative.org>

16 UNDP: "eGovernance and ICT usage report for South East Europe ". 2nd edition. Sarajevo 2010 http://www.eseeinitiative.org/images/stories/pub/eGovernance_and_ICT_Usage_Report_for_South_East_Europe.pdf

17 http://www.eseeinitiative.org/images/stories/esee_wg_meetings/eGovernment_Services_Matrix_July_2012.doc

G2C	Provider(s)	Web	Status	Stage	Comments
2. Social benefits: unemployment, child supplement, health care payments, students supplement	Unemployment benefit. A. Institute for Employment of the Federation of BH B. Institute for Employment of Republika Srpska C. Institute for Employment of the Brcko District Child supplement. D. Ministry of Labour and Social Policy of the Federation of BiH through cantonal centres for social protection E. Ministry of Labour and Military-Disability Protection of Republika Srpska and municipal centres for social protection F. Centre for Social Affairs of Brcko District Health care payments (reimbursement or direct settlement). G. Institute for Health Insurance of the FBiH and cantonal institutes for health insurance H. Health Insurance Fund of Republika Srpska I. Health Insurance Fund of Brcko District Student supplements and grants I. Ministry of Education and Science of the Federation of BiH through cantonal ministries of education J. Ministry of Education and Culture of Republika Srpska K. Education Department of Brcko District	Unemployment benefit. A. www.fzzz.ba B. www.zzrs.org C. - Child supplement. D. www.fmrsp.gov.ba E. http://www.vladars.net/sr-SPCyrl/Vlada/Ministarstva/mpb/Pages/Splash.aspx F. - Health care payments www.for.com.ba G. www.zdravstvo-srpske.org H. - Student supplements and grants J. www.fmon.gov.ba K. http://www.vladars.net/sr-SPCyrl/Vlada/Ministarstva/mpk/media/Pages/splash.aspx L. www.bdcentral.net	In implementation process	1/5	Unemployment benefit. A. B. Provider does not qualify for any of the defined criteria. Information necessary to obtain benefits is provided on the public administration portal: (www.esrpska.com). C. No website available. Child supplement. D. Providers do not qualify for any of the defined criteria. E. Providers do not qualify for any of the defined criteria. F. No website available. Health care payments G. Providers do not qualify for any of the defined criteria. H. I. No website available. Student supplements and grants J. K. Providers do not qualify for any of the defined criteria. Providers do not qualify for any of the defined criteria

G2C	Provider(s)	Web	Status	Stage	Comments
3. Personal documents: ID, passport or driving permit	<p>ID.</p> <p>A. Ministry of Internal Affairs of the Federation of BiH through cantonal ministries of internal affairs</p> <p>B. Ministry of Internal Affairs of Republika Srpska</p> <p>C. Public Registry Department of Brcko District</p> <p>International passport.</p> <p>D. Ministry of Internal Affairs of the Federation of BiH through cantonal ministries of internal affairs</p> <p>E. Ministry of Internal Affairs of Republika Srpska</p> <p>F. Public Registry Department of Brcko District</p> <p>Driving license.</p> <p>G. Ministry of Internal Affairs of the Federation of BiH through cantonal ministries of internal affairs</p> <p>H. Ministry of Internal Affairs of Republika Srpska</p> <p>I. Public Registry Department of Brcko District</p>	<p>ID.</p> <p>A. www.fmup.gov.ba</p> <p>B. www.mup.vladars.net</p> <p>C. www.javniregistar.com</p> <p>International passport.</p> <p>D. www.fmup.gov.ba</p> <p>E. www.mup.vladars.net</p> <p>F. www.javniregistar.com</p> <p>Driving license.</p> <p>G. www.fmup.gov.ba</p> <p>H. www.mup.vladars.net</p> <p>I. www.javniregistar.com</p>	In implementation process	4/5	<p>The project for implementation of e-services for issuing personal documents should be implemented in parallel with the e-ID Project. The Project implementation is planned to begin as of March 2013 - IDDEEA and responsible authorities in B&H, www.iddeea.gov.ba</p> <p>ID.</p> <p>A. Of the 10, only Sarajevo and Zenica-Doboj Cantons have information required for obtaining services.</p> <p>B.</p> <p>C.</p> <p>International passport.</p> <p>D. Of the 10, only Sarajevo Canton has information required for obtaining services.</p> <p>E.</p> <p>F.</p> <p>Driving license.</p> <p>G. Of the 10, only Sarajevo Canton has information required for obtaining services.</p> <p>H.</p>
4. Car registration: new, second hand or imported	<p>A. Ministry of Internal Affairs of the Federation of BiH through cantonal ministries of internal affairs</p> <p>B. Ministry of Internal Affairs of Republika Srpska</p> <p>C. Public Registry Department of Brcko District</p>	<p>A. www.fmup.gov.ba</p> <p>B. www.mup.vladars.net</p> <p>C. www.javniregistar.com</p>	In implementation process	4/5	<p>The project for implementation of e-services for issuing car registrations should be implemented in parallel with the e-ID Project. The Project implementation is planned to begin as of March 2013 - IDDEEA and responsible authorities in B&H, www.iddeea.gov.ba</p> <p>A. Of the 10, only Sarajevo Canton has information required for obtaining services.</p> <p>B. Provider does not qualify for any of the defined criteria.</p>

G2C	Provider(s)	Web	Status	Stage	Comments
5. Public libraries: review of catalogue and ordering	<p>A. Cooperative On-line Bibliographic System and Service of BiH</p> <p>B. National and University Library of Republika Srpska</p>	<p>A. www.cobiss.ba</p> <p>B. http://www.nub.rs</p>	Done	3/5	National and University Library of Bosnia and Herzegovina is providing a review of the catalogue and searching mechanisms, but ordering is not possible. http://www.cobiss.ba/scripts/cobiss?command=CONNECT&base=10000
6. Certificates: birth, death and marriage records	<p>Birth certificate.</p> <p>A. Public Registry Department of Brcko District</p> <p>B. City of Mostar</p> <p>C. Municipality of Banja Luka</p> <p>D. Municipality of Bijeljina</p> <p>E. Municipality of Doboj</p> <p>F. Municipality of Prijedor</p> <p>G. Municipality of Novi Grad Sarajevo</p> <p>H. Municipality of Tuzla</p> <p>I. Municipality of Zenica</p> <p>Death certificate.</p> <p>J. Brcko District-Public Registry Department</p> <p>K. City of Mostar</p> <p>L. Municipality of Banja Luka</p> <p>M. Municipality of Bijeljina</p> <p>N. Municipality of Doboj</p> <p>O. Municipality of Prijedor</p> <p>P. Municipality of Novi Grad Sarajevo</p> <p>Q. Municipality of Tuzla</p> <p>R. Municipality of Zenica</p> <p>Marriage certificate.</p> <p>T. Brcko District-Public Registry Department</p> <p>U. City of Mostar</p> <p>V. Municipality of Banja Luka</p> <p>W. Municipality of Bijeljina</p> <p>X. Municipality of Doboj</p> <p>Y. Municipality of Prijedor</p> <p>Z. Municipality of Novi Grad Sarajevo</p> <p>AA. Municipality of Tuzla</p> <p>AB. Municipality of Zenica</p>	<p>Birth certificate.</p> <p>A. www.javniregistar.com</p> <p>B. www.mostar.ba</p> <p>C. www.banjaluka.rs.ba</p> <p>D. www.sobijeljina.org</p> <p>E. www.opstina-doboj.ba</p> <p>F. www.opstinaprijedor.org</p> <p>G. www.novigradsarajevo.ba</p> <p>H. www.tuzla.ba</p> <p>I. www.zenica.ba</p> <p>Death certificate.</p> <p>J. www.javniregistar.com</p> <p>K. www.mostar.ba</p> <p>L. www.banjaluka.rs.ba</p> <p>M. www.sobijeljina.org</p> <p>N. www.opstina-doboj.ba</p> <p>O. www.opstinaprijedor.org</p> <p>P. www.novigradsarajevo.ba</p> <p>Q. www.tuzla.ba</p> <p>R. www.zenica.ba</p> <p>Marriage certificate.</p> <p>T. www.javniregistar.com</p> <p>U. www.mostar.ba</p> <p>V. www.banjaluka.rs.ba</p> <p>W. www.sobijeljina.org</p> <p>X. www.opstina-doboj.ba</p> <p>Y. www.opstinaprijedor.org</p> <p>Z. www.novigradsarajevo.ba</p> <p>AA. www.tuzla.ba</p> <p>AB. www.zenica.ba</p>	In implementation process	3/5	<p>As of October 1, 2012 all of the municipalities in the Republic of Srpska are technically connected to a unique electronic database of registry books, thus, in the near future, citizens will be able to receive a certificate from the registry books at any location for issuance of such certificates in RS, not only at the specific location where it was issued before. The Ministry of Administration and Local Self-Government of the Republic of Srpska http://www.vladars.net/sr-SP-Cyrl/Vlada/Ministarstva/muls/Pages/Default.aspx</p> <p>FBiH has just adopted a Law on Electronic Registry Books. However, the plan is to connect both systems, as soon as all the preconditions are there, and thereby enable those who were born at the territory of Federation of BiH and now live in the Republic of Srpska, or vice versa, to receive the certificates from the registry books at the place of their current residence.</p>

G2C	Provider(s)	Web	Status	Stage	Comments
7. Admission to higher education institutions	A. University of Sarajevo B. University of Banja Luka C. University of Mostar D. University of Mostar (Dzermal Bijedić University) E. University of Tuzla F. University of Bihać G. University of Zenica H. University of Istočno (East) Sarajevo	A. www.unsa.ba B. www.unibl.org C. www.sve-mo.ba D. www.unmo.ba E. www.untz.ba F. www.unbi.ba G. www.unze.ba H. www.unssa.rs.ba	In planning phase	1/5	
8. Residence registration: in case of change of address	A. Ministry of Internal Affairs of the Federation of BiH through cantonal ministries of internal affairs B. Ministry of Internal Affairs of Republika Srpska C. Public Registry Department of Brcko District	A. www.fmup.gov.ba B. www.mup.vladars.net C. www.javniregistar.com	In implementation process	5/5	The project for implementation of e- services for issuing Residence registration certificate should be implemented in parallel with the e-ID Project. The Project implementation is planned to begin as of March 2013 - IDDEEA and responsible authorities in B&H, www.iddeea.gov.ba

3.5.2 eServices for Businesses availability

Table 6 Bosnia and Herzegovina, G2B services status

G2B	Provider(s)	Web	Status	Stage	Comments
1. Tax payment: registration, payment and analysis	<p>A. Taxation Authority of the Federation of BH</p> <p>B. Taxation Authority of Republika Srpska</p> <p>C. Taxation Authority of Brcko District</p>	<p>A. www.pufbih.ba</p> <p>B. www.poreskaupravors.org</p> <p>C. http://www.bdcentral.net/Members/poreska_uprava</p>	Done	3/5	<p>The Tax Authority of FBiH has developed a system for electronic filling of tax declarations.</p> <p>Tax Authority of the Republic of Srpska has developed a program for the electronic submission of monthly tax. They have developed electronic filling of other forms, but they cannot be submitted electronically yet.</p> <p>Directorate of Finance - Tax Authority of the Government of Brcko District has developed forms that can be downloaded only.</p>
2. Environment and construction permits; obtaining a license	<p>Environment permit</p> <p>A. Ministry of Environment and Tourism of the Federation of BiH</p> <p>B. Ministry of Physical Planning, Construction and Ecology of Republika Srpska</p> <p>C. Department for Physical Planning and Property-Law Affairs of Brcko District</p> <p>Construction permit</p> <p>D. Brcko District Department for Physical Planning and Property-Law Affairs</p> <p>E. City of Mostar</p> <p>F. Municipality of Banja Luka</p> <p>G. Municipality of Bijeljina</p> <p>H. Municipality of Dobož</p> <p>I. Municipality of Prijedor</p> <p>J. Municipality of Novi Grad Sarajevo</p> <p>K. Municipality of Tuzla</p>	<p>Environment permit</p> <p>A. www.fmoit.gov.ba</p> <p>B. http://www.vladars.net/sr-SP-Cyrl/Vlada/Ministarstva/mgr/DJEL/Pages/Procedure.aspx</p> <p>C. http://www.bdcentral.net/Members/imovinsko/odjelza-prostorno-planiranje-iimovinsko-pravne-poslove?</p> <p>Construction permit</p> <p>D. http://www.bdcentral.net/Members/imovinsko/odjel-za-prostornoplaniranje-iimovinskopravne-poslove?</p> <p>E. www.mostar.ba</p> <p>F. www.banjaluka.rs.ba</p> <p>G. www.sobijeljina.org</p> <p>H. www.opstina-doboj.ba</p> <p>I. www.opstinaprijedor.org</p> <p>J. www.novigradsarajevo.ba</p> <p>K. www.tuzla.ba</p>	Done	1/5	<p>Construction permits in BiH are within the responsibility of municipalities, so we have very diverse implementation of this G2B service. Several municipalities have developed these services to the third stage, and some of them are at the first level.</p>

G2B	Provider(s)	Web	Status	Stage	Comments
3. Electronic cadastre and related registers of ownership	A. Electronic cadastre of Federation of Bosnia and Herzegovina B. Republic of Srpska	A. http://92.36.224.127/LarisLight/ , http://www.katastar-hn.ba/Pregled.aspx B. www.ezkrs.net	Ongoing	4/5	Federal Ministry of Justice is the bearer of the "Land Registry" and, by the end of 2010, Federation of Bosnia and Herzegovina has digitized 925,829 land registry files, which represents 93% of the total land registry files that will be placed in the electronic cadastre of Federation of Bosnia and Herzegovina. http://92.36.224.127/LarisLight/ , http://www.katastar-hn.ba/Pregled.aspx In the Republic of Srpska there is a unique cadastre available at www.ezkrs.net
4. Healthcare and pension: payments and examinations	A. Institute for Pension and Disability Insurance of the FBiH B. Institute for Pension and Disability Insurance of Republika Srpska C. Institute for Health Insurance of the FBiH and cantonal institutes for health insurance D. Health Insurance Fund of the Republic of Srpska E. Health Insurance Fund of Brcko District	A. www.fzmiopio.ba B. www.fondpiors.org C. www.for.com.ba D. www.zdravstvo-srpske.org E. -	No activity taken	?	A. - B. Forms available via the website only refer to evidence of pension insurance obtained abroad. Contributors from Brcko District can opt for a declaration of pension and disability contributions in the Federation of BiH or Republika Srpska. C. Providers do not qualify for any of the defined criteria. D. The Taxation Authority of RS will take over registration, payment and control of contributions, including healthcare and pension, from the institutions currently responsible. E. No website available.

G2B	Provider(s)	Web	Status	Stage	Comments
5. Enterprise registration	A. Banja Luka Basic Court B. Bijeljina Basic Court C. Brcko District Basic Court D. Doboj Basic Court E. Mostar Municipal Court F. Prijedor Basic Court G. Sarajevo Municipal Court H. Tuzla Municipal Court I. Zenica Municipal Court	A. www.osnovnisudbl.org B. www.osnovnisudbn.com C. www.osbd.ba D. www.osdoboj.org E. - F. - G. www.oss.ba H. www.osudtuzla.com.ba I. -	In implementation process	2/5	
6. Company income registration	A. Taxation Authority of the Federation of BiH B. Taxation Authority of Republika Srpska C. Taxation Authority of Brcko District	A. www.pufbih.ba B. www.poreskaupravors.org C. http://www.bdcentral.net/Members/poreska_uprava	In implementation process	1/5	
7. VAT	Indirect Taxation Authority of BiH	www.uino.gov.ba	Done	3/5	The Indirect Taxation Authority has launched a new “e-VAT” web system providing the registered VAT taxpayers. Users of the system have access to their files and data contained in the information system of the Indirect Taxation Authority. The service is available at https://epdv.uino.gov.ba:8443/
8. Customs declarations	Indirect Taxation Authority of BiH	www.uino.gov.ba	Done	5/5	The Indirect Taxation Authority of BiH has introduced the ASYCUDA system in Bosnia and Herzegovina and it has enabled: electronic submitting of customs and transit declaration (DTI – Direct Trader Input), use of selectivity in import and export procedures, electronic discharge of transit declarations, automatization of payments for customs duties, accurate statistics, speed up of customs process, facilitate movement of goods and passengers.

G2B	Provider(s)	Web	Status	Stage	Comments
9. Single Window for one-time filing all required information on a foreign trade transaction	Indirect Taxation Authority of BiH	www.uino.gov.ba	In planning phase	?	Forwarding agents act as intermediators between the service provider and business by declaring export via the ASYCUDA system, but this is not single-window.
10. Public procurement	Public Procurement Agency	https://goprocore.javnenabavke.gov.ba/	Under implementation	4/5	As of September 1, 2011 all public procurement notices in BiH are submitted and published electronically on BiH's public procurement portal "Go-Procure" available at: https://goprocore.javnenabavke.gov.ba/ The Public Procurement Agency is implementing a project to upgrade the "Go-Procure" system to allow e-Tendering features (publishing tender documents and giving clarifications online). Expected end of a project is in 2013.
11. Registry of mortgages of legal persons	Pledge Registry of BiH	www.reg-zaloga-bih.gov.ba	No activity taken	?	
12. Submitting statistical data to State Statistical System (incl. harmonization with EUROSTAT requirements)	<ol style="list-style-type: none"> 1. Agency for Statistic of BiH 2. Federal Office of Statistics 3. Institute of Statistics of Republika Srpska 4. The Central Bank of BiH 	<ol style="list-style-type: none"> A. www.bhas.ba B. www.fzs.ba C. www.rzs.rs.ba D. www.cbbh.ba 	Under implementation	4/5	BH Statistical Office (www.bhas.ba) is implementing a system similar to EUROSTAT's eDamis, to allow interchange of statistical data between state and entities' statistical offices.

3.5.3 eServices for Government availability

Table 7 Bosnia and Herzegovina, G2G services status

G2G	Provider(s)	Web	Status	Stage	Comments
1. Treasury and programmatic budgeting	Coordinator's office for Public Administration Reform in BiH		In implementation process	1/5	The project "Budget Management Information System" is under implementation at the state and entity levels in BiH. Implementer of this project is the Coordinator's office for Public Administration Reform in Bosnia and Herzegovina.
2. Support systems for implementation of EU funds	Ministry of Finances and Treasury of BiH		In implementation process	1/5	Development in process by Sector for Financing of the EU Assistance Programs and Projects, Ministry of Finances and Treasury of BiH
3. Integrated control of borders	Border Police, Ministries of the Interior, Interpol, Europol, Service for Foreigners' Affairs, IDDEEA		In implementation process	4/5	BiH has implemented an integrated system for border control. This system allows online sharing / data validation between Border Police, Ministries of the Interior, Interpol, Europol, Service for Foreigners' Affairs, IDDEEA, and other relevant institutions.

3.5.4 Availability of other eServices for Government

Table 8 Availability of other eServices for eGovernment in Bosnia and Herzegovina

	Name	Description
1	My Vacancy" ("mojKonkurs") mojkonkurs.ads.gov.ba	<p>The system "My Vacancy" ("mojKonkurs" in BiH languages) is a functioning G2C service available on web address https://mojkonkurs.ads.gov.ba which currently serves as a system for electronic notifications of candidates participating in vacancy procedures for civil service posts in state institutions of Bosnia and Herzegovina.</p> <p>It has two major channels of communication with citizens - candidates pursuing civil service posts: (a) web site, where all notifications on all vacancies for civil service positions are published; and (b) personalized electronic messages sent to each candidate via SMS and e-mail.</p>
2	WisPPA wisppa.javnenabavke.gov.ba	<p>The system "WisPPA" is a functioning G2G service available on https://wisppa.javnenabavke.gov.ba/ which serves as contract reporting facility for contracting authorities in public procurement procedures. All contracting authorities in BiH are obliged by the Law to send a report on contracts following public procurement procedures. The Public Procurement Agency is able to provide wide range of statistical data regarding public spending in BiH.</p> <p>The system can be viewed as a system conforming Article 85. <i>Individual reports on procedures for the award of contracts</i> of the Proposal for a directive on public procurement replacing Directive 2004/18. Documents available at http://goo.gl/QgMbx.</p>

3.5.5 G2G services concerned with learning, training or management

Table 9 G2G services concerned with learning, training or management

	Name of the service	Description
1	iLearn.gov.ba (not available yet)	(under implementation, expected end of the project: end of 2013) The Civil Service Agency of Bosnia and Herzegovina together with German Agency for International Development (GIZ) has just started a project of establishing eLearning Management Information System and a webinars platform to deliver online training to state-level civil servants on a wide range of topics, one of which will be eGovernment. The Civil Service Agency, as a state government-wide human capital management Agency, will make efforts to develop learning contents which will up-skill state-level employees working with eGovernment-related reforms.
2	mojaObuka.ads.gov.ba (not available yet)	(under implementation, expected end of the project: end of 2013) The BiH Civil Service Agency is responsible for coordinating the training of civil servants and for organizing centralised, horizontal training for the state-level public administration in Bosnia and Herzegovina. This project, implemented in cooperation with GIZ, concerns development of the BH Civil Service Agency training management system to serve as a customer-centric training portal for all state-level institutions, and training management system for CSA staff as well. With this system all phases of the training organization and delivery would be conducted online and all administrative procedures would be supported by the "My Training" web system.

4 Croatia

4.1 Legal Infrastructure

On 20 October 2011, the Croatian Government decided to establish eGovernment development goals in the State Administration for 2011-2015. This is in line with the EU's '[eGovernment Action Plan 2011-2015](#)'.

On 15 April 2011 the Croatian Parliament ratified the memorandum of understanding between the Republic of Croatia and the EU on the participation of Croatia in the Interoperability Solutions for European Public Administrations (ISA).

Plans for the near future

The business systems of the State Administration must be improved to a level that will enable: Electronic communications and data exchange with the administrative bodies of both the EU and its Member States.

The development of eGovernment services in supporting the rights of citizens to travel, work, study and live, as well as the freedom for businesses to establish and to provide services, in any EU Member State.

4.2 Institutional Framework

The Central State Office for e-Croatia became a directorate of the Ministry of Public Administration with the goal to implement ICT and to modernize the administration, thereby integrating two previously separate units: the reform of public administration and ICT implementation.

On 2 February 2012, the Croatian Government adopted the decision to establish "The Commission for the Coordination of Implementation of ICT in the Public Sector".

The task of the Commission is to direct developments and coordinate all activities and projects regarding the information and communication technologies in the public sector, with the aim of rationalisation of the system while increasing the quality of public services. The head of the Commission is Vice President of the Government of Republic of Croatia and minister of youth and social policy (www.uprava.hr/UserDocsImages/Odluka.pdf)

4.3 Who-is-who

4.3.1 Main responsible for eGovernment

Minister responsible for eGovernment

Minister of Public Administration Arsen Bauk
Ministry of Public Administration
Maksimirska 63, HR-10 000, Zagreb
Tel.: +385 1 235 7555
Fax: +385 1 235 7607
Contact: <http://www.vlada.hr/en/content/tipafriend/22235>
Source: <http://www.vlada.hr>

Head of eGovernment Strategy

Assistant Minister of Public Administration Darko Parić
Ministry of Public Administration
Maksimirska 63, HR-10 000, Zagreb
Tel.: +385 1 6303 355
Fax: +385 1 6303 783
Email: N/A
Source: <http://www.uprava.hr>

eGovernment executive

Ministry of Public Administration

Darko Parić

Assistant Minister of Public Administration

Ministry of Public Administration

Maksimirska 63

HR-10 000, Zagreb

Tel.: +385 1 2357 543

Fax: +385 1 2357 693

E-mail: N/A

Source: <http://www.uprava.hr/>

Committee for the Coordination of the ICT development in the public sector

Head of the Committee

- **Milanka Opačić**

Deputy Prime Minister and Minister of Social Welfare Policy and Youth http://www.vlada.hr/hr/naslovnica/o_vladi_rh/clanovi_vlade/milanka_opacic

Ministry of Social Welfare Policy and Youth

Address: Trg hrvatskih velikana 6, 10 000 Zagreb

Tel.: +385 1 230 8 888

Fax: +385 1 363 3 903

Source: <http://www.mspm.hr/>

<http://www.uprava.hr/UserDocsImages/Odluka.pdf>

Committee for the Coordination of the ICT development in the public sector is comprised by top officials of the Government of the Republic of Croatia, whose role it is to steer development and coordination of all tasks and projects concerning ICT application in the public sector.

