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MINISTRY OF INNOVATION AND PUBLIC ADMINISTRATION

# CROSS-CUTTING STRATEGY “DIGITAL AGENDA OF ALBANIA 2015-2020”



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## ABBREVIATIONS LIST

<b>3G</b>	Third generation of mobile telephony networks
<b>AKCE</b>	National Authority for Electronic Certification
<b>AKEP</b>	Authority of Electronic and Postal Communications
<b>AKSHI</b>	National Agency for Information Society
<b>AKTI</b>	Research, Technology and Innovation Agency
<b>ALCIRT</b>	National Agency for Computer Security
<b>AMA</b>	Audio-visual Media Authority
<b>APP</b>	Public Procurement Agency
<b>ASHDHGJH</b>	State Authority for GeoSpatial Data
<b>ASHZHI</b>	Albanian Agency for Investments Development
<b>BB</b>	World Bank
<b>BE</b>	European Union
<b>bSEE</b>	Broadband South Eastern Europe
<b>DAP</b>	Department of Public Administration
<b>DBAL</b>	Electronic Database for Higher Education
<b>DPZHFNH</b>	Department of Development, Financing and Foreign Aid Programming
<b>e- Biznesi</b>	Electronic Business
<b>e-Government</b>	Electronic Governance
<b>eSEE</b>	Electronic South Eastern Europe
<b>e-Services</b>	Electronic Services
<b>EUROSTAT</b>	European Community Statistics Office
<b>GI</b>	Geographical Information
<b>GIS</b>	Geographical Information System
<b>GovNet</b>	Government Network
<b>IDI</b>	ICT Development Index
<b>INSTAT</b>	Institute of Statistics
<b>IoT</b>	Internet of Things
<b>IPB</b>	Index of basket prices in ICT
<b>IPR</b>	Intellectual Property Rights
<b>ISP</b>	Internet Service provider
<b>ITU</b>	International Telecommunications Union
<b>KDIMDP</b>	Information Rights and Privacy Protection Data Commissioner
<b>KE</b>	European Commission
<b>KM</b>	Council of Ministers
<b>MAS</b>	Ministry of Education and Sport
<b>MMSR</b>	Ministry of Social Welfare and Youth
<b>MSA</b>	Stabilization and Association Agreement
<b>MSH</b>	Ministry of Health
<b>MSHIAP</b>	Minister of State for Innovation and Public Administration
<b>MZHETS</b>	Ministry of Economic Development, Tourism, Trade and Enterprise
<b>MZHU</b>	Ministry of Urban Development
<b>NSDI</b>	National Infrastructure of Spatial Data
<b>OECD</b>	Organization for Economic Cooperation and Development
<b>OSHC</b>	Certification Service Provider
<b>PKI</b>	Public Key Infrastructures
<b>PQH</b>	Open Governance Partnership
<b>QKL</b>	National Licensing Center
<b>QKR</b>	National Registration Center
<b>QSUT</b>	University Hospital Center Tirana
<b>SEMD</b>	Court Management Electronic System
<b>SISP</b>	Public Health Information System
<b>SKZHI</b>	National Strategy for Development and Integration
<b>SMIP</b>	Pre-university Information Management System
<b>SPC</b>	Connectivity Public System
<b>TIK</b>	Information and Communication Technologies
<b>UN</b>	United Nations
<b>UNDP</b>	United Nations Development Programme
<b>VoIP</b>	Voice over IP
<b>xDSL</b>	Digital Data Transmission Technology

## PREFACE



For decades the Internet and digital technologies have been gradually transforming economy, the society and our daily lives in many ways. Today, however, we are still counting our first steps towards the digital revolution that will bring profound transformation to the way we work, produce, live, receive services and acquire knowledge. The range and consequences of these expected changes are considered worldwide to be the second most important revolution, following the industrial one that marked the nineteenth century, improving dramatically the life of a significant part of the world population. Establishing a never-existed-before global social context, it has made knowledge

accessible for everyone at a low cost, merely that of Internet access.