The Committee has been established in order to ensure political commitment on the highest level to be able to make informed decisions on ICT reforms which will be based on the outcomes made by five working groups:

1. Electronic identity and authentication

<http://www.uprava.hr/UserDocsImages/Elektroni%C4%8Dki%20identitet%20i%20autentikacija.pdf>

Head of the Working group: **Dražen Božić**

Ministry of Public Administration

Maksimirska 63

HR-10 000, Zagreb

tel: 01 2357 524

2357 529

2357 545

2357 525

fax: 01 2357 693

<http://www.uprava.hr/default.aspx?id=13517>

2. Standardisation of solutions for customers' access

<http://www.uprava.hr/UserDocsImages/Radna%20skupina%20-%20korisnicki%20pristup.pdf>

Head of the Working group: **Tomislav Vračić**

Ministry of Public Administration

Maksimirska 63

HR-10 000, Zagreb

tel: 01 2357 522

fax: 01 2357 693

<http://www.uprava.hr/default.aspx?id=13517>

3. Key registers and electronic data exchange access

<http://www.uprava.hr/UserDocsImages/Radna%20skupina%20SRM.pdf>

Head of the Working group: **Leda Lepri**

Ministry of Public Administration

Maksimirska 63

HR-10 000, Zagreb

tel: 01 2357 694

fax: 01 2357 693

<http://www.uprava.hr/default.aspx?id=13517>

4. Defining of areas and topics for joint public procurement access

<http://www.uprava.hr/UserDocsImages/Radna%20skupina%20za%20definiranje%20podru%C4%8Dja%20i%20tema%20za%20objedinjenu%20javnu%20nabavu.pdf>

Head of the Working group: **Božo Zeba**

Ministry of Public Administration;

Maksimirska 63

HR-10 000, Zagreb

tel: 01 2357 523

fax: 01 2357 693

<http://www.uprava.hr/default.aspx?id=13517>

5. Infrastructure access

<http://www.uprava.hr/UserDocsImages/Radna%20skupina%20za%20infrastrukturu.pdf>

Head of the Working group: **Ivana Golub**

CARNet

Josipa Marohnića 5, 10000 Zagreb

tel.: +385 1 6661 616

fax: +385 1 6661 615

e-mail: Ivana.Golub@CARNet.hr

mob: +385 91 1278 561

<http://www.carnet.hr/kontakt>

Darko Parić, Assistant Minister of Public Administration is coordinating the five established working groups in the name of the Committee.

4.3.2 Main actors

Developing eGovernment policy/strategy

In Croatia the government has been reorganised. Three ministries are now involved in policy-making: the Ministry of Administration (information society policy in general), the Ministry of Maritime Affairs, Transport and Infrastructure (electronic communications, broadband) and the Ministry of Economy (electronic business strategy).

Ministry of Public Administration
Maksimirska 63, HR-10 000 Zagreb
Tel: 01 235 75 55
Fax:: 01 235 76 07
Web: www.uprava.hr

Coordinating eGovernment developments

Ministry of Public Administration
Maksimirska 63, HR-10 000 Zagreb
Tel: 01 235 75 55
Fax:: 01 235 76 07
Web: www.uprava.hr

Implementation of the eGovernment strategy and initiatives

Ministry of Public Administration
Maksimirska 63, 10 000 Zagreb
Tel: 01 235 75 55
Fax:: 01 235 76 07
Web: www.uprava.hr

Ministry of Maritime Affairs, Transport and Infrastructure
Prisavlje 14, Zagreb
Tel: 01 6169 111
Web: www.mppi.hr/

Information Systems Security Bureau
Fra Filipa Grabovca 3, HR-10 000 Zagreb
Tel: 385 1 4694 100
Web: www.zsis.hr

Supporting the development of eGovernment

Ministry of Public Administration
Maksimirska 63, HR-10 000 Zagreb
Tel: 01 235 75 55
Fax:: 01 235 76 07
Web: www.uprava.hr

Ministry of Regional Development and EU Funds
Trg kralja Petra Krešimira IV br. 1, HR-10 000 Zagreb
Tel (01) 6400-600
Web: www.mrrfeu.hr
Croatian Bureau of Statistics (CBS)
Ilica 3, HR-10000 Zagreb
Tel: (+385 1) 48 06 111
Web: www.dzs.hr

Information Systems and Information Technologies Support Agency (APIS IT)
Paljetkova 18, HR-10001 Zagreb
Tel: 01/ 3885 777
Fax: 01/ 3880 504
Email: apis-it@apis-it.hr
Web: www.apis-it.hr

Financial Agency (FINA)
Vrtni put 43, HR-10 000 Zagreb
Tel: +385 1 6127 111
Web: www.fina.hr

National Council for Information Society, Ministry of Science, Education and Sports
Donje Svetice 38, HR-10000 Zagreb
Phone: +385 1 4569 000
Fax: +385 1 4594 301
Email: office@mzos.hr
Web: public.mzos.hr

Croatian Information Documentation Referral Agency (HIDRA)
Siget 18c, Zagreb HR-10020 Hrvatska
Tel: +385 (1) 4855 827
Fax: +385 (1) 4855 655
Email: ured@hidra.hr
Web: www.hidra.hr

Auditing eGovernment implementation

State Audit Office
Tkalčićeva 19, HR-10000 Zagreb
Tel: 01/4813 301
Fax: 01/4813 304
Web: www.revizija.hr

Institutions Related to eGovernance Development

Ministry of Public Administration

The Ministry monitors the implementation of: laws and regulations in the field of ICT; ICT in public administration; and new technologies in support of administrative procedures in public administration facilities. Moreover, it is responsible for driving the implementation of the 'eCroatia Programme'. (www.uprava.hr)

Ministry of Maritime Affairs, Transport and Infrastructure

The Ministry performs administrative services and other professional actions related to the field of electronic communications representing the basic information-communication infrastructure. (www.mppi.hr)

Information Systems Security Bureau

The Bureau is a central government body tasked with implementing the technical aspects of information security for government bodies. Technical areas include the following: standards for information systems' security; security accreditation of information systems; management of crypto-material used in the exchange of classified information; and the prevention and response to computer threats. (www.zsis.hr)

Responsible for citizens and businesses data protection

Personal Data Protection Agency
Martićeva 14, HR-10 000 Zagreb
Tel. +385 (0)1 4609-000
Fax. +385 (0)1 4609-099
Email: azop@azop.hr
Web: www.azop.hr

Government interoperability

Responsible for planning, implementing and operating government interoperability:

Ministry of Public Administration
Maksimirska 63, HR-10 000 Zagreb
Tel: 01 235 75 55
Fax:: 01 235 76 07
Web: www.uprava.hr

Coordination Committee for Computerisation of the Public Sector

Major providers of eGovernance solutions

Ministry of Public Administration

The Ministry participates in the overall promotion and improvement of IT infrastructure in Croatia. Furthermore, it promotes the building of the information society, the public's access to Internet services and facilities, as well as the development of ICT, eGovernment, eEducation and eBusiness. (www.uprava.hr)

Croatian Bureau of Statistics (CBS)

CBS provides statistical data on economic, demographic, social, health and ecological conditions, activities and events. In addition, it fulfils the international commitments of Croatia that are related to production and dissemination of official statistics. (www.dzs.hr)

Information Systems and Information Technologies Support Agency (APIS IT)

APIS IT maintains the information systems of Croatia. It has developed a document management information system to support the ongoing activities of the State Administration and local government institutions. APIS IT also supports the State administration portal. (www.apis-it.hr)

Financial Agency (FINA)

FINA is a Government-owned company competent for financial transactions. It streamlines the information-communication infrastructure, supports the State and public finances systems, as well as the registers and information services of administration, regional and local self-government bodies. FINA was entrusted with the development of IT-Communication Network of State Administration Bodies (HITRO.HR). (www.fina.hr)

National Council for Information Society, Ministry of Science, Education and Sports

The National Council for Information Society advises the Government on issues relating to the development of the information society as a whole. (public.mzos.hr)

Croatian Information Documentation Referral Agency (HIDRA)

HIDRA is an expert government service which performs information, documentation and referral work. In addition, it promotes the use of official public domain data, information and documentation and ensures the use of additional information, data and documentation relevant to state bodies and institutions. (www.hidra.hr)

Ministry of Regional Development and EU Funds

The Ministry is in charge of preparing primary and secondary legislation which regulates administrative procedures in the area of EU funds. (www.mrrfeu.hr)

Active Donors in the Area of eGovernance and ICT

The meta-registry being developed by Working group on Meta-registry supported by MATRA flex Program of the Netherlands.

4.4 National Infrastructure

4.4.1 Accessibility

Eurostat:

- Percentage of households with Internet access: 61 % (2011)
- Percentage of households with a broadband connection: 56 % (2011)
- Percentage of used Internet by individuals:
 - within the last 3 months: 58 % (2011)
 - within the last 12 months: 60 % (2011)
- Percentage of frequency of use by individuals
 - every day or almost every day: 44 % (2011)
 - at least once a week: 55 % (2011)
- Percentage of enterprises with
 - Internet access: 96 % (2011)
 - A broadband connection: 84 % (2011)
- Percentage of individuals having ordering goods or services for private use in last 12 months: 29 % (2011)

Enlargement countries monitoring report 2 – July 2012:

The CARNET network is connected to the pan-European GEANT network (connection speed 10 Gbps).

Number of the registered sub domains based on data from January to April 2012.

- 86.407 .hr domains
- 19,6 per 1000 inhabitants

Plans for the near future

National Research and Education Networks (NRENs) that take up this new service will now be able to automatically create multi-domain international connections for their users – students and teachers, scientists and projects, in minutes, thanks to the new GÉANT Bandwidth on Demand (BoD) service, which on 17 May 2012 moved out of the pilot phase to become a production service. (http://www.carnet.hr/carnet_news)

4.4.2 Utilisation of ICT in public administration

Percentage of Internet users having used Internet in last 12 month for:

- obtaining information from websites of public authorities 21 %
- submitting completed official forms to public authorities 10 % (2011)

There is no new official data on how ICTs are used within the public administration.

4.4.3 Utilisation of ICT within education

e-Class Register

The e-Class Register is a web application for the management of the class register in electronic form, which began as a pilot project at the beginning of the school year 2011/2012. Students will also have the possibility of viewing their grades and, through them, their parents as well.

(Source: http://www.carnet.hr/internet_services/e_class_register)

Be Safe!

Be Safe! A project - alert to parents, children and the general public to the potential dangers of the Internet and cell phones.

(Source: <http://www.e-hrvatska.hr/budisiguran>)<http://www.e-hrvatska.hr/budisiguran>)

National CERT

A project established by CARNet's, National Cert is dedicated to working on Internet security; It contains some useful advice on online security and tools for protecting IT systems.

Source: (<http://www.cert.hr>)

Skole.hr

Another initiative by CARNet, this portal is designed for students and teachers wanting to use technology as an aid in learning, teaching, class preparation, reinforcing the knowledge they acquire from school materials, and everyone who wishes to cooperate with colleagues all over Croatia and exchange knowledge and digital course materials (Source: <http://www.skole.hr>)

Croatian National Educational Standard (CNES)

The Croatian National Educational Standard (CNES) has been created as a basis for the changes in the teaching programme and work methods in the elementary school system for the purpose of developing the school tailored to pupils. (Source: <http://public.mzos.hr>)

National Centre for External Evaluation of Education (NCEEE)

National Centre for External Evaluation of Education (NCEEE) administers the state Matura national exam at the end of upper secondary education and the results of these exams. Apart from being used to monitor the overall quality of the national educational system, it is used by all the higher education institutions in Croatia as a criterion for enrolment. (Source: <https://www.postani-student.hr>)

4.4.4 Utilisation of ICT within health

HNIS

HNIS is comprehensive Health Information Exchange platform and has been in operation nationwide from 20 February 2007. It supports various healthcare delivery processes. Supported services are:

- Electronic Patient Records Management
- E – Prescriptions
- E – Referrals
- E – Booking
- Health Insurance Reporting
- Public Health Reporting
- Patient and Health Resources Administration
- Business Intelligence

All 2300 physician offices already integrated and over 4 million patient registered in the system. A major system upgrade began in Q4 2009 with the integration of additional 2500+ primary health specialists, 1100+ pharmacies, 100+ PHC laboratories and 66 hospitals.

From 31st January 2011, all physicians in Croatia use only ePrescriptions.
From 14th February 2011, all physicians in Croatia use only eReferral for biochemistry lab and paper forms are used only in emergency cases.

Health related services

Health related services offers interactive advice on the availability of services in different hospitals and appointments for hospitals. (Source: Ministry of Health and Social Care, various hospitals, website: <http://www.mzss.hr>)

Description: Health related services include standard procedures for interactive consulting of available hospital services and interactive appointments for hospitals. They are organised by hospitals and health centres.

Plans for the near future

Paperless Practice - a project for the computerisation of primary care practices in Croatia. Its purpose is to streamline the healthcare system, reduce costs and establish a single and uniform data collection system.

4.4.5 Know-how and human resources

Croatian Information Documentation Referral Agency (HIDRA)

HIDRA is the official service of the Government for the dissemination of information, documentation and referral. (Source: www.hidra.hr)

Higher Education Institutions Information System - Undergraduate Studies (ISVU)

ISVU is a network-oriented system intended for the digitisation of all student services at higher education institutions that offer graduate studies. (Source: www.isvu.hr)

CROVOC thesaurus¹⁸

EuroVoc is a multilingual, multidisciplinary thesaurus covering the activities of the EU in general and the European Parliament in particular. It contains over 6 600 structurally organised and controlled terms (descriptors) in 22 EU languages, Croatian among them. The Croatian equivalent (CROVOC) was translated by the Croatian Information and Documentation Referral Agency (HIDRA) for subject indexing of official documentation in the Republic of Croatia. (Source: www.hidra.hr)

4.4.6 Major projects related to eGovernance development¹⁹

The state administration portal (My eGovernment Portal) connects citizens and legal subjects with the administration, making information available in one place and in a user-friendly manner.

HITRO.HR portal is a service provided by the Government to facilitate rapid communication between citizens and businesses with the State administration for the following services:

- How to start a limited liability company; How to start a craft business: entrepreneurs are able to carry out online the process of business creation.
- eREGOS (Central Registry of Insured Persons): registered users are able to submit electronically the
- R-Sm form (the insured person's specification based on calculated and paid compulsory contributions for pension fund insurance).
- eTax: taxpayers (legal and natural entities) are able to submit electronically tax returns and forms.

18 <http://www.epractice.eu/en/document/288436>

19 <http://www.epractice.eu/files/eGovernmentCroatia.pdf>

- eVAT: citizens are able to perform VAT (value-added tax) payments online.
- ePension: employers and taxpayers (legal and natural entities) are able to register online for pension insurance.

eJudicial practice database portal

The eJudicial practice database portal provides insight into the case-law published in printed versions of the Supreme Court under 'Selection of rulings', thus giving access to complete texts on Supreme Court rulings since 1993.

Judges web service

Judges web is an interactive web service providing access to information on all Croatian courts, judges, lawyers, court experts and judicial practice, in order to render the judicial system more transparent and to provide a helpful tool for all actors.

eBulletin board and court networking project

A project has been initiated for developing a single intranet and Internet network for judicial bodies which will create prerequisites for the exchange of documents and information within the judiciary.

StuDOM project

Through the project sponsored by the Ministry of Science, Education and Sports, all student dormitories are connected to the broadband network.

FINA eCard

The FINA (Financial Agency) eCard provides faster, simpler and more secure access to information and services for businesses.

SmartX university card

The SmartX university card is a multifunctional smart card intended for professionals and students at university level.

eProcurement: Electronic Public Procurement Classifieds (EPPC)

EPPC is the national platform and is managed by the Official Gazette (Narodne Novine). eNotification is available during the eProcurement pre-award process; however, the eSubmission and eAward services are not.

Croatian Information Documentation Referral Agency (HIDRA)

HIDRA is the official service of the Government for the dissemination of information, documentation and referral. It provides a central information and documentation portal for official information and documents of the public domain.

Higher Education Institutions Information System - Undergraduate Studies (ISVU)

ISVU is a network-oriented system intended for the digitisation of all student services at higher education institutions that offer graduate studies.

CROVOC thesaurus

EuroVoc is a multilingual, multidisciplinary thesaurus covering the activities of the EU in general and the European Parliament in particular. The Croatian equivalent (CROVOC) was translated by the Croatian Information and Documentation Referral Agency (HIDRA) for subject indexing of official documentation in the Republic of Croatia.

Personal identification number (OIB) system

The OIB system offers safe infrastructural and functional services for all central and public institutions in charge of physical and legal entity registration.

eCourt registry

The eCourt registry contains all entities that are being founded, including trading companies, co-ops and institutions.

eCREW

The eCREW system enables all legal and natural entities who rent yachts and boats to register, prior to putting out to sea, their crew and passengers via the Internet using smart cards with a digital certificate based on acquired user rights.

eCustoms

The Customs administration offers Internet services to international dispatchers.

Central Database Registry on Personal Data

Registry offices in the country keep national records on registries of births, marriages and deaths.

Multipurpose Spatial Information System

The application of the Multipurpose Spatial Information System links basic spatial databases into a unique information system which enables users to efficiently use data and build on it. It is maintained by the Croatian State Geodetic Directorate.

Croatian National Educational Standard (CNES)

The CNES has been created as a basis for the changes in the teaching programme and work methods.

HNIS is comprehensive Health Information Exchange platform that supports various healthcare delivery processes.

Agronet (help farms and other users in obtaining the aid in agriculture)

Arkod (new system of records of land parcels) (web: <https://agronet.aprrr.hr>)

ARHINET is a network information system for describing, processing and managing archival material. It is designed for archives and other holders of archival material (museums, libraries, documentation centers etc.) as well as institutions, administration bodies and enterprises producing archival records.

AZOP - Central Register with records on personal data filing system.

4.4.7 Important events related to eGovernance

2011

- On 20 October 2011, the Croatian Government adopts a Decision establishing eGovernment development goals in the State Administration for 2011-2015
- On 15 April 2011, the Croatian Parliament ratifies the Memorandum of Understanding between the Republic of Croatia and the EU on the participation of Croatia in the Interoperability Solutions for European Public Administrations (ISA) Programme
- On 11 February 2011, the Republic of Croatia signs a Memorandum of Understanding with the EU to join the Interoperability Solutions for European Public Administrations (ISA) Programme.

By joining the ISA programme, Croatia will become familiar with EU policies in the field of interoperability, one of the key elements identified in the flagship initiative Digital Agenda for Europe (DAE).

2010

- On 20 December 2010, Croatia signs the European Union's Memorandum of Understanding (MoU) to implement eCall, the pan-European in-vehicle emergency call system.
- On the occasion of the traditional Archives Celebration Day in Croatia, on 10 December 2010, the Central State Administrative Office for e-Croatia and the Croatian State Archives sign a cooperation agreement on the effective management of digital archives and their contents.
- On 22 April 2010, the Croatian Protection and Rescue Directorate joins the EU Common Emergency Communication and Information System (CECIS).
- Transfer from analogue to digital television broadcasting.
- Adoption of the Standard eOffice Project.
- Launch of the first version of the Croatian Interoperability Framework.

2009

- Implementation of the personal identification number (OIB).
- Completion of the national tertiary education application system.
- Implementation of the eCompany project.

2008

- Launch of the "Moja uprava" ("My Government") portal.
- Adoption of the Strategy for Transfer from Analogue to Digital Television Broadcasting.
- Adoption of the Law on Electronic Communications.
- First national eGovernance conference.

2007

- Adoption of the Law on the Data Protection Act and the Law on Information Security.
- Adoption of the Strategy of eBusiness Development 2007-2010.
- Development of the HITRONet.
- Improved development of new projects in different areas of eGovernance.

4.4.8 Portals

Citizen portals

- **Mojauprava.hr** (www.mojauprava.hr)
Central government portal

Business portal

- **HITRO.HR** (www.hitro.hr)
One stop shop portal for businesses

4.4.9 Government wide networks

There are no government wide intranets in Croatia.

4.4.10 eIdentification/eAuthentication

eID - Single-sign-on for eGovernment services

National system does not exist, a pilot project for identification and authentication is ongoing and that uses at the moment three types of credentials (login/password, AAI@EDU credential and soft-certificate)

digital signature - e-Tax administration services, e-Customs services, e-Company (establishment of a company), e-Health insurance, e-Pension insurance, e-Charter service

Digital signature has been integrated for identification/authentication in most eGovernment services for business sector

AAI@EDU – (www.edu.hr)

Educational and scientific sector uses AAI@EDU credentials for electronic services

4.4.11 eProcurement

Electronic Public Procurement Classifieds (EPPC) from the Ministry of Economy.

EPPC is the national platform and it is managed by the Official Gazette (Narodne Novine). eNotification is available during the eProcurement pre-award process; however, the eSubmission and eAward services are not. (Web: <http://oglasnik-jn.nn.hr>)

4.4.12 Knowledge management

www.mojoprava.hr - The portal provides information on Government services intended for citizens and entrepreneurs. The portal remains in the first phase of its development in terms of building a unified synergy platform to integrate the overall Croatian public government system.

https://circa.e-hrvatska.hr/Public/irc/irc/Home/central_dir_admin?fn=register - The portal of collaborative workspace for partners of the European Institutions.

4.4.13 ePayment

SMS Paying parking rate to local self-government. The registration number is sent to the provider via SMS and the SIM card is charged

SMS Paying public transportation to the City of Zagreb. A code defining the service is sent via SMS and the SIM card is charged.

4.5 Croatian eServices availability

The table below are composed of data from provided by the UNDP's Electronic South Eastern Europe (eSEE) Initiative²⁰, including the 2010 Report "eGovernance and ICT Usage"²¹, the Overview of the status of the implementation of the set of basic eGovernment Services as stated in eSEE Agenda Plus, Annex 1 July 2012²², and updates provided by the national respondents for this report.

4.5.1 eServices for Citizens availability

Table 10 Croatia, G2C services status

G2C	Provider(s)	Web	Status	Stage	Comments
1. Job search	Croatian Employment Service	http://hzzweb.hzz.hr/manager/posloprimac.asp	In implementation process	3/4	
2. Social benefits: unemployment, child supplement, health care payments, students supplement	A. Croatian Employment Service B. Croatian Institute for Pension Insurance C. Croatian Institute for Healthcare Insurance D. Ministry of Science, Education and Sport	A. http://www.hzz.hr B. http://www.mirovinsko.hr C. http://www.hzzo-net.hr D. http://public.mzos.hr	In implementation process	A. 3 B. 2 C. 2 D. 3/4	Online information and forms to download are provided
3. Personal documents: ID, passport or driving permit	A. Ministry of Internal Affairs B. Ministry of Internal Affairs C. Ministry of Internal Affairs	A. http://www.mup.hr/42.aspx B. http://www.mup.hr/44.aspx C. http://www.mup.hr/46.aspx	In implementation process	A. 2 B. 2 C. 2/5	D. ID card: downloadable forms are available. E. International passport: downloadable forms are available. F. Driver's license: downloadable forms are available.

20 <http://www.eseeinitiative.org>

21 UNDP: "eGovernance and ICT usage report for South East Europe ". 2nd edition. Sarajevo 2010 http://www.eseeinitiative.org/images/stories/pub/eGovernance_and_ICT_Usage_Report_for_South_East_Europe.pdf

22 http://www.eseeinitiative.org/images/stories/esee_wg_meetings/eGovernment_Services_Matrix_July_2012.doc

G2C	Provider(s)	Web	Status	Stage	Comments
4. Car registration: new, second hand or imported	Ministry of Internal Affairs	http://www.mup.hr/45.aspx	In implementation process	1/4	Only information is available.
5. Public libraries: review of catalogue and ordering	A. National and University Library B. Zagreb city libraries C. Split University Library D. Požega City Library E. Pazin City Library	A. http://katalog.nsk.hr/cgi-bin/Pwebrecon.cgi?DB=local&PAGE=First B. http://kgz-opac.zaki.com.hr C. http://libar.svkst.hr D. http://crolist.gkpz.hr:8080/ E. http://www.knjiznica.hr/pazin	In implementation process	3/5	
6. Certificates: birth, death and marriage records	Ministry of Administration	http://www.uprava.hr/index.cgi?A=ZAHTJEVI	In implementation process	2/4	
7. Admission to higher education institutions	The Ministry of Science, Education and Sports introduced a National Information	http://public.mzos.hr/	In implementation process	3/4	The Ministry of Science, Education and Sports introduced a National Information System of Applications for Higher Education Institutions. Thanks to the state graduation exam and this particular system, high school graduates are able to undertake all activities related to enrolment at desired higher education institutions at their own school.
8. Residence registration: in case of change of address	Ministry of Internal Affairs	http://www.mup.hr/main.aspx?id=43	In implementation process	2/4	

4.5.2 eServices for Businesses availability

Table 11 Croatia, G2B services status

G2B	Provider(s)	Web	Status	Stage	Comments
1. Tax payment: registration, payment and analysis	Ministry of Finance (Tax Administration)	<ul style="list-style-type: none"> http://www.mfin.hr/ http://www.porezna-uprava.hr/e-Porezna/index.asp?id=b03d1 		4/4	eTax: taxpayers (legal and natural entities) are able to submit electronically tax returns and forms
2. Environment and construction permits; obtaining a license	<p>A. Ministry of Construction and Physical Planning</p> <p>B. The City of Zagreb</p>	<p>A. http://www.mgipu.hr/default.aspx?id=7928</p> <p>B. http://www.zagreb.hr/default.aspx?ID=669</p>	<p>A. In implementation process</p> <p>B. In implementation process</p>	2/5	<p>Downloadable forms are available.</p> <p>A. For the buildings which are of national importance for the Republic of Croatia, the location permit is issued by the Ministry of Environmental Protection, Physical Planning and Construction. The information necessary to start the procedure for an environment-related permit (including reporting) is available on the Ministry website.</p> <p>B. The request for a building permit is submitted to the Regional office of Planning, Architecture, Housing and Municipal Affairs and Trade, and the corresponding regional departments in the area where the action is planned. Regional Offices offer the possibility to obtain and download the paper form to start the procedure for an environment- related permit.</p>
3. Electronic cadastre and related registers of ownership	State Geodetic Directorate (Cadastre)	www.katastar.hr	In implementation process	2/5	
4. Healthcare and pension: payments and examinations	<p>A. Croatian Institute for Healthcare Insurance</p> <p>B. Croatian Institute for Pension Insurance</p>	<p>A. http://www.hzzo-net.hr/07_01_03.php</p> <p>B. http://e-prijave.mirovinsko.hr/ep-prijave/</p>	In implementation process	4/4	

G2B	Provider(s)	Web	Status	Stage	Comments
5. Enterprise registration	Hitro.hr	www.hitro.hr	In implementation process	3/4	
6. Company income registration	Ministry of Finance (Tax Administration)	http://www.porezna-uprava.hr/e-Porezna/index.asp?id=b03d1	In implementation process	4/4	eID: all employers and payers receipts from employment or salary or pension, or the taxpayer are able to submit electronically income tax and forms.
7. VAT	Ministry of Finance (Tax Administration)	http://www.porezna-uprava.hr/e-Porezna/index.asp?id=b03d1	In implementation process	4/4	eVAT: all value-added tax payers are able to perform VAT (value-added tax) payments online.
8. Customs declarations	Customs Administration	http://www.carina.hr/Aplikacije/OtpremniciUpute.aspx	In implementation process	3/4	Authorised representatives of authorised companies can make customs declarations electronically (via a password-protected website).
9. Single Window for one-time filing all required information on a foreign trade transaction	Ministry of Finance Customs Administration	http://www.carina.hr/	In implementation process	3/4	The website of the Customs Administration offers the possibility to submitting customs declarations over the Internet.
10. Public procurement	Ministry of Economy Official Gazette (Electronic Public Procurement Classifieds).	http://oglasnik-jn.nn.hr	In implementation process	3/4	The Electronic Public Procurement Classifieds (EPPC) is the national platform and it is managed by the Official Gazette (Narodne Novine). eNotification is available during the eProcurement pre-award process; however, the eSubmission and eAward services are not.
11. Registry of mortgages of legal persons	The Financial Agency (FINA)	<ul style="list-style-type: none"> http://www.fina.hr/Default.aspx?sec=1244 http://zaloznaprava.fina.hr 	In implementation process	4/5	Registry of registered loads, rights or restrictions on movable property, stocks, shares and business shares.
12. Submitting statistical data to State Statistical System (incl. harmonization with EUROSTAT requirements)	Central Bureau of Statistics	http://www.dzs.hr	In implementation process	3/5	There is an official electronic form to submit at least one statistical questionnaire to the National Institute for Statistics.

4.5.3 eServices for Government availability

Table 12 Croatia, G2G services status

G2G	Provider(s)	Web	Status	Stage	Comments
1. Treasury and programmatic budgeting	The Financial Agency (FINA)	http://www.fina.hr/Default.aspx?sec=1171	In implementation process	4/5	The Register of the State Budget Users has been established with the purpose of more efficient functioning of the system of the State Treasury and linking with the third level in the system – the budget users.
2. Support systems for implementation of EU funds	Ministry of Regional Development and EU Funds	http://www.mrrsvg.hr/default.aspx?id=474	In implementation process	3/5	The pages contain information on EU Funds, presented per certain areas within which there is a possibility of co-financing the relevant projects from the European Union assistance programmes.
3. Integrated control of borders	Ministry of the Interior	http://www.policija.hr/127981/2.aspx	In implementation process	1/5	NBMIS - new functions: automatic search of national and Interpol databases, the use of portable terminals, auto-risk profile creation, storage of vehicles and license plates and connecting with Interpol.

4.5.4 Availability of other eServices for Government

Table 13 Availability of other eServices for eGovernment in Croatia

	Name	Description
1	Arhinet (National Archival Information System) http://arhinet.arhiv.hr/	An archival information system which should cover all archival functions: keeping, preserving, arranging and use of archival records.
2	Agronet https://agronet.aprrr.hr	Agronet offers help farms and other users in obtaining the aid in agriculture Arkod (new system of records of land parcels)

4.5.5 G2G services concerned with learning, training or management

	Name	Brief description
1	www.carnet.hr/eduhr	Central point for accessing services provided by CARNet: Nikola Tesla distance-learning portal , Moodle , e-library , School forum , School Portal , Adobe Connect Pro , Blog , Media on Demand , Radio on Demand , online educational quiz (Školska učilica) and online educational traffic quiz (Prometna učilica) , CARNet Users Conference - CUC , Online Encyclopedia , Timetable , Partner's in Learning , Textbook exchange , Webmail and eLektire .
2	www.carnet.hr/education/e-learning_academy	E-learning Management , E-learning Tutoring , E-learning Course Design
3	www.skillsoft.com	eLearning for Business Skills and IT Certification
4	www.znanstvenici.hr	Croatian Scientific Portal is an attempt to consolidate information on Croatian scientists, their work and scientific projects with the goal to promote and popularize science in Croatia.

5.1 Legal Infrastructure

The Ministry of Transport and Communications has developed *The National Strategy for Information Society for 2006-2012*, which was approved by the Government of Kosovo on 26 April 2006. Furthermore, in 2007 the Government of Kosovo adopted *The Strategy for Public Administration Reform (SPAR)* and the *Action Plan for the period 2007-2012*. SPAR was proposed by the Ministry of Public Services (now MPA) and based on the work of the Group of Experts for Public Administration Reform (GERAP), which included a broad spectrum of government officials and civil society representatives. These two documents are currently the key guidelines for the reform process in the short-term (1-2 years) and mid-term (3-5 years) period.

(Source: UNDP, 2010 p. 204)

An adoption of the Law on Information Society bodies is awaiting the parliament's approval.

In the future there is a plan to draft a Law on e-Governance which will enforce the usage of e-services.

5.2 Institutional Framework

In Kosovo* the responsibility for eGovernment implementation is divided between two ministries. Accordingly, the Ministry of Transport and Communications (<http://www.mtpt.org>) is responsible for the development of policies and the implementation of legislation for the provision of services in the sector of information technology. It is also responsible for the promotion of information technology and innovation in areas such as electronic commerce, the 162 Law nr. 2009/03/172 available at: <http://www.assembly-kosova.org/?cid=2,194&filter=15> promotion of access to technology and encouraging the development of information technology training systems. On the other hand, the Ministry of Public Administration (MPA) (formerly the Ministry of Public Services) (www.rks-gov.net/mshp) is in charge of the development of information technology standards and the coordination of information technology services within the Government of Kosovo*. Within the MTC there is the Department of Information Technology that covers the functions related to the MTC.

(Source: UNDP, 2010 p. 206)

An Interoperability Framework based on EIF²⁴ is processed by the government, to be implemented later.

5.3 Who-is-who

5.3.1 Main responsible for eGovernment

Minister responsible for eGovernment

Mahir YAGCILAR
Ministria e Administratës Publike,
Kati: V-të zyra: 534 Ndërtesa e ish – Rilindjes
10000 Prishtinë
Kosovo^{25*}
Tel: +381 (0) 38 200 30 007
Email: Mahir.Yagcilar@rks-gov.net

23 *This designation is without prejudice to positions on status, and it is in line with UNSCR 1244 and the ICJ Opinion on the Kosovo Declaration of Independence

24 European Interoperability Framework http://ec.europa.eu/isa/documents/isa_annex_ii_eif_en.pdf

25 *This designation is without prejudice to positions on status, and it is in line with UNSCR 1244 and the ICJ Opinion on the Kosovo Declaration of Independence

Head of eGovernment Strategy

Driart ELSHANI

Director of Department for Electronic Governance and Administrative Processes (DeGAP)

Ministria e Administratës Publike,

Kati: V-të zyra: 204 Ndërtesa e ish - Rilindjes

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Tel:+381 (0) 38 200 30 600

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eGovernment executive

Driart ELSHANI

Director of Department for Electronic Governance and Administrative Processes (DeGAP)

Ministria e Administratës Publike,

Kati: V-të zyra: 204 Ndërtesa e ish - Rilindjes

10000 Prishtinë

Kosovo*

Tel:+381 (0) 38 200 30 600

Email: driart.elshani@rks-gov.net

5.3.2 Main actors

Developing eGovernment policy/strategy

Ministry of Public Administration (MPA)

Ministria e Administratës Publike

Kati: V-të zyra: 534 Ndërtesa e ish - Rilindjes

10000 Prishtinë

Kosovo^{26*}

Tel:+381 (0) 38 200 30 007

Web:map.rks-gov.net/

Coordinating eGovernment developments

Ministry of Public Administration (MPA)

Ministria e Administratës Publike

Kati: V-të zyra: 534 Ndërtesa e ish - Rilindjes

10000 Prishtinë

Kosovo*

Tel:+381 (0) 38 200 30 007

Web:map.rks-gov.net/

Implementation of the eGovernment strategy and initiatives

- Ministry of Public Administration (MPA)
Ministria e Administratës Publike,
Kati: V-të zyra: 534 Ndërtesa e ish – Rilindjes
10000 Prishtinë
Kosovo*
Tel:+381 (0) 38 200 30 007
Web: <http://map.rks-gov.net/>

26 *This designation is without prejudice to positions on status, and it is in line with UNSCR 1244 and the ICJ Opinion on the Kosovo Declaration of Independence

- Ministry of Economic Development (MED)
Sheshi “Nëna Terezë” (ish ndërtesa e Toskanës)
Prishtinë, Kosovo*
Tel: +381 (38) 200 215/05
Web: <http://mzhe.rks-gov.net/>
- Ministry of Local Government Administration
Ish ndërtesa e Rilindjes
Katet:10, 11, 12 dhe 13
Prishtinë
Kosovo*
Tel: +381 (0) 200 35 630 (centrala)
Web: <http://mapl.rks-gov.net>
- Municipalities
Web: <http://kk.rks-gov.net>

Supporting the development of eGovernment

- Government
- Donors
- Municipalities

Auditing eGovernment implementation

Ministry of Public Administration (MPA)
Ministria e Tregtisë dhe Industrisë
Rr.”Muharrem Fejza”, p.n Lagjja e Spitalit
10000 - Prishtinë
Kosovo^{27*}
Tel: + 381(0) 38 512 059 / + 381(0) 38 512 133
Fax: + 381(0) 38 512 798
Web: map.rks-gov.net/

Institutions Related to eGovernance Development

Ministry of Public Administration (MPA)
Web: <http://map.rks-gov.net/sq/>

Ministry of Economic Development (MED)
Web: <http://mzhe.rks-gov.net/>

Telecommunications Regulatory Authority (TRA)
Web: <http://www.art-ks.org/>

The new Law on Information Society Bodies will establish an Agency of Information Society which will have all competencies in the field of ICT and e-Governance.

Responsible for citizens and businesses data protection

Ministry of Trade and Industry (MTI)
Ministria e Tregtisë dhe Industrisë
Rr.”Muharrem Fejza”, p.n Lagjja e Spitalit
10000 - Prishtinë
Kosovo*
Tel: + 381(0) 38 512 059 / + 381(0) 38 512 133
Fax: + 381(0) 38 512 798
Web: <http://www.mti-ks.org/>

27 *This designation is without prejudice to positions on status, and it is in line with UNSCR 1244 and the ICJ Opinion on the Kosovo Declaration of Independence

Government interoperability

Responsible for planning, implementing and operating government interoperability:

Ministry of Public Administration (MPA)
Ministria e Administratës Publike,
Kati: V-të zyra: 534 Ndërtesa e ish – Rilindjes
10000 Prishtinë,
Kosovo^{28*}
Tel:+381 (0) 38 200 30 007
Web: <http://map.rks-gov.net/>

Major providers of eGovernance solutions

The major providers of eGov solutions in Kosovo* are:

- ProNEt (www.pronet-ks.com)
- Cacctus (www.cacttus.com)
- Komtel (www.komtel-ks.com)
- DataProgNet (<http://www.dataprognnet-ks.com>)
- InterAdria (www.interadria.eu)
- PPC-IT (<http://www.ppc-it.com>)
- Botek (www.bo-tek.com)
- Comtrade (www.comtrade-ks.com)

(Source: UNDP 2010 Report “eGovernance and ICT Usage”)

Active Donors in the Area of eGovernance and ICT

- World Bank
 - UNDP
 - EU
 - USAID
 - SOROS (KFOS)
 - The Swiss Agency for Development and Cooperation (SDC)
- (Source: UNDP 2010 Report “eGovernance and ICT Usage”)

The Norwegian Government is expected to finance future projects in e-Governance

5.4 National Infrastructure

5.4.1 Accessibility

According to the latest results from the Telecommunications Regulatory Authority (TRA) accessibility has reached 48.45% (internet penetration), whereas mobile penetration has reached 85% (see: <http://www.art-ks.org/>)

Plans for the near future

There are plans for expansion of the ICT accessibility to rural areas

5.4.2 Utilisation of ICT in public administration

More than 90% of the institutions use services provided by the governmental network which is managed by the Department for e-Governance and Administrative Processes (DeGAP) in the Ministry of Public Administration (MPA); the number of governmental e-mail users has reached 10.000

28 *This designation is without prejudice to positions on status, and it is in line with UNSCR 1244 and the ICJ Opinion on the Kosovo Declaration of Independence

Plans for the near future

There are plans to cover also the municipalities in the North which are currently using other networks.

5.4.3 Utilisation of ICT within education

Data for usage of ICT in education is very scarce, but it is estimated by the Ministry of Education, Science and Technology (MEST) that more than 50% of schools have IT facilities and around 30% of them are connected to the internet.

Plans for the near future

There are plans to include public schools in the governmental network and there is already a pilot project e-Schools which has just been finished. The plan is to expand the e-Schools project which ran in 4 schools as pilot project to all public schools.

5.4.4 Utilisation of ICT within health

There are no updates or comments related to the utilisation of ICT within health.

Plans for the near future

There is a plan for the establishment for an e-Health system, but this is in an initial phase.

5.4.5 Know-how and human resources

The planning and delivery of ICT training for officials is decentralised, and no data is available on the amount of training received. ICT training is planned and implemented by individual ministries and government agencies.

The UNDP 2010 report notes that the Ministry of Local Government has organised ongoing ECDL training for municipal civil staff.

5.4.6 Major projects related to eGovernance development

Drivers' License Software completed

- Vehicle Registration Software completed
- e-Archive (Electronic Archive) completed
- National Data Center ongoing
- e-Schools pilot project completed
- e-Files (Document Management System) completed
- e-Cabinet completed e-Procurement ongoing e-Cadaster ongoing
- e-Assets (Property Management System) completed
- e-Business completed
- Government Network Extension ongoing

Plans for the near future

The plans in the future are to develop:

- an e-Voting system
- e-Health
- e-ID
- e-Justice
- e-Employment
- e-Culture and to further extend the Government Network

5.4.7 Important events related to eGovernance

Establishment of an Agency for Information Society. Plans for the near future includes adoption of the law for e-Governance.

5.4.8 Portals

Citizen portals

- **E- Portal** (www.rks-gov.net)
Point of entry for information about institutions for citizens

Business portal

- **E-Business** (<https://e-bizneset.rks-gov.net>)
Provides possibility to register a business online

5.4.9 Government wide networks

Kosovo^{29*} has a government intranet (<https://intranet.rks-gov.net/>), which is only accessible from within the government network.

5.4.10 eIdentification/eAuthentication

- **PKI** - Provides identification and authentication for staff's used only by a limited number of officials because it's still in a testing phase
- **Single Sign On** - Provides the possibility to be authenticated in all e-Government services, but it's still in development.

5.4.11 eProcurement

The Public Procurement Regulatory Commission of Kosovo^{30*} publishes data on every tender procedure initiated by the Government. This data is meant for printing and does not offer any on-line functionality. In the planning phase is a transactional service.

5.4.12 Knowledge management

There is no national knowledge management portal, programme or project in Kosovo*.

5.4.13 ePayment

There is no ePayment system(s) in Kosovo*.

29 *This designation is without prejudice to positions on status, and it is in line with UNSCR 1244 and the ICJ Opinion on the Kosovo Declaration of Independence

30 *This designation is without prejudice to positions on status, and it is in line with UNSCR 1244 and the ICJ Opinion on the Kosovo Declaration of Independence

5.5 Kosovo^{31*} eServices availability

The tables below are composed of data from provided by the UNDP's Electronic South Eastern Europe (eSEE) Initiative³², including the 2010 Report "eGovernance and ICT Usage"³³, the Overview of the status of the implementation of the set of basic eGovernment Services as stated in eSEE Agenda Plus, Annex 1 July 2012³⁴, and updates provided by the national respondents for this report.

5.5.1 eServices for Citizens availability

Table 14 Kosovo*, G2C services status

G2C	Provider(s)	Web	Status	Stage	Comments
1. Job search	Ministry of Labour and Social Welfare	www.ks-gov.net/mpms	Done	?	This area is covered by the Ministry of Labour and Social Welfare, which currently does not offer on-line information on registering with regional and local labour offices. Furthermore there is no information on the procedure on searching for job openings.
2. Social benefits: unemployment, child supplement, health care payments, students supplement	Ministry of Labour and Social Welfare	www.ks-gov.net/mpms	No activity taken	?	The Ministry of Labour and Social Welfare is responsible for the management of social transfer schemes and distribution of social benefits. Currently, there is no information on applying for and obtaining any of the social benefits offered by the Government of Kosovo via its website.
3. Personal documents: ID, passport or driving permit	Ministry of Internal Affairs	http://www.mpb-ks.org	In planning phase	All	Information required to apply for and obtain all of the documents (ID, passport, driver's licence) is available on the website of the Ministry of Internal Affairs.
4. Car registration: new, second hand or imported	Ministry of Internal Affairs	http://www.mpb-ks.org	In planning phase	?	The service is managed by the Ministry of Internal Affairs, but there is no information available on its website to instruct citizens about the procedure related to car registration.
5. Public libraries: review of catalogue and ordering	National Library of Kosovo	www.biblioteka-ks.org/katalogu.php	In implementation process	?	The National Library of Kosovo offers an on-line searchable catalogue that is accessible to everybody. Links to some regional and local libraries are also offered.

31 *This designation is without prejudice to positions on status, and it is in line with UNSCR 1244 and the ICJ Opinion on the Kosovo Declaration of Independence

32 <http://www.eseeinitiative.org>

33 UNDP: "eGovernance and ICT usage report for South East Europe ". 2nd edition. Sarajevo 2010 http://www.eseeinitiative.org/images/stories/pub/eGovernance_and_ICT_Usage_Report_for_South_East_Europe.pdf

34 http://www.eseeinitiative.org/images/stories/esee_wg_meetings/eGovernment_Services_Matrix_July_2012.doc

G2C	Provider(s)	Web	Status	Stage	Comments
6. Certificates: birth, death and marriage records	Ministry of Internal Affairs together with the Ministry of Public Administration	http://www.ks-gov.net/gjendjacivile/AplikimiLogin.aspx?l=2	A. In implementation process B. Done	? 3	The Ministry of Internal Affairs together with the Ministry of Public Administration has developed a complete on-line application that enables citizens to apply for certificates electronically. Citizens can register and apply for a certificate on-line and then collect the certificate in the municipality in which they live.
7. Admission to higher education institutions	Public University of Prishtina	www.uni-pr.edu	No activity taken	?	The public University of Prishtina offers all necessary information for students to be able to apply and enrol through its website. No application forms are currently available.
8. Residence registration: in case of change of address	Ministry of Internal Affairs	www.mpb-ks.org	No activity taken	?	The service is the responsibility of the Ministry of Internal Affairs. Nevertheless, besides the Law that regulates this issue, for the time being, no procedure is available on-line.

5.5.2 eServices for Businesses availability

Table 15 Kosovo^{35*} G2B services status

G2B	Provider(s)	Web	Status	Stage	Comments
1. Tax payment: registration, payment and analysis	The Tax Administration of Kosovo, part of the Ministry of Economy and Finance	http://www.atk-ks.org/edeclarations	In implementation process	3/4	
2. Environment and construction permits; obtaining a license	Ministry of Trade and Industry	<ul style="list-style-type: none"> • http://mti-ks.org/?cid=1,136 • www.prishtina-komuna.org 	In planning phase	1	Construction permits are usually issued by municipalities. However, the Ministry of Trade and Industry is in charge of licensing construction companies. In both cases, the information necessary to start the procedure is available on-line.
3. Electronic cadastre and related registers of ownership	Kosovo1* Cadastral Agency	www.kca-ks.org	In planning phase	?	The Kosovo* Cadastral Agency maintains a website which offers basic information about the Agency, but it does not provide information on the procedures required for obtaining and applying for the service.
4. Healthcare and pension: payments and examinations	The Kosovo* Pensions Trust	www.trusti.org	No activity taken	1	Since currently there is no social contributions scheme in Kosovo, to assess this service we had to access pensions contributions. The Kosovo* Pensions Trust is the body responsible for managing the pension contributions of employees, through their employers. The Trust runs a publicly accessible website that offers all necessary information concerning pension contributions.