Albania, like Europe and the world, is embracing this digital revolution by creating new opportunities for citizens and business to benefit. In this context, the Government of Albanian has taken a strong commitment towards supporting and promoting digital initiatives as a powerful tool that leads to modernized governance, increased know-how for a society that is more open, and a sustainable economic development for its citizens. Our efforts in this regard intended to foster regional cooperation and are coordinated with the European legal and institutional framework in the process of Albania's integration into the European Union. Albania has adapted its legal framework on information society to comply with the EU Acquis Communautaire, while being constantly in touch with the dynamic developments of the Digital Single Market.

Albania already possesses powerful instruments to develop the digital market and e-services, including full coverage of the population with mobile phones and secure identity cards, as well as a state consolidated and interactive digital infrastructure.

Young in age, our population makes intensive use of mobile phones on the basis of a solid 3G-infrastructure, with the 4G service coverage having just started to spread. The secure identity cards provided to the Albanian citizens enable electronic identification and qualified electronic signatures that will help both the public and private sector develop reduced in time and cost-effective, services and processes.

Our government systems are interconnected through an up-to-date infrastructure designed with the support of the European Union and other donors, and further

boosted also by the Albanian government investments. The Government Data Centre, established in line with international standards, serves local and central institutions. The unique public service portal, on the other hand, is offering a growing number of e-services. We are investing in the digital education, both for equipment and curricula, as well as are encouraging youth initiatives towards innovation through incentivising programs.

Technology is the future of world economic development. Our mission is to use it as a tool to ensure good governance and create development opportunities for the next generation. By the Digital Agenda Strategy 2015-2020, we define our vision and will to become a member of the European Union.

Finally, while thanking all those who contributed to the development of this document, the donors who support our good-governance initiatives, I would like to invite everyone to work harder together for a successful delivery of the goals set in this document.

**Dr. MILENA HARITO**  
Minister of Innovation and Public Administration



# INTRODUCTION

Information and Communication Technologies (ICT) play a specific role in the development of a competitive economy based on knowledge and innovation. This technology allows for a higher life quality for the citizens, assists in facilitation and efficiency of business processes, as well as the increase of effectiveness and governance transformation. Development of the ICT sector is considered a horizontal policy since the effects and influence of its implementation is extended on all social and economic sectors of the country.

Priorities of ICT on a European level are contained in Europe 2020<sup>1</sup> - a strategy for a sustainable and comprehensive growth, which aims at the preparation of the EU economy for the challenges of the next decade. The Digital Agenda for Europe (DAE)<sup>2</sup>, is directly related to the field of Information and Communication Technology.

To draw an analogy with the European Union policies and priorities, the development of ICT and the digital agenda are part of the programme of the Albanian Government for 2013-2017. The programme views the ICT and e-services development as closely related to the economic and social development of the country. The government programme has determined that the government will work on three main dire-

ctions by setting out measurable objectives:

- First, in adding and promoting electronic services for citizens, businesses and administration. Increase of transparency and improvement of public administration services according to the Open Government Partnership initiative will remain a priority.
- Second, in using the ICT for the purposes of education in order to transcend the digital gap and to empower the youth. Policies will be oriented toward the improvement and expansion of human capacities in order to increase the number of consumers and to promote the development of e-service providers. Thus, the creation of youth jobs who can be employed in the Albanian and regional market and beyond that, will be encouraged.
- Third, in consolidating the digital infrastructure in the whole territory of the Republic of Albania, by strictly respecting the European principles of free and honest competition.

Currently, the ICT are one of the major moving forces of economy. A quarter of GDP's growth in the EU comes from the ICT sector. Investments in ICT and innovation until 2020 are expected to contribute in the producti-

<sup>1</sup> <http://eur-lex.Europa.eu/LexUriServ/LexUriServ.do?uri=COM:2010:2020:FIN:EN:PDF>

<sup>2</sup> A Digital Agenda for Europe, COM(2010)245, approved on 19.05.2010, EC, [http://www.digitalEvrope.org/DesktopModules/Bring2mind/DMX/Download.aspx?Command=Core\\_Download&entryID=157&PortalId=0&TabId=353](http://www.digitalEvrope.org/DesktopModules/Bring2mind/DMX/Download.aspx?Command=Core_Download&entryID=157&PortalId=0&TabId=353)



vity growth in the EU at a rate of 45%. In Albania, the electronic communication sector alone as part of ICT contributes in the GDP at a calculated rate of 5-6%.