35 *This designation is without prejudice to positions on status, and it is in line with UNSCR 1244 and the ICJ Opinion on the Kosovo Declaration of Independence

G2B	Provider(s)	Web	Status	Stage	Comments
5. Enterprise registration	The Agency for Business Registration	<ul style="list-style-type: none"> http://www.arbk.org/arbik/Formularetabid/64/language/en-US/Default.aspx http://www.rks-gov.net/en-US/Pages/BiznesetOnline.aspx 	Done	3	The Agency for Business Registration offers downloadable forms that enable businesses to start the registration procedure. The same service provider offers a searchable database of previously registered businesses.
6. Company income registration	Tax Administration of Kosovo*	www.atk-ks.org/edeclarations	No activity taken	6	
7. VAT	Tax Administration of Kosovo2*	www.atk-ks.org/edeclarations	?	?	
8. Customs declarations	Customs of Kosovo*	http://dogana-ks.org/?cid=2,100	No activity taken	2	
9. Single Window for one-time filing all required information on a foreign trade transaction	Customs of Kosovo*	http://dogana-ks.org/?cid=2,100	No activity taken	2	
10. Public procurement	Public Procurement Regulatory Commission	http://www.ks-gov.net/krpp/Default.aspx?PID=Notices&LID=1&PCID=-1&CtIID=Search%20Notices&stat=2	A. In planning phase B. Done	A. 4 B. 2	The Public Procurement Regulatory Commission of Kosovo *publishes data on every tender procedure initiated by the Government. This data is meant for printing and does not offer any on-line functionality.
11. Registry of mortgages of legal persons	Central Bank of Kosovo*	http://www.bqk-kos.org/?cid=2.55	No activity taken	?	The Central Bank of Kosovo* has an established system for registering all loans (including mortgages) given by credit providers in Kosovo*. The system (CRK) is accessible to all credit providers via the Internet.
12. Submitting statistical data to State Statistical System (incl. harmonization with EUROSTAT requirements)	Statistical Office of Kosovo*	www.ks-gov.net/esk	No activity taken	?	Even though the Statistical Office of Kosovo* offers a rich website, with the possibility to download and request statistical information, it does not provide information on how to obtain or submit statistical questionnaires for businesses or other interested parties.

5.5.3 eServices for Government availability

Table 16 Kosovo^{36*} G2G services status

G2G	Provider(s)	Web	Status	Stage	Comments
1. Treasury and programmatic budgeting	Ministry of Finance	http://mf.rks-gov.net	Done	3	
2. Support systems for implementation of EU funds			No activity taken	?	
3. Integrated control of borders	Providers are Ministry of Interior	http://www.mpb-ks.org/	In implementation process	?	

36 *This designation is without prejudice to positions on status, and it is in line with UNSCR 1244 and the ICJ Opinion on the Kosovo Declaration of Independence

5.5.4 Availability of other eServices for Government

Table 17 Availability of other eServices for eGovernment in Kosovo^{37*}

	Name	Description
1	E-Portal	E-portal offers wide range of information that is in the interest of the citizens of Kosovo*. The e-Portal would link the majority of e-services, but needs to be further modified. The electronic services under e-Portal would be e-Employment, e-Business, e-Property, e-registers, e-School, e-Archive, e-Tourism, and others to be added.
2	E-archive	A comprehensive electronically archived information management system, which can generate periodic results reports for all interested stakeholders of the electronic archive. The system can also serve users from abroad and can deliver archive documents using the e-State Portal and e-sub-portals of other institutions.
3	Civil Status	Enables citizens of Republic of Kosovo* can apply for different certificates such as: birth certificate, marriage certificate, death certificates, residence certificates, citizenship certificate, certificate of marital status, declaration of family status, and so on.
4	e-Assets	A property management system enabling an effective management of institutional property, accurate maintenance of data, enables managing and monitoring of stocks state, minimizes or eliminates stocks from stockrooms (warehouses) of institutions, online auditing of property by the general auditor, support generation and placement of barcodes on equipment and inventory, and manages all the inflows and outflows of materials and assets.
5	Drivers License Application	Driver license database which eases the application procedure for citizens by offering online services as well as connection to other systems that are involved in the procedures of acquiring a driver's license.
6	Project Management System	Enables government to manage all the projects in central and local institutions from project idea to their final stage. The system is a unique and comprehensive tool and supports not only projects financed from GoK, but also project financed by different international organisations and donors.
7	Application for identification of vehicle and driver license	A project that will function in all areas of Kosovo*. Equipment installed in police vehicles (50 vehicles) and enables the police to identify vehicle and driver licenses. Implementation is soon expected.
8	Vehicle Registration Application	This application eases duties of employees and officers of Vehicle Registration Centers and at the same time provides faster and higher quality services to the citizens. The application supports all actions regarding vehicles starting from: first registration of the vehicle, continuation of the registration, de-registration of the vehicle, change of the owner, DVR's loss, loss of registration plates, legalization, test plates, transfer of the case, and temporary registration.
9	System for managing attendance at work	<ul style="list-style-type: none"> • Through this project, all entries and exits of officials in state buildings are recorded. • Through this process, the personnel office manages all the process of work attendance.
10	System for managing vehicle expenses	Manages and controls the expenses and location of official vehicles. This drastically reduces expenses and counters misuse of official vehicles during the work of the government institutions. The system works online, and at any time the location of every official vehicle can be controlled, the amount of the fuel supplied, the amount of fuel spent, the number of persons in the vehicle, the travelling kilometres etc.

37 *This designation is without prejudice to positions on status, and it is in line with UNSCR 1244 and the ICJ Opinion on the Kosovo Declaration of Independence

11	E-schools pilot project	Will enable digitalisation of the entire administrative and teaching process in the pre-university system, starting with the digitalisation of record book in schools, digitalisation of school diary, schedule, booklet, grade certificates, registers of the students, register of the teachers, register of the schools, register of the classes, creation of electronic documents for students and many procedures of education process. The pilot is in its testing phase.
12	Document Management System	Through this system, management of all electronic official documents will be made. The entire work procedure through documents has been digitised starting from receiving the documents up to the return response to the citizens. This application is associated with e-Archive, and the documents that require archiving will be moved automatically to electronic archive. The system is currently being tested.
13	E-Business	Will enable businesses to apply for license and register online.
14	E-Health	Electronic health database will be created through this system. E-Health is initiated from the Ministry of Health and is in the initial phase of establishment.
15	E-Cabinet	Electronic management of government cabinet sessions, thereby avoiding using paper. E-cabinet is in the testing phase.
16	E-Banking	The e-Banking project is already available and ready to use, and it is implemented by the majority of banks in Kosovo ^{3*} , e.g. Procredit Bank, Raiffeisen Bank, TEB Bank, Banka Kombëtare Tregtare (BKT), Banka për Biznes (BPB).
17	E-Cadastre	The e-Cadastre project is in the initial phase.

5.5.5 G2G services concerned with learning, training or management

There do not exist individual G2G services within eLearning, eTraining, eManagement etc. relevant for this study in Kosovo*.

6 FYR of Macedonia

6.1 Legal Infrastructure

- National e-Government Strategy 2010-2012 adopted
- National e-Inclusion strategy adopted 2011
- National strategy for PAR³⁸ adopted 2010
- Law on the Establishment of the Macedonian Academic Research Network – MARNet adopted
- Law on electronic management adopted in 2009 (105/2009) with 8 bylaws³⁹
- Law on archive material adopted 2012 (regulates e-archiving)
- Changes has been made in the following regulations⁴⁰:
 - Law on electronic communications (13/2005, 14/2007, 55/2007, 98/2008, 83/2010 and 13/2012)⁴¹
 - Broadcasting Law (100/2005, 19/2007, 103/2008, 06/2010, 145/2010, 97/2011, 13/2012)
 - Law on protection of competition (145/2010, 136/2011)⁴²
 - Law on personal data protection (7/2005, 103/2008, 124/2010, 135/2011)
 - Law on electronic commerce (133/2007, 17/2011)
 - Law on legal protection of services that are based on or concern conditional access (127/2008, 17/2011)
 - Criminal Code of the Republic of Macedonia (37/1996, 7/2008, 139/2008, 114/2009, 51/2011, 135/2011, 185/2011)
 - Law on copyright and related rights (115/2010, 140/2010, 51/2011)
 - Law of free access to information of public character (115/2010, 140/2010, 51/2011)

Plans for the near future

- Revision of the National strategy for PAR adopted 2010
- Law on Data in Electronic Form and e-Signature is to be fully aligned with EC Directives this year
- Law on media is in preparation phase
- Law on administration (comprises two existing laws: Law for public servants and Law for civil servants)

6.2 Institutional Framework

- The Ministry of Information Society became ‘Ministry of Information Society and Administration’ (MISA) in 2010. Apart from its previous responsibilities, it also became responsible for management and reform of the public administration in Macedonia.
- The Agency for civil servants was transformed into Agency for Administration, and its responsibility for trainings and development of human resources became MISA’s responsibility from 2010, as a responsibility of a separate department.
- The Department for Telecommunication which was part of the Ministry of Transport and Communication became part of MISA as of 2012. Thus, the regulation of the Telecommunication sector in Macedonia is now the responsibility of MISA.

38 Public Administration Reform

39 <http://mioa.gov.mk/?q=node/217>

40 Updates are underlined

41 http://www.aek.mk/index.php?option=com_docman&task=doc_download&gid=194&Itemid=&lang=en

42 <http://www.kzk.gov.mk/eng/law.asp>

Plans for near future

With the changes in the Law on Data in Electronic Form and eSignature, MISA will take the responsibilities for this regulation. At present it is in the hands of the Ministry of Finance. The Agency for Electronic Communication will be the body responsible for accreditation and supervision of CAs.

6.3 Who-is-who

6.3.1 Main responsible for eGovernment

Minister responsible for eGovernment

Ivo Ivanovski , Minister of information society and administration
Mito Hadzi-Vasilev Jasmin 50, 1000 Skopje, R.Macedonia
Tel: (+3892)3200870
Email: ivo.ivanovski@mioa.gov.mk

Head of eGovernment Strategy

Ivo Ivanovski , Minister of information society and administration
Mito Hadzi-Vasilev Jasmin 50, 1000 Skopje, R.Macedonia
Tel: (+3892)3200870
Email: ivo.ivanovski@mioa.gov.mk

eGovernment executive

Ivo Ivanovski , Minister of Information Society and Administration
Mito Hadzi-Vasilev Jasmin 50, 1000 Skopje, R.Macedonia
Tel: (+3892)3200870
Email: ivo.ivanovski@mioa.gov.mk

6.3.2 Main actors

Developing eGovernment policy/strategy

Ministry of Information Society and Administration
Mito Hadzi-Vasilev Jasmin 50, 1000 Skopje, R.Macedonia
Tel: (+3892)3200870
Web: mioa.gov.mk

Coordinating eGovernment developments

Ministry of Information Society and Administration is the central coordinator and responsible for implementation of the central initiatives and systems.

Ministry of Information Society and Administration
Mito Hadzi-Vasilev Jasmin 50, 1000 Skopje, R.Macedonia
Tel: (+3892)3200870
Web: mioa.gov.mk

Implementation of the eGovernment strategy and initiatives

The managing authorities implementing separate/particular e-services and e-government solutions are the organizations/institutions responsible for issuing documents and services.

Supporting the development of eGovernment

- Government of the Republic of Macedonia
- Donors (UNDP, USAID, World Bank, GIZ)
- Embassies (British, French)
- Chambers (ICT Chamber MASIT, Macedonian chamber of commerce)
- NGOs (Metamorphosis, Open the windows, Open society, etc)
- Academic sector (Faculty for information science and computer technologies, etc)

Auditing eGovernment implementation

Government of the Republic of Macedonia is regularly monitoring and revising implementation of the projects. There is no special audit of eGovernment implementation. However, there is an internal audit unit in each ministry. External audits are also being performed regularly by the State Audit Office. The projects funded by the donors, includes a component for assessing the impact of the achieved goals.

Institutions Related to eGovernance Development

- The **Ministry of Information Society and Administration** is responsible for making information society policy and IS development in general and is responsible for the electronic communications legislation and policy making
- The **Agency for Electronic Communication** is a national regulatory authority for electronic communications regulation (NRA)
- The **Broadcasting Council of the Republic of Macedonia** is the audio-visual media regulator/ broadcasting authority.
- **State Statistical Office** is responsible for information society statistics
- **Ministry of Interior** is the body responsible for network security (Art. 13a, 13b Framework Directive) and the body responsible for cybercrime
- **Ministry of Finance** is the Electronic Signatures Directive: body (bodies) responsible for supervision and/or accreditation
- **Directorate for Personal Data Protection** is the data protection authority; Body responsible for personal data security (Art. 4 e-Privacy Directive)
- **Commission for Protection of Competition** is the national competition authority (NCA)
- **MARNet** is responsible for domain name policy making, and the national domain name registry

Plans for the near future

- The foundation for CERT has been established, but the body is still not operative.
- MISA is to become authority for regulation for Electronic signature.
- The Agency for Electronic Communication will become the accredited body for licensing CAs.

Responsible for citizens and businesses data protection

- Directorate for Personal Data Protection
Samoilova Str. 10, 1000 Skopje
Tel: +389 (2) 3230 635

Government interoperability

The Ministry of Information Society and Administration is in charge of planning and operating the government interoperability system and the unique environment for the purposes of data exchange and service delivery, while institutions are in charge of implementation of their own local systems and their communication with the governmental interoperability system.

Ministry of Information Society and Administration
Mito Hadzi-Vasilev Jasmin 50, 1000 Skopje, R.Macedonia
Tel: (+3892)3200870
Web: mioa.gov.mk

Major providers of eGovernance solutions

- KING ICT Macedonia (www.king-ict.com.mk)
- Vista group (vista.com.mk)
 - Ultra computing (ultra.com.mk)
 - Infinite solutions (infinite.com.mk)
 - Asseco-see (former Pexim) (www.asseco.com)

Active Donors in the Area of eGovernance and ICT

- World Bank
- GIZ (actual name of GTZ)
- British embassy
- French embassy

6.4 National Infrastructure

6.4.1 Accessibility

According to the data of the Statistical Office of the Republic of Macedonia, in the first quarter of 2011, 55.0% of the households had access to the Internet at home, which is 8.9% percentage points more in comparison with the same period in 2010. Participation of the households with broadband connection in the total number of households increased from 37.2% in 2010 to 42.1% in 2011. In this period, the most common Internet connection, used by 46.5% of the households with internet access, was broadband connection that includes: fixed wired (cable, fiber, Ethernet, PLC etc.), fixed wireless (satellite, public WiFi, WiMax) and mobile connection to the Internet (via at least 3G handset- UMTS, or at least 3G modem-USB/card for laptop).

In the first quarter of 2011, 58.9% of the total population aged 15-74 used a computer, while 56.7% used the Internet.

Internet was most used by pupils and students, i.e. 96.6%. The Internet was most frequently used, by 82.9% of the internet users in the last 3 months, for participating in social networks (e.g., creating user profile, posting messages or other contributions to Facebook, twitter, etc.)

In the first quarter of 2011, only 4.1% of the internet users that had ever used the Internet, placed orders through the Internet for buying goods or services for private purpose, while 6.7% did so in the last 12 months, mostly for buying clothes or sport equipment (20.4%).

Of those who used the Internet in the last 12 months, 22.2% used e-government services for obtaining information (18.2%), for downloading official forms (11.2%) from the public authorities'/administrations' websites, and for sending filled in forms to the public authorities'/administrations' websites (7.4%).

Table 18 Accessibility indicators for FYR Macedonia⁴³

Indicator	Q1 2012	Q4 2011	change (%)	Q1 2011	change (%)
total number of fixed telephone lines	415341	422053	-1,59%	414066	0,31%
number of fixed telephone lines per 100 inhabitants	20,23	20,56	-1,61%	20,17	0,30%
number of active subscribers in mobile telephony	2197148	2213223	-0,73%	2178995	0,83%
number of active subscribers in mobile telephony per 100 inhabitants	107,03	107,82	-0,73%	106,15	0,83%
total number of subscribers to internet access through broadband mobile networks (2G/3G)	383610	373288	2,77%	384897	-0,33%
total number of subscribers to internet through narrow band mobile networks (2G)	161337	158395	1,86%	93583	72,40%
total number of TV services subscribers	252145	251584	0,22%	242846	3,83%

44

43 http://www.aek.mk/index.php?option=com_content&view=category&id=54&Itemid=123&lang=en (additional statistics for telecommunication market, but not available in English)

44 http://www.aek.mk/index.php?option=com_content&view=category&id=54&Itemid=123&lang=en (additional statistics for telecommunication market, but not available in English)

6.4.2 Utilisation of ICT in public administration

In 2011, according to the data of the State Statistical Office, 100% of the entities in the public sector (central and local authorities) had access to the Internet. The most common connection form and used by 80.7% of the entities in the public sector, was DSL technologies (ADSL or others).

In the public sector, 94.3% of the entities had local area network, LAN, based on wired connection, while 50.0% had wireless LAN. Intranet, internal computer network based on internet protocol, was used by 51.7%, while 25.0% had Extranet, i.e. allowed access of external users to parts of their intranet.

In 2011, 87.5% had their own website, and the Internet was most frequently used, by 92.6%, for interactions with the public authorities, i.e. the public administration.

During 2010, e-Government services were used by 88.1% of the entities in this sector.

In 2011, about 83% of the total number of employees in the central and local authorities were using a computer, and 72% the Internet.

The Unique Environment (UE) for data exchange among state/public institutions - interoperability system has been established, compliant to the Law for electronic management. Four institutions are connected to the interoperability UE.

Plans for near future

MISA will support some of the institutions to connect to the UE

6.4.3 Utilisation of ICT within education

Local self government is in charge of core schools' budgets. A part of the budget allocated for each school has to be spent on training delivered by training entities. The training topics/areas/content is being chosen based on the needs of each school. ICT is one of the topics in the list of offered and needed trainings.

Basic training video materials for software installed in the schools, in Macedonian and Albanian language are recorded and published on: <http://mioa.gov.mk> on the link for Edubuntu or: <http://mioa.gov.mk/?q=node/2246>

Within the framework of the project "Computer for every child", trainings were organised for all (100%) teachers from primary and secondary schools. The training were for: The Edubuntu operating system, basic IT skills, 43 educational Edubuntu tools, existing e-content, CMPS. Some of the teachers attended more than one training course. The attendance was above 90%. Note: Within the scope of other donors' projects, more than 65% of the teachers in both primary and secondary schools attended training in innovative use of ICT in education.

ICT curricula are mandatory at all levels of education: primary, secondary and universities.

ICT education is formally introduced as a subject at 3rd grade, but ICT is being used as a learning tool from 1st grade. ICT subjects are being taught in ⁴⁵: 3rd, 4th, 5th, 6th and 7th grades in primary school (primary education is 9 grades) and 1st, 3rd and/or 4th year in secondary schools, depending on the selected majors/departments (secondary education is 3 to 4 years).

45 http://app.bro.gov.mk/docs/nastaven_plan_devetgodisno.pdf
<http://bro.gov.mk/docs/nastavniplanovi/IZMENUVANJE%20I%20DOPOLNUVANJE%20NA%20NASTAVEN%20PLAN%20ZA%20GIMNAZISKO%20OBRAZOVANIE.pdf>

Learning content and e-books are on: www.skool.mk and www.e-ucebnici.mk, respectively.

Development of Educational Management Information System and Learning Management System for both Primary and Secondary schools are in the implementation phase.

There is no central portal for all universities. Each university has its own learning portal.

Free ICT basic skills training for citizens are provided by MISA in 2012. They are organized in 22 Internet clubs nationwide, and are available to all citizens.

Basic and advanced ICT courses are organized for civil servants by the Ministry of information society and administration, as a programme for continuous learning of governmental officials. Note: Specific ICT trainings for IT staff are part of each project.

Marnet (dns.marnet.net.mk) as an independent institution is established in January 2011. 30% of its budget for domestic and international connections is from the State Universities and the rest of its budget is by the State budget and by self-funding (from domain register and commercial connections provided).

National competence centre for OSS policy: non-profit organization Free Software, <http://www.slobodensoftver.org.mk/>

Work Force Demand Surveys for the ICT Industry in Macedonia were performed in 2009 and 2005⁴⁶.

6.4.4 Utilisation of ICT within health

The Ministry of health, The Health insurance fund and the Institute for public health in collaboration with all the health institutions are implementing the e-Health system in the Republic of Macedonia.

The e-health system is being implemented based on the following regulation/policies:

1. Law on health insurance
2. Strategy for development of Integrated health information system⁴⁷
3. Work program of the Health insurance fund
4. Strategic plan of the Ministry of health 2010-2015⁴⁸
5. Strategic plans of the Health insurance fund 2010-2015⁴⁹

According to the e-Health system all general practitioners must have software for managing patient records, recipes prescribed, sick leaves approved, investigations led etc.

Also, the Health insurance fund has launched the portal for information about the patient selected general practice doctor⁵⁰.

46 <http://masit.org.mk/index.php/en/j-stuff/2012-03-04-19-36-07>

47 <http://moh.gov.mk/index.php?news=980> (not available in English)

48 <http://www.fzo.org.mk/default.asp?ItemID=DA5BFBB1DC532742B918E1F6D2A8C853>(not available in English)

49 <http://www.fzo.org.mk/default.asp?ItemID=DA5BFBB1DC532742B918E1F6D2A8C853>(not available in English)

50 <http://moeosiguruvanje.fzo.org.mk/>

Plans for the near future

Two main projects are in progress:

- The implementation of the electronic health card system. This is on-going project and the e-health cards are in process of issuance.
- Implementation of Integrated health system- project for centralization of all medical data on national level which will result with fully electronic work processes in the health institutions: electronic health cart, electronic prescription, electronic referral, electronic appointment of medical exams etc.

The data centre has been built and the following components are in development and implementation: software for the primary health institutions; software for the special health institutions; software for hospital management; application interface for hospitals; application for registries for public health; central registries with unified codes and code lists; application interface for the pharmacies.⁵¹

6.4.5 Know-how and human resources

Free citizens training:

- ICT basic trainings (opened for all citizens that submitted application) during 2008 and 2009
- Internet clubs trainings (opened for all citizens) during 2011 and 2012
- ICT advanced courses and certification of unemployed

Formal education in the area of ICT and e-solutions at new Universities and/or Faculties at the existing universities in this area:

- Ohrid's University "Sv Apostol Pavle",
- Faculty of Computer Science and Engineering in Skopje
- University "Goce Delcev" in Stip

National curricula for all subjects in primary and secondary schools has been aligned with the equipment deployed in schools, Introduced IT subjects starting from 3 grade in primary school (please see '10.5.4.3 Utilisation of ICT within education' page 161).