ICT and digitalization processes support modernization as follows:

- **Economic processes:** through the improvement of production capacities based on the ICT, knowledge economy and establishments of start-ups, development of innovative and intelligent activities in cities and communities, production growth in agriculture, social enterprises, etc.
- **Social processes:** through the improvement of services provided to the community and that of the joint goods production, stimulation and facilitation of social innovation, joint establishment and utilization of resources and financing<sup>3</sup>, etc.
- **Institutional and administrative processes:** through the e-government services, digital identity, facilitation of inter-institutional interaction, simplification of institutional and administrative procedures, delivery of online auxiliary assistance, participation of citizens and businesses in the decision making process, etc.

ICT are seen as a tool that changes the everyday life, transforms the work organization, changes the existing markets by creating new opportunities and businesses, changes participation, cooperation and interaction models with the Public Administration, for an open and transparent governance. In this respect, the objectives are as follows:

- stimulation of the digitalization process in a systematic and sustainable manner in every field of life and economy;
- establishment of favorable conditions for the fruition of suitable infrastructures, such as, broadband networks, data center, in order to guarantee high

security levels for the information networks, integrate and computerize Public Administration and private sector services.

ICT and information society developments in Albania were based on the European model, just like the “eEurope”, “i2010” plans, etc. They are also compatible with the regional developments, as well as with the integration perspective of the European Union.

The main objective of the Digital Agenda for Europe is the establishment of sustainable economic and social benefits deriving from the development of a single digital market based on the utilization of the fast and ultra fast internet, and of the interacting applications. The Digital Agenda for Europe has identified seven priority dimensions (pillars) closely interrelated to each-other:

- ▶ A single digital market;
- ▶ Standards and interaction;
- ▶ Faith and Security;
- ▶ Access to Fast and Ultra Fast Internet;
- ▶ Research and Innovation;
- ▶ Improvement of Knowledge, Skills and Digital Inclusion;
- ▶ ICT benefits for the whole society;

In November 2013, the Southeastern European countries adopted the Regional Strategy for Southeastern Europe, SEE-2020<sup>4</sup>. The objectives for the development of the digital agenda under the chapter of the Digital Society, header “For a Smart Growth” have an important place in this strategic document. Albania’s Digital Agenda for 2015-2020, which is presented in this document, takes into consideration the objectives of the regional development specified in the Strategy SEE-2020 and supports the EU Digital Agenda. After an analysis of the current situation and developments, the document sets out the vision and development objectives for the period 2015-2020, as well as the main directions of policies that will be followed to fulfill these objectives.

<sup>3</sup> Known as “crowdsourcing” and “crowdfunding”

<sup>4</sup> <http://www.rcc.int/files/user/docs/SEE%202020%20Strategy%20Document%20-%20Draft%201.pdf>

CHAPTER I

# 1

# CURRENT CONDITIONS

The Cross-cutting Strategy for the Information Society 2008-2013, adopted through Decision No. 59 of the Council of Ministers, dated 21.01.2009, set out the main development directions and objectives in the field of information society during this period of time. This document replaced the first document of the ICT strategy adopted in 2003, whilst it also amended the main objectives for the ICT as specified in the document for the National Strategy for Development and Integration 2007-2013.

The Cross-cutting Strategy for the Information Society (ISSIS) was built in five main components. This was based on the ICT conditions and information society development in 2008, where a very low scale of internet, PC in the family and fixed telephony were identified, with the scale of mobile telephony at the level of 70%, a few developments of the electronic services mainly related to business, and an incomplete institutional and legal framework for the information society. These components are as follows:

- ▶ Development of legal and institutional framework;
- ▶ Development of ICT infrastructure and the facilitation of cheap and fast internet;
- ▶ Development of e-governance;
- ▶ Education related to ICT knowledge;
- ▶ Promotion of e-business.