Training or courses (of at least 3 hours) on any aspect of computer use in the last 3 years were attended by 14.2% of individuals that have ever used a computer, 21.5% had a course on computer use 3 years ago, while the rest (64.2%) have never taken one. The main reason for not taking computer courses, by 67.8%, was no need to take one because their computer skills were sufficient.⁵²

In-service training:

- eGovernment generic training organized and delivered by MISA
- Learning tool for microlearning has been installed and enabled for employees in MISA

Plans for near future

- Opened procurement process for Learning Management System for public servants
- Citizens trainings in the area of eGov
- Microlearning deployed in other institutions
- Development of a competence framework in the administration

51 <http://moh.gov.mk/index.php?news=980> (not available in English)

52 <http://www.stat.gov.mk/pdf/2012/8.1.12.25.pdf> and <http://www.stat.gov.mk/pdf/2011/8.1.11.25.pdf>

6.4.6 Major projects related to eGovernance development

- **Government e-Sessions.** The process of preparation and conducting Government sessions has been done online since 2008 via intra-government system. It is used by the ministries and by the government members (ministers, prime minister and vice prime ministers). The system is owned, coordinated and administrated by the General secretariat.
- **uslugi.gov.mk.** Is an informational government service portal which has been in operation since 2005. It was previously coordinated by the General Secretariat, but from 2011 by MISA. The content maintenance is in charge of the institutions. The planning process for upgrading it to transactional portal is in progress.
- **Citizen diary.** It is online and paper forms for citizens' satisfactory level and complains of government services. It has been established as a central initiative and implemented separately by each institution. MISA is responsible for monitoring the process.
- **Interoperability.** MISA conducted the legal and the technical implementation of the project. Legally, it is based on the Law of Electronic Management. Technically, there is a central system for exchange of data amongst institutions based on web services. The internal adaptation of the institutions separate systems to the interoperability technical standards is their own responsibility. The organisational aspects are also the responsibility of the institutions themselves. Four institutions have been connected since 2011. The upgrading project is in progress.
- **e-Procurement.** Is the central system for public procurement. The system is mandatory for and all public procurement procedures are conducted online.
- **e-Tax.** Since 2011 all services by the tax administration for citizens and for business can be conducted online by the e-tax system of the Public Revenue Office.
- **Application online.** Is a system for applying, evaluation, selection and testing for employment of civil servants of the Agency of Administration and has been operational since 2006. Presently procedures for any public servant employment are now conducted through the system.
- **EXIM.** The project was for implementing single window for issuing import-export licences. The system has been in use since 2008 by 15 different institutions which are involved in the process and by legal entities as end users. It is coordinated by the Customs Administration of the Republic of Macedonia.
- **eNAPSYS.** The central system for electronic payments of state taxes and fees was launched in 2010. It is constantly being upgrading with new services.
- **eForms.** The project for introducing a system for electronic forms for different services started in 2010. It is currently used for declaration of tax irregularities. MISA is doing the planning for upgrading it with new services.
- **e-Democracy portal** (e-demokratija.gov.mk) was launched in 2011. It is central Government portal consisting of forum, blogs, ideas, discussion about documents or different topics.
- **Wi-fi kiosks** in rural areas. Free Internet kiosks and Wi-fi spots were placed in about 600 rural areas.
- The implementation of the **electronic health card system.** This is an on-going project and the e-health cards are in process of issuance.
- **Open data.** The Government of the Republic of Macedonia has adopted the action plan within the framework of the Open Government Partnership Initiative of the World Bank. The portal for open data has been launched and is being extended in a continuing manner⁵³.

Plans for the near future

- **e-Reminder.** Is a project for implementing a central system for SMS and e-mail reminders for the citizens and businesses for different services (due dates and information). The implementation of

53 <http://opendata.mioa.gov.mk/>

the pilot project for 5 institutions and 11 reminders has been started by the contractor.

- **e-Health.**(see ¶10.5.4.4 Utilisation of ICT within health' page 162)
- **HRM.** Developing system for managing of public and civil servants is planned to start 2013.

6.4.7 Important events related to eGovernance

2001

- The Law on electronic data and electronic signature was adopted.

2002

- The Government founded the Committee for Information Technology (CIT).

2003

- Donated 5300 computers for all high and primary schools were deployed, and USAID e-school.mk project was launched.

2005

- The National Strategy for Information Society and its Action Plan were adopted.
- The Law on Electronic Communication was adopted.
- In accordance to the European Directive 95/46/EC, the Directorate for Personal data Protection was established.
- The portal www.uslugi.gov.mk was launched.
- The USAID e-gov.mk project was established. It implemented the first e-services.

2006

- The Minister without portfolio in charge of Information Society was assigned at the end of 2006.
- The system for electronic management of the Government sessions was implemented and launched.
- The e-tax system for the legal entities, enabling electronic filing on tax returns and other tax declarations was launched.
- The process of issuance of international cargo transport licenses was automatized with a new automatic management system. This system was used for electronic distribution of CEMT licenses for the following year of 2007.
- The "Apply-Online System for State Employment" is launched successfully.
- The project "Computer for Every Child" started with procurement of the computers for every secondary school in the Republic of Macedonia.
- The project "local e-Government" was started, including 50 municipalities.
- Internet access was brought to all primary and secondary schools nation-wide.
- Near 70% of primary school teachers and 65% of secondary school teachers was trained in using computers, in "Innovative usage of ICT in classroom".

2007

- A service for electronic job search was introduced.
- Data from the Real Estate Cadastre Agency became electronically available on www.katastar.gov.mk.

2008

- The one-stop-shop system for import/export licenses and quotas – EXIM was introduced.
- A system for electronic registration and termination of employments was launched.
- The e-tax system became available to all taxpayers, legal entities.

2009

- The Law on electronic management became applicable in practice, and based on it, the project for “interconnection and use of database registers between state authorities and institutions (interoperability)” was started.
- The implementation of a Document Management System in public administration was started.
- Agency for civil servants introduced E-government trainings as a regular trainings in the Program for civil servants generic trainings.
- The payment of administrative fees by SMS messages for certain government services was enabled.
- The portal for persons with disabilities was launched www.sakamznammozam.gov.mk.
- The opening of additional 7 free-of-charge internet clubs for the citizens in different cities in the Republic of Macedonia was started.

2010

- The Strategy for Public Administration Reform was adopted.
- E-forms for online declaration of tax irregularities were established, as a pilot for other e-forms.
- Free Internet kiosks and Wi-fi points were placed in above 600 rural areas; as Internet connections in all dormitories, enabling all citizens, especially to vulnerable groups, access to internet and governmental services.

2011

- The Ministry of information Society was transformed into Ministry of Information Society and Administration (MISA), as a body in charge of administration reforms as well.
- Republic of Macedonia officially joined the Open Government Partnership Initiative.
- In compliance with the Law on electronic management, the central and unique environment for data exchange was put into function, enabling Interoperability between institutions.
- In the field of capacity and human resource building, advanced IT courses and certification were provided for unemployed persons, enabling them to be competitive in the ICT emerging labour market.

2012

- The portal e-democracy (e-demokratija.gov.mk) was launched.
- Besides the legal entities, from 2012, citizens also are able to submit their tax declaration and other requests for services on-line using the upgrade of the e-tax system.
- The project e-reminder has started.
- For the third time, more free IT basic courses were organized for citizens, aiming to provide knowledge and skills needed for further consumers of e-services that are being developed.
- 100% of the public procurements are being implemented through e-auctions enabled with the system for e-procurement.
- The issuing of the e- health cards has started

Plans for the near future

2013

- Upgrade of the Interoperability with new services for new institutions is to commence, according to the expansion plan that is in place.
- Development of the services for citizens on municipality level, according to the action plan that is to be approved and adopted.
- e-Reminder (see ¶10.5.4.6 Major projects related to eGovernance development’ page 164)
- LMS (Learning Management System) for the administration to commence in 2013 and be deployed in 2014.

6.4.8 Portals

G2C portals

- **Government service portal** (<http://uslugi.gov.mk>)
Information portal for government services. Just downloadable forms available. No e-services.
- **eNAPSYS** (e-plakanje.gov.mk)
Payment portal for administrative taxes
- **E-democracy** (e-demokratija.gov.mk)
Government e-democracy portal consisting of forum, blogs, ideas, discussion about documents
- **“I want, I know, I can”** (www.sakamznammozam.gov.mk)
Portal for people with disabilities
- **ednevnik.edu.mk** (ednevnik.edu.mk)
Portal for e-diary (grade book)

G2B portals

- **Government service portal** (uslugi.gov.mk)
Information portal for government services. Just downloadable forms available. No e-services.
- **EXIM** (exim.gov.mk)
Customs office of the Republic of Macedonia. One-stop-shop portal for licences for import-export and transit of goods.
- **One-stop-shop for legal entities** (e-submit.crm.com.mk/efiling)
Portal for Registration of legal entities, changes and deletion, E- payment of registration fees, Certificates in electronic or paper format, An option for registration of authorized persons with the obligatory social security (Pension Fund and Health Fund) upon the first registration
- **E-democracy** (e-demokratija.gov.mk)
Government e-democracy portal consisting of forum, blogs, ideas, discussion about documents

6.4.9 Government wide networks

Government intranets:

- **e-sessions portal** (<http://esession.uslugi.gov.mk>)
Portal for government sessions used by all ministries in the process of session materials submission and by the government members during the Government sessions
- **DMS** (dms.mioa.gov.mk)
Document management system for central government
- **BPMS** (<http://bpms.uslugi.gov.mk>)
Portal for government session materials preparation (still not operational)

6.4.10 eIdentification/eAuthentication

National digital signatures, covers issuing digital certificates for citizens, legal entities and systems. DSs are issued by two commercial CAs. Commercial CAs established based on the Law on digital signatures and data in electronic form.

6.4.11 eProcurement

The Public Procurement Bureau (javninabavki.finance.gov.mk) offers transactional eProcurement services.

6.4.12 Knowledge management

There is no national knowledge management portal, programme, project for eGovernment in Macedonia.

6.4.13 ePayment

eNAPSYS / e-plakanje.gov.mk. Payment of administrative taxes (plans for payments of all kinds of payments of fees and taxes for government services). It is currently used for payments for administrative taxes for all government services by SMS and web portal mobile payments. It is in upgrading process for different kinds of fees payments by different government institutions. Citizens are the target users, while government entities uses the system(s) for checking, monitoring and confirmation of payments. There are currently plans to upgrade the system with credit card payments.

e-submit.crm.com.mk/efiling Payments of fees for registrations in the central registry by credit cards. Legal entities can prepaid for data and information of the Central registry as well as pay for service in the registration system.

E-tax is not a payment system, but sends out invoices to banks. The taxes are still not paid electronically by the e-tax system, but the system is integrated with the bank systems for issuing invoices for tax payments.

6.5 Macedonian eServices availability

The tables below are composed of data from provided by the UNDP's Electronic South Eastern Europe (eSEE) Initiative⁵⁴, including the 2010 Report "eGovernance and ICT Usage"⁵⁵, the Overview of the status of the implementation of the set of basic eGovernment Services as stated in eSEE Agenda Plus, Annex 1 July 2012⁵⁶, and updates provided by the national respondents for this report.

6.5.1 eServices for Citizens availability

Table 19 FYR Macedonia, G2C services status

G2C	Provider(s)	Web	Status	Stage	Comments
1. Job search	A. The Employment Service Agency of Macedonia (www.avrm.gov.mk) B. The Civil Servants Agency (www.ads.gov.mk)	A. https://www.avrm.gov.mk/ B. http://prijava.ads.gov.mk	In implementation process	4/5	
2. Social benefits: unemployment, child supplement, health care payments, students supplement	A. Agency for employment B. Ministry of Labour and Social Policy C. The Health Insurance Fund of Macedonia (www.fzo.org.m) D. Ministry of education and science	A. http://www.zvrm.gov.mk/default-mk.asp B. www.mtsp.gov.mk (http://uslugi.gov.mk/UslugaDetali.aspx?UslugaID=A65342CC1AD340EDA3D7EFA3C46DD848) C. www.fzo.org.mk D. http://konkursi.mon.gov.mk	In implementation process	3/5	
3. Personal documents: ID, passport or driving permit	ID A. Ministry of Interior (www.mvr.gov.mk) Passport B. Ministry of Interior (www.mvr.gov.mk) Driving permit C. Ministry of Interior (www.mvr.gov.mk)	A. http://uslugi.gov.mk/UslugaDetali.aspx?UslugaID=B9FB5CC62CBD42EF986672AA6BB19C48 B. http://uslugi.gov.mk/UslugaDetali.aspx?UslugaID=E737CF857751480FAEF973F05012AC89 C. http://uslugi.gov.mk/UslugaDetali.aspx?UslugaID=29C862E9FB6F4386AF7E2F5BD8F5C4DF	In implementation process	3/5	
4. Car registration: new, second hand or imported	Ministry of Interior (www.mvr.gov.mk)	http://uslugi.gov.mk/UslugaDetali.aspx?UslugaID=E6F129A1D43840678B1747B83D4CAD62	In planning phase	2/4	

54 <http://www.eseeinitiative.org>

55 UNDP: "eGovernance and ICT usage report for South East Europe ". 2nd edition. Sarajevo 2010 http://www.eseeinitiative.org/images/stories/pub/eGovernance_and_ICT_Usage_Report_for_South_East_Europe.pdf

56 http://www.eseeinitiative.org/images/stories/esee_wg_meetings/eGovernment_Services_Matrix_July_2012.doc

G2C	Provider(s)	Web	Status	Stage	Comments
5. Public libraries: review of catalogue and ordering	The National and University Library "St. Clement of Ohrid" - Skopje (www.nubsk.edu.mk)	http://www.vbm.mk/cobiss	In implementation process	3/5	
6. Certificates: birth, death and marriage records	<p>Birth</p> <p>A. Office for management of birth, marriage and death registries (http://uvmk.gov.mk)</p> <p>Death</p> <p>B. Office for management of birth, marriage and death registries (http://uvmk.gov.mk)</p> <p>Marriage</p> <p>C. Office for management of birth, marriage and death registries (http://uvmk.gov.mk)</p>	http://uslugi.gov.mk/ListaUslugi.aspx?OrganID=051A63A2F87B42A2AA1186815EEF2E0A	In planning phase	3/4	
7. Admission to higher education institutions	<p>A. "St. Cyril and Methodius" University - Skopje (www.ukim.edu.mk)</p> <p>B. The University "St. Clement of Ohrid" - Bitola (www.uklo.edu.mk)</p> <p>C. The "Goce Delcev" University – Stip (www.ugd.edu.mk)</p> <p>D. The State University of Tetovo (www.unite.edu.mk)</p> <p>E. The University for Information Science and Technology (www.uist.edu.mk)</p>	<p>A. www.ukim.edu.mk</p> <p>B. www.uklo.edu.mk</p> <p>C. www.ugd.edu.mk</p> <p>D. www.unite.edu.mk</p> <p>E. www.uist.edu.mk</p>	In implementation process	3/4	
8. Residence registration: in case of change of address	Ministry of Interior (www.mvr.gov.mk)	http://www.uslugi.gov.mk/UslugaDetali.aspx?UslugaID=585F12683813427FA22A57C653849B13	In implementation process	2/4	

6.5.2 eServices for Businesses availability

Table 20 FYR Macedonia, G2B services status

G2B	Provider(s)	Web	Status	Stage	Comments
1. Tax payment: registration, payment and analysis	Public Revenue Office (http://ujp.gov.mk/)	http://etax.ujp.gov.mk	Done	4	The new system eTax for businesses will enable issuance of all services and documents offered by the PRO (Public Revenue Office) to legal entities.
2. Environment and construction permits; obtaining a license	Environment permit A. Ministry of Environment and Physical Planning (www.moep.gov.mk/) Construction permit B. Municipalities in FYR Macedonia	Environment permit A. http://www.uslugi.gov.mk/UslugaDetali.aspx?UslugaID=22BAC587C4A747F19AFB3086ACA17ABA (www.moep.gov.mk) Construction permit B. The websites of all municipalities in FYR Macedonia Macedonia	In planning phase	1/5	
3. Electronic cadastre and related registers of ownership	Real Estate Cadastre Agency (www.katastar.gov.mk)	http://www.uslugi.gov.mk/ListUslugi.aspx?OrganID=CC2B7370F3BE4B5E8EBD30D42A1DBE0C	In implementation process	5/5	
4. Healthcare and pension: payments and examinations	Pension and Disability Insurance Fund of Macedonia (www.piom.com.mk)	www.piom.com.mk	In implementation process	3/4	
5. Enterprise registration	Central Register of Macedonia (www.crm.com.mk)	http://www.crm.com.mk/download/Registers_document_forms/POe.pdf	Done	4	Fully implemented http://e-submit.crm.com.mk/efiling/
6. Company income registration	Public Revenue Office (http://ujp.gov.mk/)	http://etax.ujp.gov.mk	Done	5	Fully implemented with the e-tax system. https://etax-fl.ujp.gov.mk/
7. VAT	Public Revenue Office (http://ujp.gov.mk/)	http://etax.ujp.gov.mk	Done	4	
8. Customs declarations	Customs Administration of Macedonia (www.customs.gov.mk)	www.customs.gov.mk	In implementation process	2/4	

G2B	Provider(s)	Web	Status	Stage	Comments
9. Single Window for one-time filing all required information on a foreign trade transaction	Customs Administration of Macedonia (www.customs.gov.mk)	www.exim.gov.mk	Done	5	http://exim.gov.mk
10. Public procurement	Public Procurement Bureau (http://javninabavki.finance.gov.mk)	www.e-nabavki.gov.mk	Done	4	
11. Registry of mortgages of legal persons	Central Register of Macedonia (www.crm.com.mk)	http://www.crm.com.mk/download/Registers_document_forms/obrazecnedviznosti.pdf	?	2/5	http://katastar.gov.mk/mk/Page.aspx?id=127
12. Submitting statistical data to State Statistical System (incl. harmonization with EUROSTAT requirements)	State Statistical Office (www.stat.gov.mk)	http://www.stat.gov.mk/glavna.asp?br=95	In implementation phase	3/5	

6.5.3 eServices for Government availability

Table 21 FYR Macedonia, G2G services status

G2G	Provider(s)	Web	Status	Stage	Comments
1. Treasury and programmatic budgeting	Ministry of finance	Internal system	In implementation process	4/5	
2. Support systems for implementation of EU funds	Ministry of finance	Internal system	In implementation process	4/5	
3. Integrated control of borders	Ministry of interior	Internal system	Implemented	5/5	

6.5.4 Availability of other eServices for Government

Table 22 Availability of other eServices for eGovernment in FYR of Macedonia

	Name	Description	Stage
1	Employment registration	G2B. Submission of employment registration forms to the Agency of Employment. https://www.avrm.gov.mk/avrm.public.web/	4/4
2	CEMT	G2B. System for distribution and monitoring transport licences of Ministry of transport and communication. http://www.dozvoli-mtc.gov.mk	4/4
3	Reservation of company name	G2B. Central registry. http://www.crm.com.mk/namereservation/	4/4
4	Following Bankruptcy procedures	G2B. Central registry. http://e-submit.crm.com.mk/ebankruptcypublic/	3/3
5	Following liquidation procedures	G2B. Central registry. http://www.crm.com.mk/ds/default.aspx?MainId=5	3/3
6	Announcement of disqualified individuals and legal entities	G2B. Central registry. http://www.crm.com.mk/ds/default.aspx?MainId=10	3/3
7	Registering collateral and leasing	G2B. Central registry. http://e-submit.crm.com.mk/RDBEfilin/	4/4
8	Submission of annual accounts	G2B. Central registry. http://e-submit.crm.com.mk/AAOL/	4/4
9	Registration of direct investments	G2B. Central registry. http://e-submit.crm.com.mk/rdi/	4/4
10	Declaration of tax irregularities	G2B/G2C. PRO. http://www.ujp.gov.mk/mk/kontakt	4/4
11	Application for public servant	G2B. Agency of administration. http://prijava.aa.mk/	4/4
12	Preparation of government sessions	G2G. General secretariat of the Government of RM. http://portal.uslugi.gov.mk/	4/5
13	eNAPSYS	G2G. Payment portal for administrative taxes. http://e-plakanje.gov.mk	4/4
14	eTax	G2C. Public Revenue Office. https://etax-fl.ujp.gov.mk/ Beside eTax for businesses, the system is planned to offer eTax services for citizens. The system is in the phase of completion, while some of the services were launched in March 2012, such as Tax declaration. Citizens will be able to perform web registration, submission of all declarations to the Public Revenue Office and the invoices for their taxes will be available in e-format (xml) for all the payment systems (banks).	4/4
15	Services offered by Municipalities	G2B and G2C. Municipalities, as basic units of local self-government, offer e-services, on the level of forms, in accordance to their characteristics, population, needs and opportunities. Those e-services are independently developed and there is no officially gathered information in regard to these services.	

	Name	Description	Stage
16	electronic school diary	G2G and G2C. Ministry of education and science. ednevnik.edu.mk Electronic diary/grade-book (e-diary) is a project of the Ministry of Education and Science (MoES), which aims to improve communication between teachers and parents introducing sms notifications, to enable quick and easy inspection log information by the teachers in the school, to enable centralised and easy and fast statistical analysis by MoES and other state institutions.	
17	Information system for electronic submission ordering for free textbooks	G2G. Ministry of education and science. http://ucebnici.mon.gov.mk/login Macedonian Government is giving accredited textbooks to all students for all subjects in each grade/year in primary and secondary school. This system provides fast electronic order of necessary textbooks from each school.	3/3

6.5.5 G2G services concerned with learning, training or management

	Name	Description
1	Microlearning	Microlearning is an approach to technology-enhanced learning, based on Leitner's flashcard system, which together with the KnowledgePulse® application/solution, makes learning easy and uses IT and CT to assist learners in retaining information, commit it to memory and secure knowledge. The unique value of Microlearning consists in the pedagogy of small learning steps, whereby any learning content is broken down into small pieces and served up as smart learning cards. One of the most important success factors for effective learning experiences is that learners get to make learning a regular activity either on their working stations or on their mobile devices. KnowledgePulse is already available for all MISA's employees. The action plan for establishing a Macedonian Microlearning Center of Excellence within MISA and the deployment of the KnowledgePulse solution in other institutions will be completed by the end of 2012.
2	LMS	LMS (Learning Management System) is a system for providing training, evaluating, and tracking results. It is planned to be developed and used by all civil servants, for both generic and specific trainings. The procurement of the development of such a system is on-going.
3	DMS	Central system for record and document management. Provided as a central IT web solution by MISA and in implementation process by the central Ministries and Secretariats. The record and archiving process is implemented based on Macedonian legislation for office and archiving work. All 15 ministries, all 4 Secretariats and 1 office were included in the first phase of implementation. Around 650 (in total) processes (work-flows) were developed. Currently 3 institutions are active users and around 5 in a preparation phase. It is in continuous improvement and upgrade process with functionalities and work flows.
4	eSessions	E-sessions and BPMS. The process of preparation and managing Government sessions since 2008 is done online via intra-government system. It is used by the ministries and by the government members. There is also a system for intra-ministerial Government sessions materials preparation which is fully integrated with the eSessions system, but still no operational.

7 Montenegro

7.1 Legal Infrastructure

The legal and Montenegrin regulatory framework provides capacities for further development of an information society. However, the framework continues to be improved with revisions of specific laws and regulations, adopting new regulations and further harmonisation with the legal and regulatory framework of the EU. A better implementation of the framework in practices becomes important.

The Montenegrin legal infrastructure consists of:

- Law on Electronic Signature
- Law on Electronic Document
- Law on Electronic Commerce *
- Law on Population Register
- Law on Electronic Communications *
- Law on Digital Broadcasting
- Law on Personal Data Protection
- Law on Information Security
- Law on Information Secrecy
- Law on Protection of Unpublished Data
- Law on Electronic Media
- Law on Freedom of Access to Information
- Law on Application of Legal Acts for the Protection of Intellectual Property Rights
- Law on the Confirmation of the Convention on Cybercrime
- Law on the Confirmation of an Additional Protocol to the Convention on Cybercrime

* Due to further improvements and harmonisation with the EU legal and regulatory framework of 2009, the denoted laws have to be changed, a work now in the preparatory phase.

Recent developments:

- The Law on Modification and Addition to the Law on eSignature has been adopted (Official Gazette of Montenegro, 41/10-Jul).
- The Law on Modification and Addition to the Law on Population Register (Official Gazette of Montenegro, 49/2007, 41/10-Jul, 73/10-Dec, 40/11-Aug) has been adopted.
- The Law on Information Security has been adopted (Official Gazette of Montenegro, 14/10-Mar).