ISSIS was also accompanied by an action plan which was reviewed in 2011. The action plan for the period 2011-2013 included activities related to the development of ICT, e-governance and the information society in general. Part of the activities of this plan were fulfilled, whilst the rest of them are still ongoing. A number of activities have to be readdressed and focused toward the fruition of the government programme for the consolidated development of the ICT infrastructure, increase of electronic services as well as the increase of utilization of these services by the citizens, business as well as the public administration itself.

## DEVELOPMENT OF THE LEGAL AND INSTITUTIONAL FRAMEWORK

During the period of 2008-2013, a series of laws were drafted and adopted in compliance with the European Union standards. The efforts of the Albanian institutions during this period were focused into the development of the necessary legal and institutional framework in order to secure an efficient environment for communicating with the business, establishment and maintenance of the advanced electronic communication for the needs of the public administration and electronic governance, legal amendments for the management of the spectrum on the

basis of the principle of technological neutrality in order to promote the development of the broadband infrastructure, development and delivery of electronic services for businesses as well as individuals within the scope of electronic governance.

The Albanian legislation in force related to the electronic communications, information society and press, intends to:

- Eliminate the obstacles for the efficient functioning of the internal market in the networks and services of electronic communications;
- Promote competition in the internal market;
- Protect the consumer, etc.

The Stabilization Agreement, in its Articles 102-104, foresees the obligation of approximation of internal legislation with that of the *acquis* of the EU, as well as the approximation with the EU policies. Also, the SAA requires a special attention in relation to respecting the rights of intellectual property in programme transmission through the land-line, satellite and cable networks, etc.

A number of important laws have been drafted and adopted in line with the SAA engagements, such as:

- Law No. 9918, dated 19.05.2008, "On the Electronic Communications in the Republic of Albania", as amended by Law No. 102/2012 in compliance with the latest developments of the *acquis* of the EU;
- Law No. 9880, dated 25.2.2008, "On the Electronic Signature";
- Law No. 10273, dated 29.4.2010, "On the Electronic Document";
- Law No. 10128, dated 11.5.2009, "On the Electronic Trade", as amended by Law No. 135/2013;
- Law No. 9887, dated 10.3.2010, "On the Protection of Personal Data", as amended by Law No. 48/2012 and Law No. 120/2014;

- Law No. 10325, dated 23.9.2010, "On the Basis of State Data";
- Law No. 9380, dated 28.4.2005, "On the Copyright and other Related Rights";
- Law No. 72, dated 28.6.2012, "On the Organisation and Functioning of the National Geospatial Infrastructure in the Republic of Albania";
- Law No. 146/2014 "On the Public Notification and Consultation";
- Law No. 119/2014 "On the Right of Information";

Albania has harmonized the legislation on the cyber crime with the European Council Convention on Cyber Crime (ETS No. 185). In 2004, Albania ratified "The Additional Protocol of the Cyber Crime Convention, for the penalization of racial and xenophobic natured acts carried out via computer systems" (ETS No. 189) and in 2008 there were amendments of the Criminal Code to also include provisions of cyber crime.

The transposition of Directive 2001/29/EC related to the Intellectual Property in the information society is still ongoing.

A number of sub-legal acts mainly related to e-governance have also been adopted, such as:

- DCM No. 248, dated 27.4.2007<sup>5</sup>, as amended, for the establishment and functioning of NAIS;
- DCM No. 945, dated 2.11.2012, "On the Adoption of Regulation "Administration of the Basis System of State Data";
- DCM No. 961, dated 24.11.2010, "On the Establishment of the Regulatory Coordination Authority of the basis of state data";
- DCM No. 357, dated 24.2.2013, "On the Adoption of Regulation for the Management of Electronic Document in the Republic of Albania";
- DCM No. 303, dated 31.3.2011, "On the Establishment of Information and

<sup>5</sup>DCM No. 703, dated 29.10.2014 has superseded DCM No. 248, dated 27.4.2007

Communication Technological Units at the line ministry and subordinate institutions”;