Also note that:

- There were a number of changes to the existing Law on Electronic Communications (50/08-Aug, 53/09, 70/09-Oct, 49/10-Aug, 32/11-Jul, 40/11). Due to further improvement and harmonisation with EC legal framework, a new draft of the law is being prepared. The addition to the Law on Electronic Communications (53/09, 70/09-Oct) is just one of several adopted changes of the Law and it should not be specified separately any more.
- The Law on Electronic Media (Media Electronic Law) has been adopted (Official Gazette of Montenegro, 46/10-Aug, 40/11-Aug, 53/2011-Nov) and the broadcasting law is not valid any more.
- After the adoption of amendments to the Law on Digital Broadcasting (June 2012), the reference to the Broadcasting Law and the reference on the Law on Switch over from Analogue to Digital Terrestrial Broadcasting System is not valid any more.

Plans for near future

Further improvements of the legal and regulatory framework will relate to: consumer protection, intellectual property rights, digital rights and electronic trade. The Law on Spatial Data and Construction is planning to remove barriers for building or rebuilding the telecommunications infrastructure and improve conditions for providing better connection to broadband networks.

7.2 Institutional Framework

Ministry of Information Society and Telecommunications

The Ministry is in charge of proposing and implementing policies regarding the information society, promotion of information society, development of government and development of the ICT infrastructure. Electronic communications, postal services and radio spectrum are within the competence of the ministry as of January 2011.

Other government institutions that have authority over certain elements related to the information society include the Agency for Electronic Communications and Postal Services, the Agency for Personal Data Protection, and the Agency for Electronic Media. Information society developments are also supported by EU institutions and some of the EU countries.

Agency for Electronic Communications and Postal Services (EKIP)

The Agency is an independent regulatory body, established to regulate telecommunications market in Montenegro pursuant to the Law on Electronic Communications and to create a competitive environment in postal services market on the basis of the Law on Postal Services. The agency has special responsibility to regulate, supervise, analyse and report on these markets with regards to prices, cost accounting and regulation of the radio frequency spectrum.

Agency for Personal Data Protection

The agency is independent body and will supervise personal data protection in accordance with the Law. The agency makes decisions on requests for the protection of rights, gives consent with regards to the establishment of a personal data filing systems and delivers opinions as to whether practices of personal data processing endanger the rights and freedom of individuals.

Agency for Electronic Media

The agency is an independent regulatory body that monitors electronic media. The agency issues licenses for the provision of audiovisual media (AVM) services, performs supervision of AVM service providers, makes decisions and undertakes measures referring to the work of AVM service providers and performs other duties in accordance with the Law on Electronic Media. The Agency cooperates with the Agency for Electronic Communications referring to radio frequencies intended for AVM services providing.

7.3 Who-is-who

7.3.1 Main responsible for eGovernment

Minister responsible for eGovernment

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Minister of Ministry for Information Society and Telecommunications

Ministers Cabinet

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7.3.2 Main actors

Developing eGovernment policy/strategy

- Ministry for Information Society and Telecommunications (MIDT)

Coordinating eGovernment developments

- Ministry for Information Society and Telecommunications (MIDT)

Implementation of the eGovernment strategy and initiatives

Ministry for Information Society and Telecommunications is responsible for implementation of eGov strategy and initiatives. However, for particular initiatives responsibilities are distributed amongst involved government authorities and institutions.

Supporting the development of eGovernment

- Government of Montenegro
- IT companies through public-private partnership and on a commercial bases

Auditing eGovernment implementation

Internal auditing (MIDT): Yearly Action Plan Initiatives auditing with regards to objectives defined indicators. Indicators are used as additional information in creating reports to the government.

Internal auditing: Yearly analysis of eGovernment development in Montenegro.

I2010 Benchmarking: The Statistical Office of Montenegro (MONSTAT).

Since 2011 MONSTAT has included information society in research and reporting. The first ICT survey based on the Eurostat methodology was conducted in October 2011.

Institutions Related to eGovernance Development

The key institutions with subjects related to information society are listed below.

- University of Montenegro:
- Centre for Information Technology;
- Faculty of Electrical Engineering;
- Faculty of Economics;
- Faculty of Natural sciences and Mathematics;
- Faculty of Mechanical Engineering.
- Mediteran University:
- Faculty for Information Technology.

(Source: UNDP, 2010 report, p. 254)

Responsible for citizens and businesses data protection

- Agency for Personal Data Protection

Government interoperability

The Ministry for Information Society and Telecommunications is responsible for planning, implementing and operating government interoperability.

Major providers of eGovernance solutions

The main local and regional ICT and eGovernance solutions providers with experience of projects in Montenegro, along with their respective websites:

- ČIKOM (www.cikom.com)
- ITAS (www.itas.co.me)
- DIGIT MONTENEGRO (www.digit.co.me)
- INFOSTREAM (www.infostream.co.me)
- MONTORA (www.montora.com)
- MG SOFT
- WIN SOFT (www.winsoft.co.me)
- S&T (www.snt.me)
- Comtrade Group/Spinaker & Hermes SoftLab (www.comtradegroup.com)

(Source: UNDP, 2010 report, p. 254)

Active Donors in the Area of eGovernance and ICT

Major international organisations and institutions, such as USAID, UNDP, the European Commission/ European Agency for Reconstruction, EBRD, World Bank (credit support) etc., are present in Montenegro and they all actively participate in various donor and other financial investment programmes, including numerous ones in the area of ICT and eGovernance.

(Source: UNDP, 2010 report, p. 255)

7.4 National Infrastructure

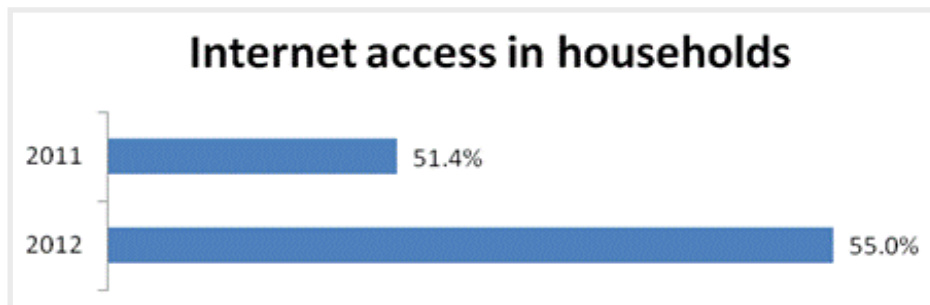
7.4.1 Accessibility

According to data from monthly reports prepared by the Agency for Electronic Communications and Postal Services and data from Census 2011, penetration of fixed and mobile telephony is shown below.

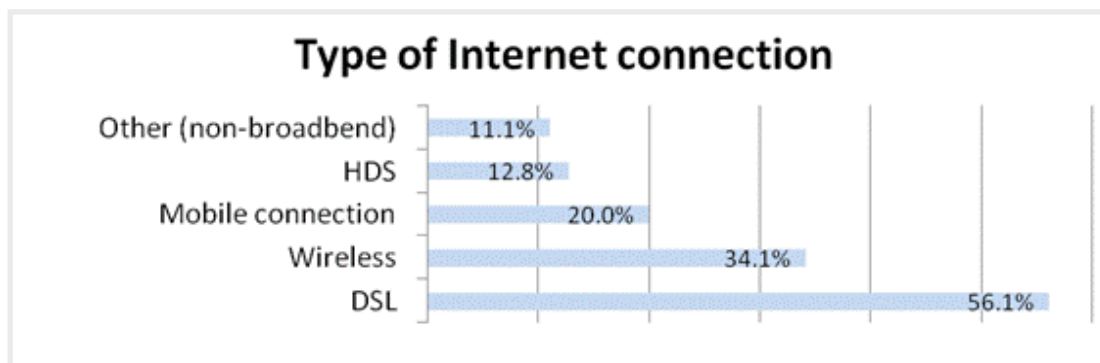
- Number of users of ADSL, WiMAX, WiFi, KDS is 8,2112.
- Dial Up – 429 users
- ADSL 68,438 users (89,59% citizens, 10,41% legal entities)
- WiMax 7,537 users
- Orientation to broadband internet access is noticeable.

Updates for Q3 2012 Accessibility.

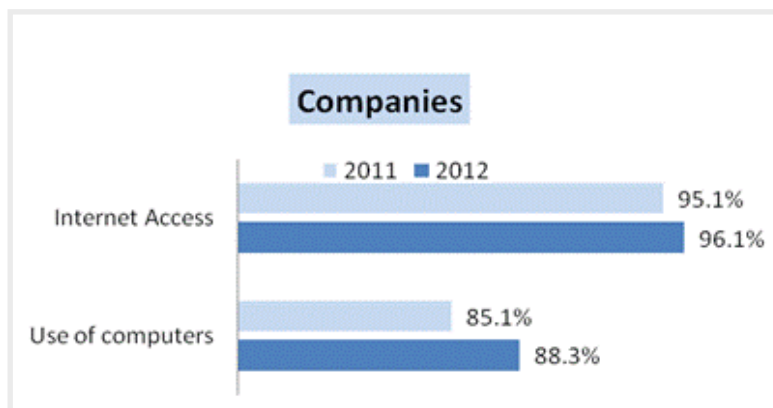
Official Statistical Office (MONSTAT) has published results of the new survey conducted in October 2012. A comparison of the results with data from October 2011 is as follows:



This means that 55% of households in Montenegro have an Internet connection, which is 4.7% more than in 2011.



The most frequent broadband connection to the internet is through a DSL connection. We also see a rising trend towards access through wireless connections.



In January 2012, 88.3% of companies were using computers in their businesses, which is 3.2% more than in the January of 2011 (85.1). 96.1% of these companies had internet access in January 2012.

7.4.2 Utilisation of ICT in public administration

State authorities and the most of government institutions utilise network services through use of domain services, internet, e-mail service, government portal and their own portals and electronic document management system.

7.4.3 Utilisation of ICT within education

According to the Montenegrin strategic objectives and in line with eSEE Agenda+ objectives, there are activities aimed towards improving the curricula with ICT skills programmes, introduce distance learning, further development of the Montenegrin Research and Education Network (MREN) and improve regional interconnection.

A basic ICT infrastructure have been installed in all schools. All primary and secondary schools have a computer laboratory, except for a singular newly established secondary school that will have the necessary equipment very soon. All primary and secondary schools have broadband internet access, except for schools in rural areas due to technical reasons. These schools will have satellite internet by the end of 2012. ICT related curricula is mandatory at all education levels.

The Registry of Students, Schools and School Employees has been implemented through the project of Montenegrin Educational Information System (MEIS). MEIS has been introduced in all secondary schools. MEIS manages all information related to the education process on all levels up to university level, that is: students, teaching and administrative staff, marks, exchange data between educational entities, reporting, etc.

The MREN has been connected the the European Academic Network (GEANT) as of October 2010. The capacity of the this link (fiber optic with high speed) has been significantly increased compared to the previous connection. MREN is a high-speed broadband network that provides networking services for education and research community in Montenegro and serves as basic support for ICT in education. The network is dispersed to all academic centres in Montenegro. Links with this network are enabled for Montenegrin Academy of Science and Arts, the Ministry of Education and Science, the National Library of Montenegro located at Cetinje, as well as all students' residences within the academic campus owned by University of Montenegro.

According to the actual strategy for the information society, the importance of the R&D sector is recognised. For the next four years it has been planned to fund promotion and regional partnerships, but there is still no concrete activities.

Plans for the near future

- The activity related to the one of the eEducation objectives is that all primary and secondary schools should have broadband internet access with minimum of 10Mbps by 2014.
- A project from the Ministry of Education and Sports to improve the educational process through implementation of a system for distance learning is being prepared.
- Implementation of a professional development framework for providing training and counselling services to the teachers.

7.4.4 Utilisation of ICT within health

In order to implement the strategic priorities for the development of e-health, which include the establishment of a basic information infrastructure in health care and the creation of organisational, human and technological preconditions for developing an integrated information system in health care, information systems has been put in place at the first and second levels of care. A total of 260 sites are connected with secure communication, data storage and management in the health care system (medical data). This way, the health care managers and health system managers who are responsible for the efficiency of the health system, can ensure the exchange of clinical, organizational, economic and management information between health care organizations.

7.4.5 Know-how and human resources

There are more than 1,000 researchers and 40 research institutions (Montenegro e-CRIS database). According to Official Statistical Office (MONSTAT), in the 2011 there were 3045 graduates on basic studies (at 3 universities). Post-graduate studies finished 1739 students (specialization 1482, master 257).

In the school year 2011-2012, primary schools were attended 69461 pupils and 31914 pupils enrolled secondary schools. In primary schools there are 21 pupils per school department in average and 14 pupils per one teacher.

In the public sector the Human Resource Management Authority provided 383 educational events (workshops, seminars, trainings) attended by 6015 civil servants. The percentage of trainings for ICT skills is 4%. HRM Authority administers HRMS information system with database related to the key competencies of civil servants.

MREN - Academic network of the University of Montenegro (MREN) is connected with the European Academic Network (GÉANT) as of 1 October 2010. Currently, the MREN has included in the EGI-InSpire project (Integrated Sustainable Pan-European Infrastructure for Researchers in Europe), started on 1 May 2010. The EGI-InSPIRE is co-funded by the European Commission for four years, as a collaborative effort involving more than 50 institutions in over 40 countries. Its mission is to establish a sustainable European Grid Infrastructure (EGI). EGI-InSPIRE is placed to join together the new Distributed Computing Infrastructures (DCIs) such as clouds, supercomputing networks and desktop grids, for the benefit of user communities within the European Research Area.

Digital Library of Montenegro heritage has established (www.montenegrina.net). Beside that, all libraries in Montenegro have been networked into a unique information system – Montenegrin Virtual Library, providing to users access to bibliographic data and documents in electronic form. Moreover, Montenegrin Virtual Library has connected with COBIB.CG database (within the www.cobbiss.net – cooperative on-line bibliographic system of Bosnia and Herzegovina, Macedonia, Serbia, Slovenia and Montenegro)

HRMA - HR management policy is decentralized. That means HR management is transferred to state authorities so getting more flexibility in workforce planning, workforce remodelling, recruitment and selection. The HRM Authority provides numerous trainings and workshops for civil servants intended for their professional development, including ICT skills. Under the Authority there was implemented centralized HRMS information system (KIS) used by two thirds of all government departments approximately and primarily used for managing of personal evidences.

New e-services are developed through cooperation with employers in the field of mediation and the services of professional selection for young people. Based on the Strategy for Employment & Human Resources Development and the Strategy for lifelong entrepreneurship learning, the important efforts have been made at the University of Montenegro last two years. The project “Lifelong learning in Montenegro” has started two years ago at the University (December 2010). The participation of Montenegro in EU Lifelong Learning Program has published (November 2011) together with open call to all organizations in Montenegro related to education to participate with project.

7.4.6 Major projects related to eGovernance development

Project	Status
Judicial Information System	Operational
Central Register of Citizens	Operational
Government Portal	Operational
Register of Laws and Regulations	Operational
Electronic Document Management System (eDMS)	Operational
Information System for Market Inspection Information System of Turist Inspection	Operational
Land Administration and Management Project (LAMP) *	Ongoing
National Certification Body	Established
Disaster Recovery System for Public Institutions	Ongoing
New Telecommunications Backbone for Public Institutions	Operational
Information System for EU Integrations (Phase II)	Ongoing
eGovernment Portal	Operational
Digital Libraries	Ongoing
Portal for Persons with Disabilities	Operational
Citizen's Voice -ePetitions	Operational
Private Cloud Solution in the Government	Operational
Social Card – Social Welfare Information System	Ongoing

* Ongoing means that the project is either in the final implementation stage or the solution has just launched.

7.4.7 Important events related to eGovernance

Table 23 Main developments and key milestones in Montenegro 2009-2012

Data	Main developments and key Milestones
2009 Jan	Ministry for Information Society established
2009 Feb	Strategy for Information Society Development of Montenegro 2009-2013 adopted
2009 Jun	Meeting of the Working Group for eSEE Initiative held
2009 Jul	Strategy for Establishment of the Certification Authority adopted
2009 Oct	Information Security Policy adopted
2009 Oct	Implementation of eDMS in the state administration started
2009 Dec	Certificate Authority for government institutions established
2010 Feb	National Certificate Authority established
2010 Feb	First Government e-Session held
2010 Apr	Promotion of the eGovernment portal
2010 May	Contract with Telecom Montenegro signed – providing of telecommunication services for state institutions
2010 Jun	Promotion of the Judicial Information System (PRIS) – The automated case-management system for all courts
2010 Oct	National Academic Network (MREN) connected with pan European Academic Network (GEANT)
2010 Sep	Strategy for introducing ECDL standard adopted
2011 Jan	Telecommunications sector and postal services have been came within jurisdiction of the Ministry of Information Society and Telecommunication
2011 Mar	Strategy of Public Administration Reform 2011-2016 adopted
2011 Aug	E-mail address for each citizen of Montenegro, provided through new e-Service
2011 Sep	Technical and Executive Board Meeting of the SEE Digi.TV initiative - to help digital switchover harmonization across the region, held in Budva
2011 Sep	Presentation of the Portal for Persons with Disabilities
2011 Sep	Strategy for Open Source Technologies Strategy adopted
2011 Dec	Strategy for Development of Information Society 2012-2016 adopted
2011 Dec	National Interoperability Framework adopted
2012 Jan	Strategic co-operation agreement signed with Microsoft
2012 Jan	Action Plan for Open Source Strategy adopted
2012 Jan	Disaster Recovery Strategy
2012 Feb	The project “Educational software for elementary schools” commenced
2012 Mar	Private Cloud Solution in Government implemented
2012 May	The project “Strengthening of administrative capacities in information society“ commenced
2012 Sep	Promotion of the new Portal of Official Gazette of Montenegro
2012 Oct	Digital Democracy in Montenegro - Promotion of the “Citizen’s Voice – ePetition” portal - every citizen can submit petition electronically

Table 24 Conferences in Montenegro 2009.2012

Date	Conferences
2009 May	The Day of Telecommunications and Information Society, Podgorica
2009 Oct	INFOFEST - Festival of IT Achievements, Budva
2010 Feb	Information Technology Conference, Žabljak
2010 Mar	Promotion of Information Society Education, Podgorica
2010 Oct	INFOFEST - Festival of IT Achievements, Budva
2010 Nov	Balkan Olympiad in Informatics, Petrovac

Date	Conferences
2011 Feb	Information Technology Conference, Žabljak
2011 Sep	Knowledge Factory, Podgorica
2011 Jun	Regional conference "Empowerment of marginalized groups in eGovernment: accessibility and efficiency", Podgorica
2011 Oct	INFOFEST - Festival of IT Achievements, Budva
2012 Feb	Information Technology Conference, Žabljak
2012 Sep	Regional Conference "Public-Private Partnership in SEE"
2012 Oct	INFOFEST - Festival of IT Achievements, Budva

7.4.8 Portals

The eGovernment G2C and G2B portal of Montenegro is called euprave.me (www.euprava.me)

7.4.9 Government wide networks

The Montenegrin government intranet is called eDMS

7.4.10 eIdentification/eAuthentication

[Pošta CG] CA National CA for Digital Certificates. Issued certificates is used for authentication, electronic signing of digital documents and verification of electronic documents. The service covers:

- Managing of the certificate repository
- Issuing of Qualified Digital Certificates
- Publishing of Certificate Revocation Lists
- Promotion of digital certificates

Internal CA for public servants. Issued certificates is used for authentication, electronic signing of digital documents and verification of electronic documents

7.4.11 eProcurement

The www.gov.me/djn website contains information and downloadable forms for eProcurement.

7.4.12 Knowledge management

Plans are to establish an enterprise service bus as a platform for automatic data exchange between registries and information systems.

7.4.13 ePayment

ePayment system for clients of one bank in MNE and used for payment on the eGovernment portal (www.euprava.me). The system provides direct payment for bank clients

Payment on eGovernment portal. The system provides payment via normal transactions and verification is done by a webservice provided by the Treasury.

7.5 Montenegrin eServices availability

The tables below are composed of data from provided by the UNDP's Electronic South Eastern Europe (eSEE) Initiative⁵⁷, including the 2010 Report "eGovernance and ICT Usage"⁵⁸, the Overview of the status of the implementation of the set of basic eGovernment Services as stated in eSEE Agenda Plus, Annex 1 July 2012⁵⁹, and updates provided by the national respondents for this report.

57 <http://www.eseeinitiative.org>

58 UNDP: "eGovernance and ICT usage report for South East Europe ". 2nd edition. Sarajevo 2010 http://www.eseeinitiative.org/images/stories/pub/eGovernance_and_ICT_Usage_Report_for_South_East_Europe.pdf

59 http://www.eseeinitiative.org/images/stories/esee_wg_meetings/eGovernment_Services_Matrix_July_2012.doc

7.5.1 eServices for Citizens availability

Table 25 Montenegro, G2C services status

G2C	Provider(s)	Web	Status	Stage	Comments
1. Job search		www.zzzcg.org	In implementation process	3	Some employers choose not to publish their advertisements on this website.
2. Social benefits: unemployment, child supplement, health care payments, students supplement		Unemployment benefits: A. www.zzzcg.org Child supplements: B. www.gov.me/minradiss Healthcare payments: C. www.fzocg.me Student supplements and grants: D. www.gov.me/minprosv	No activity taken In planning phase	1	
3. Personal documents: ID, passport or driving permit		www.mup.gov.me	In planning phase	1	
4. Car registration: new, second hand or imported		www.mup.gov.me	A. No activity taken B. In planning phase	A. ? B. 2	
5. Public libraries: review of catalogue and ordering		http://vbcg.vbcg.me/cobiss/	In planning phase	3	There is a centralised database of libraries; electronic reservation is an option on the website, but as yet it is not in function.
6. Certificates: birth, death and marriage records		Birth certificate A. www.mup.gov.me Death certificate B. www.mup.gov.me Marriage certificate. C. Municipalities' websites usually in the format: www.nameofmunicipality.me	Done	?	It contains general information about the legal framework. There is a readiness to accept the electronic confirmation/ signature of submitted documents in accordance with the Law, but as yet it is not applicable. Birth certificate A. Since January 2010 municipalities' websites offer such information. Death certificate B. Since January 2010 municipalities' websites offer such information. Marriage certificate. C. The average mark for all municipalities is close to 1.
7. Admission to higher education institutions		<ul style="list-style-type: none"> • www.ucg.ac.me • www.udgedu.me • www.unimediterran.net 	A. In planning phase B. In implementation process	C. 1 D. 1/2	The level of available information depends on particular institutions.
8. Residence registration: in case of change of address		www.mup.gov.me	In planning phase	1	

7.5.2 eServices for Businesses availability

Table 26 Montenegro, G2B services status

G2B	Provider(s)	Web	Status	Stage	Comments
1. Tax payment: registration, payment and analysis		www.poreskauprava.gov.me	A. In implementation process B. In implementation process	A. 2 B. 4	
2. Environment and construction permits; obtaining a license		www.mse.gov.me	A. In planning phase B. In implementation process	A. ? B. ?	Some documents are available on-line.
3. Electronic cadastre and related registers of ownership		www.nekretnine.co.me	Done	4	There is a centralised searchable database of properties ownership.
4. Healthcare and pension: payments and examinations		A. Healthcare http://www.fzocg.me B. Pensions www.rfondpio.co.me	In implementation process	1-2	
5. Enterprise registration		www.crps.co.me	Done	3	
6. Company income registration		www.poreskauprava.gov.me	In implementation process	?	
7. VAT		www.poreskauprava.gov.me	In implementation process	?	
8. Customs declarations		www.upravacarina.gov.me	A. In implementation process B. In planning phase	A. 4 B. 4	Full electronic handling of customs declarations for companies that apply for this service and on-line availability of general information for public users.
9. Single Window for one-time filing all required information on a foreign trade transaction			No activity taken	?	
10. Public procurement		www.gov.me/djn	In planning phase	2	
11. Registry of mortgages of legal persons		www.nekretnine.co.me	In implementation process	?	
12. Submitting statistical data to State Statistical System (incl. harmonization with EUROSTAT requirements)		www.monstat.org	In implementation process	2	

7.5.3 eServices for Government availability

Table 27 Montenegro, G2G services status

G2G	Provider(s)	Web	Status	Stage	Comments
1. Treasury and programmatic budgeting			Done	4	
2. Support systems for implementation of EU funds			In planning phase	?	
3. Integrated control of borders			In planning phase	?	