- DCM No. 778, dated 7.11.2012, “On the Approval of General, Minimal Standards of the ICTU Personnel for the Structural Organization of ICT”;
- DCM No. 710, dated 21.8.2013, “On the Establishment and Functioning of Systems for the Safeguarding of Information, Continuity of Work and Service Level Agreements”;
- DCM No. 734, dated 28.8.2013, “On the Establishment of the Unique System of Registration, Authentication and Identification of Users in Retriving Public Services from Electronic Systems”.
- Directive No. 1, dated 31.12.2012, “On the verification of the copy letter of the electronic document in public institutions”;
- Directive No. 2, dated 2.9.2013, “On Standartization of Drafting the TORs for the ICT projects in public administration”.

***Currently, there is a rich legal framework that directly and indirectly regulates ICT and information society. However, the ammendment and improvement of ICT, e-governance and information society legislation is necessary in order to respond to the dynamic development of this field and the establishment of a single digital market integrated with that of the EU and beyond;***

## **DEVELOPMENT OF ICT INFRASTRUCTURE AND THE INTERNET**

With the liberalization of the telecommunications market and after the privatization of the state owned companies, the development of ICT infrastructure was seen as closely related to private investments and stimulation of policies for private investments. The adoption of Law No. 9918, dated 19.05.2008, “On the Electronic Communications in the Republic of Albania”, marked

an important step toward the full liberalization of telecommunications market. The law specifically eliminated the entry barriers in the market for the entrepreneurs, as well as it facilitated:

- the right of each entrepreneur to deliver electronic communication networks and services, on the basis of a general authorization as well as individual ones in the case of utilization of limited resources (frequencies and numbers);
- a suitable regulatory environment, which respects the principle of technological impartiality;
- transferral of rights to utilize the limited resources through transparent, non-discriminatory and proportional procedures.

Competition in the electronic communications market has increased and in 2014 there were four mobile telephony operators in the electronic communications market, 79 alternative fixed telephony operators and 131 providers of internet services, ISP. Three operators of the mobile telephony provided broadband mobile services based on the 3G technology.

In the first half of 2014, published data by AEPC related to the market indicated the following figures: 3,473,361 active users of mobile telephony; 1,058,354 users of broadband internet from the mobile phones, while the number of fixed telephony customers decreased by reaching 255,358 from 281200 at the end of 2013. The number of fixed broadband services was 188,668.

The scale of utilization of electronic communications, such as the mobile telephony, internet, etc has increased annually. Different observations indicate that utilization of the smart, tablets and other equipment has increased. Utilization of the social networks in the country is wider. There is also an increasing trend in relation to the traffic of data communications and a decrease of the telephone traffic (voice). This is a global tendency which is also reflected in our country.

Internet penetration according to the pub-

lished data by the ITU for Albania is evaluated as over 60%, broadband penetration has increased, especially in the broadband mobile segment. At the end of 2013, mobile broadband penetration based on all kinds of equipment, including the smartphone and tablet reached 37%. Also, the tariffs for accessing the Internet have decreased several times by making this service more affordable. The speed for providing the internet service has increased. The most utilized speed increased from 256kbit/s in 2008-2009 to 2-4Mbit/s. Based on LSMS<sup>6</sup> data for 2012 and LSMS data for 2008, the number of families owning a PC increased by 4-5 times. A more general overview on the progress of the main indicators of the electronic communications sector is provided in Appendix 2.

Despite the progress in the ICT field, Albania is still far away from the average level of not just the EU countries, but the regional ones as well in relation to the access to the infrastructure and the broadband services.

## **NATIONAL PLAN FOR THE DEVELOPMENT OF BROADBAND**

The National Plan for the development of broadband is a strategic document for the development of the broadband infrastructure and services, adopted by way of DCM No. 468, dated 30.5.2013. Broadband National Plan is an important development because it provides a clear direction of what the government, public administration and the regulator such as AEPC are going to do for the period of 2013-2020. This plan offers a vision of how access to the internet will develop by being utilized to the maximum by the Albanian families, even in the most remote areas.