7.5.4 Availability of other eServices for Government

Table 28 Availability of other eServices for eGovernment in Montenegro

	Name	Description
1	Issuing of the license to practice trade in tobacco products	G2B service where for businesses submit their application for wholesale distribution of tobacco products under the Tobacco Agency, which is responsible for its execution. The competent authority is the Ministry of Agriculture and Rural Development. This service requires identification using a digital certificate. Similar services are also available for other similar tasks.
2	Reporting corruption to the Agency for anticorruption initiative	G2C service. The main goal of this service is to enable citizens and legal entities to report corruption. This service does not require authentication.
3	Prijava za pohađanje seminara (Registration for attending the seminar)	G2G service. Public servants can apply for trainings organised by HRM. The responsible institution is the Human Resource Authority
4	Reporting of illegal contraction	G2C service that enables citizens to report any form of illegal contraction
5	Request for opening e-mail account on mail.me domain	G2C service.
6	Submitting application for participation in program	G2B service. Main goal is to enable legal entities to submit their application for program of training of persons with high education
7	Application of person with high education	G2C service

7.5.5 G2G services concerned with learning, training or management

There does not exist individual G2G services within eLearning, eTraining, eManagement etc. relevant for this study in Montenegro.

8.1 Legal Infrastructure

Strategy for the development of electronic communications in Serbia from 2010. to 2020. (Official Gazette of the Republic of Serbia, No. 68/2010).

This strategy focuses on taking a pragmatic view on the measures necessary for Serbia to ensure it a favourable position in the global economy, bearing in mind the global financial crisis. Together with the Information Society Development Strategy, this strategy constitutes the Digital Agenda for the Republic of Serbia. Development of the information society should be accompanied by the following:

Strategy for Information Society Development in Republic of Serbia until 2020. (Official Gazette of the Republic of Serbia, No. 51/2010).

Together with the telecommunications strategy, this Strategy constitutes the Digital Agenda for the Republic of Serbia. Information Society Development Strategy in the Republic of Serbia by 2020 is the Government act that defines the basic objectives, principles and priorities of information society development along with the activities that need to be taken over the period covered by this Strategy.

Development of the information society should be accompanied by the following:

- Participation of all the Republic of Serbia citizens, which particularly pertains to the inclusiveness of social groups with special needs, regional development and strengthening of local initiatives;
- Development of ICTs related knowledge and skills and strengthening of the role of ICT within the education system;
- Constant investments in research and innovation, in order to recognize, understand and use in the best possible manner the ICT potentials;
- Answers to the challenges brought by ICTs, such as: the new aspects of safety, privacy encroachment, technological dependence, insufficient interoperability and open issues of intellectual property protection;
- Coordination and cooperation among the public, private and civil sectors.

Strategy of the Public Administration Reform with the Action Plan for Implementation of the Public Administration Reform in the Republic of Serbia for the Period from 2009 to 2012 (Official Gazette of the Republic of Serbia, No. 83/09 and 5/10)

This document defines the basic goals, principles and priorities for improvement of the state of affairs in this area and identifies activities to be undertaken in the upcoming period. Also, the term “electronic government”, in terms of the Strategy, implies the implementation of ICT which should contribute to efficient and effective work of the bodies of the state administration and of holders of public authorities in terms of governance, economic growth and reduction of administrative burden. The Strategy emphasizes the low development of electronic public services as a burden. The current state of affairs in this area is characterized as follows:

- insufficiently developed joint computer-communication network;
- insufficiently developed official records in electronic format as a core of data necessary for development of electronic government;
- indispensability of paper documents almost in every procedure;
- insufficient standardization and coordination of the development of information systems in the state authorities;
- lack of competent human resources.

Plans for the near future

Strategy of the Public Administration Reform with the Action Plan for Implementation of the Public Administration Reform in the Republic of Serbia for the Period from 2009 to 2012 (Official Gazette of the Republic of Serbia, No. 83/09 and 5/10), is currently being reviewed to create a **new Public Sector Reform Strategy and a connected action plan** for the upcoming years of 2013-2017. It is planned to be adopted at the first half of 2013.

Law on Information Security The Law on Information Security has been drafted. Serbia has finished a round of consultations with competent state authorities in accordance with legislative procedures prescribed. As parliamentary elections were held in May 2012, it is expected that this Law will be adopted until the end of 2012. Public consultations were held from January 25, until February 6, 2012.

Law on Register of citizens. The Law on Register of citizens is currently in preparation. The Register of citizens should be a reference database that would contain the authentic data on the current status of the persons. The greatest benefit of establishment of a Register of citizens in Serbia is reflected in the fact that it will be identified as the reference source of data on citizens, while other authorities will retrieve information from it, instead of running a range of official records. The establishment of a Register of citizens will give the possibility for a simpler, faster and more transparent sharing of data on the one hand, and ensure the highest levels of security and protection of personal data, on the other.

8.2 Institutional Framework

The government development stakeholders in Serbia who are forming the institutional framework for eGovernment:

Ministry of Justice and Public Administration

Minister: Nikola Selaković

Email: kabinet@mpravde.gov.rs

Web: www.mpravde.gov.rs

Ministry of Justice and Public Administration conducts state administration affairs in relation to: state administration system and organisation and work of the Ministry and special organisations; ombudsman; administrative inspection; administrative procedure and administrative lawsuit; elections for republic bodies; labour relations in state authorities; professional development of the state administration employees; registry books; official use of language and script; seals, political and other organisation, save for trade union organisation; unique voter's list as well as any other affairs stipulated by the law.

The Ministry of Justice and Public Administration conducts state administration affairs in relation to: keeping of the register of political parties; keeping of register of churches and religious communities; keeping of registers of national councils of ethnic minorities; drafting of regulations on human and minority rights as well as any other affairs stipulated by the law.

Ministry of Foreign and Internal Trade and Telecommunications (MTT)

Minister: Rasim Ljajić

Email: kabinet@mtt.gov.rs

Web: www.mtt.gov.rs

Ministry of Foreign and Internal Trade and Telecommunications conducts the state administration affairs in relation to: telecommunications, i.e., electronic communication and postal service; system of electronic communication and postal service and their safety; inspection control; creating strategy and policies for electronic communications development; organising financial and technical control; international affairs

in the area of electronic communications and postal service; measures for encouraging research and development in the area of electronic communications and postal service; drafting of the proposal for the plan of radio-frequency band allocation; decisions on conditions for issue of individual permits for use of radio-frequency; making list of basic services in electronic communications (universal service) to be provided by service providers as well as any other affairs stipulated by the law.

Ministry of Foreign and Internal Trade and Telecommunications conducts state administration affairs in domain of information society in relation to: creating strategy and policies for information society development; drafting of laws, other regulations, standards and measures in the area of electronic operations; measures for fostering research and development in the domain of information society; development and improvement of academic, educational and scientific computer network; coordination of drafting of strategic and developmental documents on the level of the Republic of Serbia; data protection and information security; international affairs in the domain of information society as well as any other affairs stipulated by the law.

Directorate for Digital Agenda - Ministry of Foreign and Home Trade and Telecommunications

Director: Sonja Talijan

Email: office@digitalnaagenda.gov.rs

Web: www.uzda.gov.rs

Digital Agenda Administration, as a body pertaining to Ministry of Foreign and Internal Trade and Telecommunications, conducts professional and state administration affairs in relation to: implementation of strategies in the area of information society and electronic communications; application of ICTs; provision of information services; research and development in the area of information society and electronic communications; development and functioning of ICT infrastructure, improvement, development and functioning of information systems of the state authorities, territorial autonomies, local self-government and public services; application and use of Internet in the operation of state authorities, territorial autonomies, local self-government and public services; development and application of standards in introduction of ICTs in state authorities, territorial autonomy, local self-government and public services; creating conditions for realisation of projects financed from EU pre-accession funds, donations and other forms of development aid in the area of information society and electronic communications as well as any other affairs stipulated by the law.

The Republic Telecommunications Agency (RATEL)

Director: Milan Janković, PhD

Email: ratel@ratel.rs

Web: www.ratel.rs

The Agency is a regulatory body, an autonomous and independent organisation with public authorisation, established to regulate the telecommunications market in Serbia. The Agency is mandated to introduce the liberalisation of the market and to safeguard the public interest by increasing the level of efficiency among operators, introducing new services, improving the level of quality of existent operators and the modernisation and further development of the telecommunications market. At present the Agency is also tasked with active participation in the harmonisation of national legislation with that of the EU.

The Serbian National Register of Internet Domain Names (RNIDS)

Director: Zoran Perović

Email: zoran.perovic@rnids.rs

Web: www.rnids.rs

The RNIDS Fund is an expert, non-governmental and non-profit organisation without affiliation to any political party and which manages the Republic of Serbia National Registry of Internet Domain Names.

8.3 Who-is-who

8.3.1 Main responsible for eGovernment

Minister responsible for eGovernment

Ministry of Justice and Public Administration

Minister: Nikola Selaković

Email: kabinet@mpravde.gov.rs

Web: www.mpravde.gov.rs

Ministry of Foreign and Internal Trade and Telecommunications (MTT)

Minister: Rasim Ljajić

Email: kabinet@mtt.gov.rs

Web: www.mtt.gov.rs

The Ministry of Interior

Minister: Ivica Dačić

Email: info@mup.gov.rs

Web: www.mup.gov.rs

The Ministry of Finance and Economy

Minister: Mlađan Dinkić

Email: kabinet@mfp.gov.rs

Web: www.mfp.gov.rs

The Ministry of Labour, Employment and Social Policy

Minister: Jovan Krkobabić

Email: ministar@minrzs.gov.rs

Web: www.minrzs.gov.rs

Head of eGovernment Strategy

Ministry of Justice and Public Administration

Minister: Nikola Selaković

Email: kabinet@mpravde.gov.rs

Web: www.mpravde.gov.rs

eGovernment executive

Directorate for Digital Agenda – Ministry of Foreign and Home Trade and Telecommunications

Director: Sonja Talijan

Email: office@digitalnaagenda.gov.rs

Web: www.digitalnaagenda.gov.rs

8.3.2 Main actors

Developing eGovernment policy/strategy

Ministry of Justice and Public Administration

Minister: Nikola Selaković

Email: kabinet@mpravde.gov.rs

Web: www.mpravde.gov.rs

Ministry of Foreign and Internal Trade and Telecommunications (MTT)

Minister: Rasim Ljajić

Email: kabinet@mtt.gov.rs

Web: www.mtt.gov.rs

Coordinating eGovernment developments

Ministry of Justice and Public Administration

Minister: Nikola Selaković

Email: kabinet@mpravde.gov.rs

Web: www.mpravde.gov.rs

Ministry of Foreign and Internal Trade and Telecommunications (MTT)

Minister: Rasim Ljajić

Email: kabinet@mtt.gov.rs

Web: www.mtt.gov.rs

Directorate for Digital Agenda – Ministry of Foreign and Home Trade and Telecommunications

Director: Sonja Talijan

Email: office@digitalnaagenda.gov.rs

Web: www.uzda.gov.rs

Implementation of the eGovernment strategy and initiatives

Ministry of Justice and Public Administration

Minister: Nikola Selaković

Email: kabinet@mpravde.gov.rs

Web: www.mpravde.gov.rs

Ministry of Foreign and Internal Trade and Telecommunications (MTT)

Minister: Rasim Ljajić

Email: kabinet@mtt.gov.rs

Web: www.mtt.gov.rs

The Ministry of Interior

Minister: Ivica Dačić

Email: info@mup.gov.rs

Web: www.mup.gov.rs

The Ministry of Finance and Economy

Minister: Mlađan Dinkić

Email: kabinet@mfp.gov.rs

Web: www.mfp.gov.rs

Directorate for Digital Agenda – Ministry of Foreign and Home Trade and Telecommunications

Director: Sonja Talijan

Email: office@digitalnaagenda.gov.rs

Web: www.uzda.gov.rs

Tax Administration - The Ministry of Finance and Economy

Director: Ljiljana Kovačević

Email: informacije@poreskauprava.gov.rs

Web: www.poreskauprava.gov.rs

Business Registers Agency

Director: Zvonko Obradović

Email: registar@apr.gov.rs

Web: www.apr.gov.rs

Republic Geodetic Authority

Director: Zoran Krejović

Email: office@rgz.gov.rs

Web: www.rgz.gov.rs

Central Register of Compulsory Social Insurance

Director: Milica Danilović

Email: milica.danilovic@croso.rs

Web: www.croso.rs

Supporting the development of eGovernment

Directorate for Digital Agenda – Ministry of Foreign and Home Trade and Telecommunications

Director: Sonja Talijan

Email: office@digitalnaagenda.gov.rs

Web: www.uzda.gov.rs

Auditing eGovernment implementation

State Audit Institution

President: Radoslav Sretenović

Email: kancelarija@dri.gov.rs

Web: www.dri.rs

Institutions Related to eGovernance Development

Ministry of Justice and Public Administration

Minister: Nikola Selaković

Email: kabinet@mpravde.gov.rs

Web: www.mpravde.gov.rs

Ministry of Foreign and Internal Trade and Telecommunications (MTT)

Minister: Rasim Ljajić

Email: kabinet@mtt.gov.rs

Web: www.mtt.gov.rs

Directorate for Digital Agenda – Ministry of Foreign and Home Trade and Telecommunications

Director: Sonja Talijan

Email: office@digitalnaagenda.gov.rs

Web: www.uzda.gov.rs

Ministry of Interior

Minister: Ivica Dačić

Email: info@mup.gov.rs

Web: www.mup.gov.rs

The Ministry of Finance and Economy

Minister: Mlađan Dinkić

Email: kabinet@mfp.gov.rs

Web: www.mfp.gov.rs

The Ministry of Labour, Employment and Social Policy

Minister: Jovan Krkobabić

Email: ministar@minrzs.gov.rs

Web: www.minrzs.gov.rs

The Ministry of Education, Science and Technological Development

Minister: Žarko Obradović

Email: kabinet@mpn.gov.rs

Web: www.mpn.gov.rs

The Commissioner for Information of Public Importance and Personal Data Protection

Commissioner: Rodoljub Šabić

Email: office@poverenik.rs

Web: www.poverenik.org.rs

Tax Administration - The Ministry of Finance and Economy

Director: Ljiljana Kovačević

Email: informacije@poreskauprava.gov.rs

Web: www.poreskauprava.gov.rs

Treasury administration - The Ministry of Finance and Economy

Director: Svetlana Ljubičić

Email: marijana.milanovic@trezor.gov.rs

Web: www.trezor.gov.rs

Business Registers Agency

Director: Zvonko Obradović

Email: registar@apr.gov.rs

Web: www.apr.gov.rs

Republic Geodetic Authority

Director: Zoran Krejović

Email: office@rgz.gov.rs

Web: www.rgz.gov.rs

Central Register of Compulsory Social Insurance

Director: Milica Danilović

mail: milica.danilovic@croso.rs

Web: www.croso.rs

The School of Electrical Engineering, University of Belgrade

Address: Bulevar Kralja Aleksandra 73, Belgrade.

Tel: +381-11- 324-8464

Web: www.etf.bg.ac.rs

The Faculty of Organisational Sciences, University of Belgrade

Address: Jove Ilića 154, Belgrade.

Tel: +381-11-3950-8005

Web: www.fon.rs

CePIT (Centre for Research into Information Technologies), Belgrade Open School

Address: Masarikova 5/16, Belgrade.

Web: www.bos.rs/cepit

Standing Conference of Towns and Municipalities (SCTM)

Address: Makedonska 22/VIII, 11000 Belgrade.

Tel: +381-11-322-3446

Email: secretariat@skgo.org

Web: www.skgo.org

Responsible for citizens and businesses data protection

The Commissioner for Information of Public Importance and Personal Data Protection

Commissioner: Rodoljub Šabić

Email: office@poverenik.rs

Web: www.poverenik.org.rs

Government interoperability

Responsible for planning, implementing and operating government interoperability

Ministry of Justice and Public Administration

Minister: Nikola Selaković

Email: kabinet@mpravde.gov.rs

Web: www.mpravde.gov.rs

Ministry of Interior

Minister: Ivica Dačić

Email: info@mup.gov.rs

Web: www.mup.gov.rs

Ministry of Foreign and Internal Trade and Telecommunications (MTT)

Minister: Rasim Ljajić

Email: kabinet@mtt.gov.rs

Web: www.mtt.gov.rs

Tax Administration - Ministry of Finance and Economy

Director: Ljiljana Kovačević

Email: informacije@poreskauprava.gov.rs

Web: www.poreskauprava.gov.rs

Business Registers Agency

Director: Zvonko Obradović

Email: registar@apr.gov.rs

Web: www.apr.gov.rs

Republic Geodetic Authority

Director: Zoran Krejović

Email: office@rgz.gov.rs

Web: www.rgz.gov.rs

Major providers of eGovernance solutions

Institute Mihajlo Pupin

Address: Volgina 15, 11000 Belgrade.

Tel: +381-11-277-1398, +381-11-2772-876

Web: www.institutepupin.com

P. E. of PTT Communications "SRBIJA". Beograd

Address: Takovska 2, 11000 Beograd.

Tel: +381 11 360-77-88

Email: contact@ptt.rs

Web: www.posta.rs

S&T Serbia Ltd.

Address: Narodnih heroja 43/XII, Belgrade.

Tel: +381-11-311-6221

Fax: +381-11-311-7665

Email: info@snt.rs

Web: www.snt.co.rs

SRC Sistemske Integracije Ltd

Address: Bulevar Mihajla Pupina 165v, 11070 Novi Beograd.

Tel: +381-11-222-5001

Fax +381-011-222-5002

Web: www.src.si/sr

Comtrade

Address: Savski nasip 7, Beograd.

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Active Donors in the Area of eGovernance and ICT

- The Fund for Open
- The British NGO “mySociety” with the support of the Open Society Institute (OSI) The Ministry of Culture of the Republic of Serbia (see: ‘1.7.4.6 Major projects related to eGovernance development’ page 134).
- USAID Serbia (see: ‘1.7.4.6 Major projects related to eGovernance development’ page 134).
- European Commission (IPA 2009) provides support to the Ministry of Telecommunications and Information Society for the development of eGovernment service.
- European Commission in Serbia within the framework of the programme of the Municipal Support Programme in Northeast Serbia. This programme (MSPNES) includes plans for six roundtables on eGovernment, the first of which was held in Zrenjanin .
- The European Agency for Reconstruction funded a programme for the modernisation of the State Tax Administration in August 2003.

8.4 National Infrastructure

8.4.1 Accessibility

Internet Penetration

According to research conducted by the Statistical Office of the Republic of Serbia (SORS) 48.4 % of the respondents had used the Internet during the last three months, 1.6 % more than three months ago and 1.6 % more than a year ago. However, 48.4 % of the respondents have never used the Internet. The number of Internet users increased by 4.6 % in 2011, by 5.7% in 2010 and by 8% relative to 2009.

This means that more than 2 700 000 persons have used the Internet during the last three months. The number of persons who used the Internet in the last three-month period rose with over 300 000 than in 2011⁶⁰.

Distribution of Internet users (during the last three months), by education level:

- 78.6% of persons with higher and high education;
- 64.1% of persons with secondary education;
- 23.8% of persons with education lower than secondary.

60 Statistical Office of the Republic of Serbia, Use of information and communication technologies in the Republic of Serbia 2012, Belgrade, 2012, page 7-9.

Analysis of the respondents by sex shows that, during the last three months, 50.4 % of males and 46.6% of females used the Internet. The EU average was 71% for men and 66% for women in 2010.

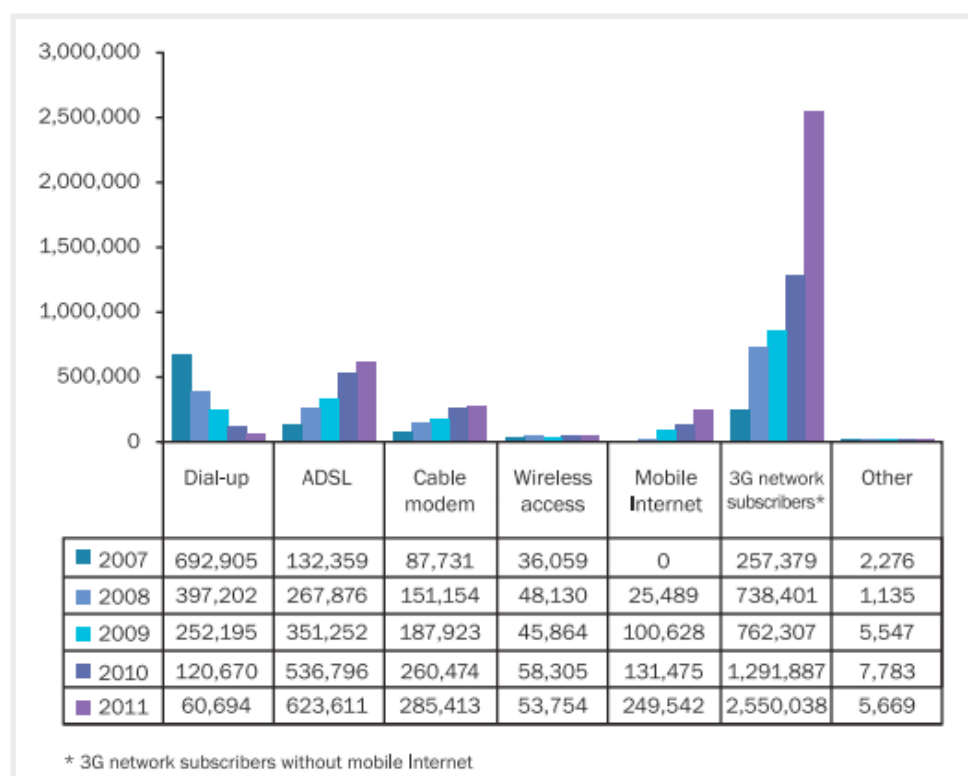
Type of Internet connection

In December 2011, there were 232 Internet service providers (ISPs) in Serbia registered within the Authorisation Register.

The total number of Internet subscribers in 2011 amounted to approximately 1.2 million. However, if we consider the availability of Internet access using 3G mobile network (via cell phone), the total number of potential subscribers in 2011 amounted to 3.8 million, which is an increase of 59% year-on-year.

The total number of broadband connections in Serbia in 2011 was 1.2 million (3G mobile network users excluded), which is approximately 22% more than in 2010. There was a significant increase in the number of subscribers who accessed the Internet using ADSL modem (16%), amounting to 623,000 connections. An increase of 10% of subscribers accessing the Internet via cable modem was observed. The largest increase of broadband users was observed accessing internet via mobile 3G network modem. The number of subscribers is ten times higher than in 2008 when this type of access first became available in the Republic of Serbia, amounting to 249 thousand in 2011, with the share in the total number of broadband users of 20% (excluding 3G subscribers). In view of the growing demand for high bit-rate data transmission, the number of dial-up connections has dropped significantly year after year. In 2006 the total number of dial-up subscribers amounted to 882,000 accounting for 88% of the total number of Internet subscribers, whereas in 2011 the number dropped to 60,000, or 1.5% of the total number of Internet connections.