The Action Plan for the Broadband Development determines as a vision the develop-

ment of broadband infrastructure and services in the whole country in order to gain access to the electronic services in different fields, such as, health (e-health), education (e-education), commerce (e-commerce), government services (e-government), by stimulating the economic and social development of the country.

Broadband services facilitate fast and complete information for the individuals and businesses, support a better governance, and according to the ITU<sup>7</sup> data, the increase of broadband penetration level by 10% brings in an economic growth of the GDP by 1.38% in countries with a low and average economic level.

In the framework of the implementation of the Broadband National Plan 2013-2020, a few activities intending to fulfill the set objectives related to the regulatory and technical issues have been undertaken. These activities include the public consultations by AEPC related to the spectrum issue, the national conference on the broadband development by emphasizing the close public-private cooperation and the need for investments, the establishment of the Regional Development Fund to support the projects of rural and regional infrastructure development, ICT, e-governance, e-learning, etc.

Transferral of rights of frequency utilization, which represent a limited national resource of a considerable value in the economy of a country, is based on the principle of technological neutrality, by giving the necessary space to the more advanced broadband mobile communications technologies LTE/4G to be applied in their best parameters.

An important role in this respect is played by the release of the spectrum called the Digital Divident, currently used for audio-visual broadcasting. The digital divident will be placed at the disposal of the broadband services of the mobile communications, thus directly influencing the increase of the broadband access. Government efforts are

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<sup>6</sup> Observation for the Subsistence Level carried out by INSTAT

<sup>7</sup> [http://www.itu.int/ITU-D/treg/broadband/ITU-BB-Reports\\_Impact-of-Broadband-on-the-Economy.pdf](http://www.itu.int/ITU-D/treg/broadband/ITU-BB-Reports_Impact-of-Broadband-on-the-Economy.pdf)

focused into the timely implementation of the “Strategy on the transferral of the analogue broadcasts into numerical ones”. Based on Law No. 97/2013, “On the Audio-Visual Media”, the Authority of the Audio-Visual Media played an important role in the release of the Digital Divident and its utilization for the purposes of the broadband services.

***ICT infrastructure development for fast and super fast broadband requires the establishment of the necessary resources for the radio spectrum, as a limited natural resource. Thus, there is a need to draft a clear spectrum policy to stimulate the longterm investments in the NGN networks. The perspective for development of the electronic communications sector, the developments of the broadband mobile networks of 4G generation, require a harmonized integrated development of the electronic communications infrastructure. Joint investments, joint utilizations and addressing the right of transferral for the electronic communications networks remain issues that require a speedy solution. The wide development of electronic services in general and the increase of demand for them, also require the development of optic fibre cable infrastructure in the whole of the country.***

## **DEVELOPMENT OF E-GOVERNANCE AND INFORMATION SOCIETY**

E-governance developments for the period of 2008-2013, were focused into the central level and mainly in the government-business public service (G2B) and G2G. The establishment of the National Licensing Center, National Registration Center, the expansion of GovNET (G2G) infrastructure, the establishment of infrastructure for interaction, e-tax, e-procurement, e-customs, e-patents, e-fines services, Civil State National Register, issuance of biometric document, etc are some of the main developments.

The National Agency for the Information Society (NAIS) was established in 2007, as a specialized agency for the e-governance and information society. During the period of 2008-2014 work was carried out to expand the coverage of GovNET, to increase the number of institutions connected to the GovNET (from 18 institutions in 2008 to 211 by the end of 2014), to create the e-Albania. al portal, to develop the implementation of e-acts system, to establish the governmental data center, to establish the infrastructure for interaction of systems (ESB), to create the infrastructure for PKI and to deliver secure services, to develop the “cloud computing” infrastructure, etc.

Through the governmental data centre, NAIS offers a series of services concentrated in the 211 public institutions. This center was established near the NAIS, according to the contemporary standards and facilitates the centralization and integration of all of the government online services. 15 institutions were connected to the government gateway during 2014.