Figure 1 Number of internet subscribers in relation to access technology in Serbia in 2011⁶¹



In 2011, the number of Internet connections per 100 inhabitants was approximately 53, which roughly corresponds to the number of broadband Internet connections per 100 inhabitants, in view of the rather

61 Republic of Serbia Telecommunications Agency (RATEL), "Overview of the Telecommunications Market in the Republic of Serbia for 2011": Belgrade, 2012, p. 85.

low share of narrowband connections. However, if the 3G mobile network subscribers are excluded from the total number of broadband subscribers, broadband penetration amounts to nearly 17%. Fixed broadband penetration was around 13%, which is a decent percentage compared with the countries in the region, but still below EU average (according to the available data for 2010, the average for EU candidate and potential candidate countries was 10.6% and the EU average was 26.6%)⁶². The above facts lead to the conclusion that the Internet sector growth in Serbia is constant, both in terms of total revenues and the number of broadband users. The choice of access technology revealed a step-up towards broadband services usage, reflected in the constant increase of ADSL, cable and mobile Internet access users as well as in the continuous decrease in the number of dial-up users.

Households

Based on the research results gathered in 2012 by SORS in the Republic of Serbia there were 47.5% of the households in the Republic of Serbia with Internet connection, which presents an increase of 6.3 % in relation to 2011, 8.5% compared to 2010 and 10.8 % increase in relation to 2009⁶³. 38% of the households in Serbia have broadband Internet connection, which is the increase of 7% in relation to 2011 and 10.4% in relation to 2010. This sort of connection is the most widespread in Belgrade (50.4 %), in Vojvodina (37.6 %), while in Central Serbia it amounts to 32.4 %.

Related to ways of the Internet access (types of connection) households were offered the multiple choice. On the evidence of the obtained results, out of total number of households that have the Internet connection, 51 % have DSL (ADSL), 31 % possess cable Internet, 24.4 % possess WAP and GPRS and 1.4 % possess modem connection.

Companies

On the basis of the results received through the SORS research, 97.7% of the enterprises in the Republic of Serbia the presence of Internet connection the increased by 0.5% in relation to 2011, by 0.9% in relation to 2010 and by 3.2% relative to 2009.

Analysis of enterprises by size shows that 100 % of big enterprises have the Internet connection, 99 % of middle – sized enterprises and 97.3% of small enterprises.

On the basis of the obtained results, out of total number of the enterprises that have the Internet connection, 77.2 % have DSL connection, 33 % of the enterprises have cable Internet and 4.8% have modem connection.

87.4% of the enterprises with the Internet connection use the electronic services of public administration and it is an increase of 7.6 % in relation to 2011, increase of 16.8 % when compared to 2010. 12.6 % of the enterprises do not use such a possibility⁶⁴.

8.4.2 Utilisation of ICT in public administration

All of the employees of the central public administration possess a computer. At the local level, a large number of municipalities possess a sufficient number of computers for their basic needs.

62 Supply of services in monitoring regulatory and market developments for electronic communications and information society services in Enlargement Countries 2011-2013 – November 2011, Cullen International

63 Statistical Office of the Republic of Serbia, Use of information and communication technologies in the Republic of Serbia 2012, Belgrade, 2012, page 3-5.

64 Statistical Office of the Republic of Serbia, Use of information and communication technologies in the Republic of Serbia 2012, Belgrade, 2012, page 10-12.

All central level state institutions use network services, such as e-mail, share resources, printers, common databases etc. and all have internet access.

All municipalities in Serbia have internet access, but the use by municipality employees differs dependent on available equipment.⁶⁵

8.4.3 Utilisation of ICT within education

Updates for the respective information are not available because studies regarding utilization of ICT within education were not processed, since the last one showed that **100% of primary and secondary schools possess a computer lab, while 87% of primary and secondary schools have an Internet connection.** Regarding the frequency of e-mail/Internet usage among the pupil population results showed that: **the Internet is used on a daily basis**, it is the main information and communications media tool among the young and it is **used predominantly for fun**, that young people spend an increasing amount of **time in front of a computer, on average 2 to 3 hours or even more.**

Regarding, eLearning in Serbia, the first steps were made in 2004/05 when WUS Austria financially supported by the Austrian Development Agency (ADA - Austrian Development Agency) implemented the first phase of the program for the development of e-learning for the Serbia and Montenegro under the name eLTF - eLearning Task Force. The program's goal was to create a collaborative environment between academic and interested groups in Serbia and Montenegro, as well as the initiation of a common and standardized approach to the development of this field. The working group for the development of e-learning (eLTF) consisted of representatives of all universities. After several meetings and consultations Working Group prepared recommendations for the development of e-education in region. eLearning development network was created in Serbia in 2008, and the first portal was created in cooperation with WUS Austria. It is designed based on the knowledge gained in the first and second stage of the eLearning program that was implemented by WUS Austria in the period since 2004. by 2007. It is designed for those who are interested in developing eLearning and distance education in Serbia, especially in universities and staff development program participants of master studies. It was designed as a platform for the exchange of information on experiences, interests and needs that arise within the educational community of ICT use in education. During 2009 and 2010 a number of seminars regarding development and benefits of eLearning were implemented in Serbia. (www.eucenje.rs).

In March 2010, the first website started to present topics (www.e-learning.rs). The first concrete e-Learning programme in Serbia started on 15th of September 2011 within the area of democracy and human rights. It was implemented and developed by "Partneri Srbija" and CHRIN with the support of EU Delegation in Serbia⁶⁶.

Plans for near future

Under preparation is the eLearning module for training of civil servants and local police employees (Communal Police).

The mission of the Communal Police eLearning module is to set and enforce training standards, to identify and meet the training needs of the Communal Police.⁶⁷

65 UNDP, 2010 report, page 289

66 www.partners-serbia.org/images/stories/pdf_ovi/e-leraningskolaizvestaj.pdf

67 www.drzavnauprava.gov.rs

8.4.4 Utilisation of ICT within health

Precise information or official studies regarding utilisation of ICT within health are not available. Services for electronic prescriptions do not exist yet in Serbia. Services for electronic appointments with doctors and hospitals exists in some municipalities in the Belgrade region, e.g. Health Care Centre Palilula, Belgrade. The Municipality of Palilula, Belgrade implemented a contact centre for electronic appointments, and as this municipality is one of the largest by territory, its management implemented the system in order to enhance the quality of life of citizens and to make it easier to process of appointments with doctors in respective health centre. The same system was also implemented in the few private medical centres by their own initiatives. Systemic implementation of such systems is not widely available in Serbia, although results from the named health centres showed great satisfaction by both citizens and health centres⁶⁸.

Plans for near future

- development of the services for e-appointment
- development of the services for Telemedicine (on-line follow up of the vital patient parameters and alert to the hospital or ER in the case of emergency)
- development of service for establishment for National registers for patients
- development for National register for rare deceases
- development of database for health services and hospital
- electronic prescription
- GIS for presentation, follow up and alert for data representing infectious diseases, food safety.

8.4.5 Know-how and human resources

The ratio of public servants trained in the use of ICT has not changed: the training of public servants in the use of ICT falls under the competency of The Human Resource Management Service of the Government of Serbia. Previous qualitative analysis showed that all employees received basic ICT training necessary for their daily duties, but that only a small percentage of them underwent any advanced ICT training.

In vocational schools, gymnasiums and secondary schools in the territory of the Republic of Serbia the ICT curricula are currently taught by over 1,000 ICT teachers. The ICT teaching program is realized in line with the current curricula determined by the Ministry of Education, as described below.

Primary Schools

From the 1st to the 5th grade of primary school the optional subject “*From toys to computers*” targets the development of motor skills through the use of materials, kits, tools, devices and computers, developing creativity and construction skills, skills and capabilities related to the use of materials, kits, tools, devices and computers in play and everyday life as well as developing the ability to solve simple tasks with the help of computers. In addition to the creative and practical activities, program focus is to establish a link between theoretical knowledge and motor skills, along with the practice and adoption of more complex procedures and actions. In the 7th and 8th grade of primary school IT related subjects are organized as optional, dependant on the school’s capacity (equipment and staff). From 2008, an optional subject titled “*Basic IT*” has also been introduced for the 5th and 6th grades of primary school. IT is not a mandatory subject in primary schools.

68 www.palilula.org.rs/vodic/zdravstvene-ustanove.html?pismo=lat and Serbian Healthcare Policy, 2002; Vision of Healthcare System in Serbia, 2002; Strategy for Healthcare Reform until 2015, presented in the publication Better Health for Everyone in the Third Millennium (2004), National Strategy for an Information Society in Serbia, 2005

Secondary Schools

In gymnasiums the IT program is realized throughout all four years, either through regular subjects or through so-called block classes with practice. In vocational schools it is a mandatory subject, and in specific schools IT is studied for two, three or four years dependant on the educational profile and type of the school. The majority of Serbian secondary schools are vocational. In most of these schools computer science and IT is only taught in the first grade.

8.4.6 Major projects related to eGovernance development

Active

“Establishment of the unified electronic citizen’s certificates system” The overall objective of the project is the establishment of a central system for electronic processing and storing of data and keeping of second copy of citizen’s certificates.

“Support to PAR” and **“Improving recruitment and career development in civil service”** The projects will provide assistance to the Serbian Government in the implementing the PAR Strategy, in particular as related to PA organization and efficiency, recruitment, career development, and professional development of the civil service.

“Support to Public Administration Reform in Serbia 2010-2013”. Provides technical assistance to support of rule of law, accountability, transparency, effectiveness and efficiency in the public administration in Serbia.

“Support to e-Government development” The Government of Serbia has got IPA support for a technical assistance project, with the general aim of creating an interoperability framework and provide the necessary human and technical skills for further activities to enable effective e-Government. The overall objective of the project is to improve the PA system in the Republic of Serbia using the tools of e-Government in accordance with the requirements of the EU integration process and to contribute to PAR. The project is divided into 4 components: Legislation component, e-Government infrastructure component, Institutional and capacity building component, e-Government services component.

„Support to Public Administration Reform in Serbia“ The overall objective of this project is to enhance the efficiency, effectiveness and accountability of the public administration in Serbia in line with the Public Administration Reform Strategy and in accordance with the requirements of the EU integration process. The project’s purpose is to contribute to the implementation of the Public Administration Reform Strategy and related action plans in particular by: enhancing strategic management; supporting the rationalization of public administration; and ensuring consistent human resources professional development.

Completed

“Strengthening capacities of Serbian Administration for EU integration” The purpose of the project is to strengthen the knowledge and skills of representatives from local, regional, and central level of PA of Serbia, on aspects of the functioning of the EU in actual relation to Serbia.

“Strengthening Institutional Capacity for E-Government of MTT” It aimed to provide strategic guidance on institutional strengthening and capacity building support to the MTT for the implementation of the recently adopted e-Government Strategy.

“Delivery of improved Local Services (DILS)” The objectives of Delivery of Improved Local Services (DILS) project for Serbia will increase the capacity of institutional actors and beneficiaries in order to improve access to and the efficiency of and quality of local health delivery, education and social protection services, in a decentralised environment.

“Support for Further Improvement of Civil Servants’ Professional Training Process” Was dedicated to the preparation of the Strategy for civil servants’ professional training.

“Establishment of unified voters register” The overall objective was to define procedures for establishing and maintaining the electoral register and information system architecture in the context of activities of MJUSTICE related to the implementation of the Law on unified voters register.

“Serbia - Improving the State Legal Administrative Framework (SIGMA)” The objective of the project was to support MHMRPALS in the preparation of a new Draft Law on General Administrative Procedure.

“Development of website standardization rules for e-Government”. Aimed at unifying the practice of Serbian public authorities in providing information through the web, and taking a step further toward the second stage of development of citizen-oriented e-Government.

Support to e-Government development - IT infrastructure

The main goal of the supply project was to create new e-Infrastructure for the introduction of 20 (twenty) priority e-Government services defined by EU criteria, 12 (twelve) G2C and 8 (eight) G2B services upgrading all of them from current sophistication level 2 to the level 3 or 4.

Plans for the near future

“Support for further development of e-Government” Specification of standards for the establishment of “one-stop-e-shop” locations at the local level, development of various new and integration of already existing centralised and unique national registers (e.g. Unified Registry of Citizens, Tax Payers, Companies etc.) in accordance with the conceptual model defined in the project from IPA 2010, harmonisation of the existing legislation related to the functioning of centralised and unique national registers and identification of adequate operational procedures for centralised and unique national registers (storage, management and use of data).

“Support for further development of e-Government - Serbia National Cloud” The goal of the project is that public administrations “recognise the need for being open, flexible and collaborative in relations with its citizens and businesses”. The primary tool is e-Government used for increasing our efficiency and effectiveness and constantly improving public e-Services, while acknowledging different user needs and maximising public value, thus supporting the transition of Serbia to a knowledge based economy.

Pilot project „Determining elements for creating a common register of citizens and develop a prototype of a single register of citizens” The goal of the pilot project is to establish a register of citizens and to define standards for interoperability between different communication systems that are under the control of the Ministry of Justice and Public Administration and the Ministry of Interior. This will allow quick and efficient registration of the most important data about citizens and their data from one website and will be available across the state administration to easily obtain all of the necessary data and to manage them within their jurisdiction (local government units, Statistics, Tax Administration health system, judicial system.).

8.4.7 Important events related to eGovernance

October 2010: **Strategy for the development of electronic communications in Serbia from 2010 to 2020** was adopted.

October 2010: **Strategy for Information Society Development in Republic of Serbia until 2020** was adopted for coordination by the Ministry for Telecommunications and Information Society.

October 2009: **The Strategy and Action Plan for e-Government Development up until 2013** was adopted

July 2009: **Action Plan for Implementation of the Public Administration Reform in the Republic of Serbia for the Period from 2009 to 2012** was adopted

Plans for near future

New Public Sector Reform Strategy and a connected action plan for the upcoming years of **2013-2017**. To be adopted in first half of 2013.

8.4.8 Portals

Citizen portal

Portal eUprava (www.euprava.gov.rs). The portal includes the generated services and information needed for a certain level of services provided by state institutions.

Business portals

The Companies Register (www.apr.gov.rs). The transition to a centralised registration system produced a unique, centralised, electronic database of companies in the Republic of Serbia, containing all data subject to registration in accordance with the law and pursuant to EU directives, available on the internet, which all interested parties can quickly and easily retrieve, without the need to prove their legal entitlement.

eTaxation (eporezi.poreskauprava.gov.rs) Enables electronic submission of VAT returns through the Internet portal of the Tax Administration of the Republic of Serbia. In the pilot the electronic submission of VAT returns was allowed only to a certain group of taxpayers. However after April 2012 it is accessible for all entrepreneurs.

8.4.9 Government wide networks

Data exchange using web services is performed in a secure (safe) zone. Currently, there are Ministry of Interior, ePortal, Republic Geodetic authority, Ministry of Justice and Public Administration, Central Registry of compulsory health insurance, tax administration, Pension fund are using this environment.

8.4.10 eIdentification/eAuthentication

eID. Identity card with a chip, the issuer is MIA

- e-Identification
- e-Authentication
- digital signatures
- PKI
- single sign-on solutions⁶⁹

Digital signatures. Issuers:

1. P. E. Of Ptt Communications “Srbija”
2. Chamber of Commerce and industry of Serbia
3. Halcom

Covers:

- e-Authentication
- digital signatures
- single sign-on solutions

8.4.11 eProcurement

The Public Procurement office (<http://www.ujn.gov.rs>) and (<http://portal.ujn.gov.rs>) enables a full transactional process of procurement.

8.4.12 Knowledge management

The project **Support to e-Government development** (www.serbiaegov.eu) financed by EuropeAid has the overall objective of improving the Serbian public administration system in accordance with the requirement of the EU integration process and to contribute to the extended use of eGovernment as part of the Public Administration Reform.

Future plans

To support the further development of basic public services to the citizens through the use of e-Government and strengthening the capacity of local self-governments in the development and use of electronic data, providing training materials for eGovernment; vocabulary for eGovernment; forums for sharing quick wins.

8.4.13 ePayment

Serbia has an online ePayment system used by different state institutions, citizens businesses etc.

8.5 Serbian eServices availability

The tables below are composed of data from provided by the UNDP's Electronic South Eastern Europe (eSEE) Initiative⁷⁰, including the 2010 Report “eGovernance and ICT Usage”⁷¹, the Overview of the status of the implementation of the set of basic eGovernment Services as stated in eSEE Agenda Plus, Annex 1 July 2012⁷², and updates provided by the national respondents for this report.

69 [1] If the appropriate legal environment and the services, which use these capabilities will be implemented, however currently only the eSignature has the necessary legal end physical environment

70 <http://www.eseeinitiative.org>

71 UNDP: “eGovernance and ICT usage report for South East Europe “. 2nd edition. Sarajevo 2010 http://www.eseeinitiative.org/images/stories/pub/eGovernance_and_ICT_Usage_Report_for_South_East_Europe.pdf

72 http://www.eseeinitiative.org/images/stories/esee_wg_meetings/eGovernment_Services_Matrix_July_2012.doc

8.5.1 eServices for Citizens availability

Table 29 Serbia, G2C services status

G2C	Provider(s)	Web	Status	Stage	Comments
1. Job search	National Employment Service	http://www.nsz.gov.rs	Done	4/4	Browsing the database by selected categories, account setting for both employers and employees, submission of data for connecting to potential employers/employees.
2. Social benefits: unemployment, child supplement, health care payments, students supplement	<ul style="list-style-type: none"> • National Employment Service • The Ministry of labour and Social Policy • The Ministry of Health • The National Institute for Health Insurance • The Ministry of Education 	<ul style="list-style-type: none"> • www.minrzs.gov.rs • http://www.rzso.rs • www.minrzs.gov.rs • http://www.mp.gov.rs 	Done	1,1,2, 2/4	Only information is available.
3. Personal documents: ID, passport or driving permit	Ministry of Interior	http://www.mup.gov.rs		3-4/5	<i>Revised estimate of stage</i> Because of e- Scheduling MIA estimates 50%.
4. Car registration: new, second hand or imported	Ministry of Interior	http://www.mup.gov.rs	In implementation process	3-4/4	Service for registration renewal has been introduced (new, used or imported vehicles).
5. Public libraries: review of catalogue and ordering	Ministry of Culture, Public libraries	<ul style="list-style-type: none"> • http://www.vbs.rs/cobiss • http://www.biblioteke.org.rs 	Done	4/5	Increased by 10% due to increased number of involved local self-governments.
6. Certificates: birth, death and marriage records	The Ministry of Public Administration and Local Self-government	http://www.drzavnauprava.gov.rs	In implementation process	3/4	
7. Admission to higher education institutions	The Ministry of Education and Universities	http://www.mp.gov.rs	Done	1/4	
8. Residence registration: in case of change of address	Ministry of Interior	http://www.mup.gov.rs	Done	1/4	<i>Revised estimate of stage</i> Serbia has electronic scheduling and electronic filing requirements for a certificate of residence. In case of address change the data on the chip have to be updated.

8.5.2 eServices for Businesses availability

Table 30 Serbia, G2B services status

G2B	Provider(s)	Web	Status	Stage	Comments
1. Tax payment: registration, payment and analysis	Tax Administration, Ministry of Finance	<ul style="list-style-type: none"> http://www.poreskauprava.gov.rs http://www.mfin.gov.rs 	In implementation process	3/4	
2. Environment and construction permits; obtaining a license	Ministry of Environment and Spatial Planning	http://www.ekoplan.gov.rs/srl/index.php	In implementation process	1/5	
3. Electronic cadastre and related registers of ownership	Republic Geodetic Authority	http://www.rgz.gov.rs	In implementation process	?	
4. Healthcare and pension: payments and examinations	Ministry of Health and the National Institute for Health Education	<ul style="list-style-type: none"> http://www.zdravlje.gov.rs http://www.rzzo.rs 	Done	1/4	
5. Enterprise registration	Serbian Business Registers Agency	www.apr.gov.rs	Done	3/4	As of May 2008, electronic enterprise registration is possible. Payment and signed copies of documents must be delivered in a non-electronic form five days after the on-line submission.
6. Company income registration	Tax Administration, Ministry of Finance	<ul style="list-style-type: none"> http://www.poreskauprava.gov.rs http://www.mfin.gov.rs 	Done	3/4	
7. VAT	Tax Administration, Ministry of Finance	<ul style="list-style-type: none"> http://www.poreskauprava.gov.rs http://www.mfin.gov.rs 	In implementation process	2/4	Until April 2012 this service is accessible for all enterprises
8. Customs declarations	Customs office	<ul style="list-style-type: none"> http://www.carina.rs http://www.upravacarina.rs www.customs.rs www.serbiancustoms.rs www.e-customs.rs 	Done	4/4	As of 2005, it is possible to submit documents electronically. A payment certificate must be obtained beforehand in a non-electronic form. With the certificate, the practice then continues electronically.
9. Single Window for one-time filing all required information on a foreign trade transaction	N/A	N/A	No activity taken	1/4	
10. Public procurement	Public Procurement Office	<ul style="list-style-type: none"> http://www.ujn.gov.rs http://portal.ujn.gov.rs 	In implementation process	1/4	The entire process can be carried out electronically.
11. Registry of mortgages of legal persons	National Mortgage Insurance Corporation	http://www.nkosk.co.rs	Done	4/5	Along with information on the conditions for obtaining a mortgage, there is an on-line mortgage calculator.
12. Submitting statistical data to State Statistical System (incl. harmonization with EUROSTAT requirements)	Statistical Office of Republika Serbia	http://webzrs.stat.gov.rs	Done	3/5	

8.5.3 eServices for Government availability

Table 31 Serbia, G2G services status

G2G	Provider(s)	Web	Status	Stage	Comments
1. Treasury and programmatic budgeting				5/5	
2. Support systems for implementation of EU funds				3/5	Not in the report. Same data.
3. Integrated control of borders				5/5	Not in the report. Exists, switch from red to green.

8.5.4 Availability of other eServices for Government

Table 32 Availability of other eServices for eGovernment in Serbia

	Name	Description
1	e-Scheduling	Schedule an appointment for identity card, passport or electronic certificates for digital signature issuance. G2C service type, level 2 for step-by-step service performed without communication with a civil servant.
2	Making a vehicle for testing	In cases when application for vehicle testing is submitted electronically, it must be accompanied by a set of documents. The citizen comes to the counter to collect the document. G2C service type, level 3 .
3	Registration extension	Certified vehicle technical services are allowed to issue or renew the registration stickers. If this is not included in the above mentioned service. Service type G2C, B2C, G2B, level 2
4	List of voters	Automatic update of the list of voters based on the information from the MIA, and data distribution through the entire application from the Ministry of Justice and the state administration to local authorities, G2G service type, level 2 .
5	Web service ID card	Data verification of identity cards by matching the data in MIA. The service is ready for use. There are many interested state authorities but they are not technically ready. Further, there are interested business users (banks, mobile operators) but there is no legal support. Due to its nature this service cannot be in this benchmarking system. Service types G2G, G2B, Level 2 .

8.5.5 G2G services concerned with learning, training or management

	Name of service	Brief description
1	AMRES eLearning MOODLE platform	Implementation of initial courses and functionality testing is in the progress. Interested professors and assistants must create a new account by filling the form for new course definition. AMRES moderator responsible for the course activation. elearning.amres.ac.rs/moodle The MOODLE platform AMRES is in initial implementation phase.
2	Strategic Management In Public Administration (eLearning)	The aim of the training in strategic management in public administration is to improve the knowledge and attitudes of civil servants at all levels (managers and operatives) about the importance and benefits of strategic management, in order to clearly define the present and future position of the state administration, course of action, method resource management and system control. www.gs.gov.rs/lat/index.html
3	eLearning	In preparation is the eLearning module for the training of civil servants and local police employees (Communal Police). The mission of the Communal Police eLearning module is to set and enforce training standards, to identify and meet the training needs of the Communal Police. www.drzavnauprava.gov.rs

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