**In the health system:** There have been a series of important interventions and investments in the field of Communication and Information Technology, such as, “*The Project of Albanian Telemedicine*”, implemented since 2012; *The Informative Inoculation System*, *The Electronic System for Reimbursed Prescriptions*, *The Electronic System of Hospital Costs*, *The Electronic Register of Pharmaceutical Warehouses* and *The Electronic Screening System*.

**In the field of public finances:** The System of Debt Management and Financial Analysis, The Midterm Budgetary Programme and the Government Financial Computer System are functioning at the Ministry of Finance. Within the development of infrastructure improvement systems, the Ministry of Finance has also facilitated, among other things, the investment for “Improving the Central infrastructure of the Treasury System”.

The tax directorate has established the Integrated Tax System, the Electronic Declaration Database and the Database for the

System of Fiscal Equipment. E-tax services initially introduced in 2008 are improving and being enriched with new services. The Automated System of Customs Data, as well as the ASYCUDA System are functioning in the customs offices.

**In the justice field:** A few important projects were carried out, such as, the establishment of the Albanian Notary Register, The Electronic Case Management System for Judicial Execution - ALBIS, The Electronic Court Cases Registration System - ICMIS, The Online Court Status Certificate System. The Office for Registration of Immovable Property has established a computerized system for the registration of immovable property.

**In the business field:** The establishment of the National Registration Center and that of the National Licensing Center were amongst the initial experiences toward delivering services to businesses through the one stop shop centers. The Electronic Business Register was created and published at [www.qkr.gov.al](http://www.qkr.gov.al). Registration of a business went through an easier and time reducing procedure. However, business registration and application at the National Licensing Center still cannot be fully completed online. The Project of Online Tracking was implemented during 2013-2014 at the NRC and NLC. The fruition of this project provided the opportunity for the different subjects who apply for permits/licences at the NLC or NRC to follow the progress of the application online during all of the stages at the respective NRC ([www.qkr.gov.al](http://www.qkr.gov.al)) and NLC ([www.qkl.gov.al](http://www.qkl.gov.al)) websites.

These developments have had their impact in improving the general index of readiness for the electronic governance<sup>8</sup>. In 2014, Albania was ranked in the 84th place out of 190 countries worldwide according to the Index of Electronic Governance in comparison with the 85th place out of 182 countries back in 2008. In the mean time the index for offering online services (an integral part

of the Index for Electronic Governance) for Albania grew from 0.3913 in 2008, to 0.4488 in 2014. A detailed information on the progress of indicators for the ICT Development Index, related to ICT development according to the ITU publications, e-governance and e-participation indicator according to the UN reports, is provided in Appendix 3.

***Albania falls into the average level worldwide in relation to e-governance, but the situation in Albania according to the UNPAN<sup>9</sup> reports, remains on lower levels in the regional ranking: Greece is ranked on the 34th place; Croatia is ranked on the 47th place, Bulgaria is ranked on the 73rd place, Serbia is ranked on the 69th place, etc.***

## ICT IN EDUCATION

ICT in education constituted one of the main directions set out in ISSIS 2008-2013. There have been a few developments in this field, but a lot more remains to be done. Currently, there are 1496 computer laboratories in the pre-university education. The internet network has been installed in schools by allowing students and teachers to utilize different information sources, as well as specifically to assist in their work of curricular projects. Each school has a dedicated broadband connection, but this remains confined only in the computer laboratories. In 2006, the ICT as a study subject was taught only in the high school level, whilst in 2014 this was also disseminated in the basic education level. It continues on Grade 7 and is taught until Grade 12.

Schools of basic public education report 15731 PC, out of which only 11331 are functional, with 4400 PC being non-functional. Schools report 1631 laptops, out of which 432 are non-functional.

Pre-University Information Management System, which would contain the basis of

<sup>8</sup>The e-Government is based on three main dimensions: (i) availability of online services, (ii) telecommunications infrastructure, and (iii) human capacity

<sup>9</sup> [http://unpan3.un.org/egovkb/Portals/egovkb/Documents/un/2014-Survey/E-Gov\\_Complete\\_Survey-2014.pdf](http://unpan3.un.org/egovkb/Portals/egovkb/Documents/un/2014-Survey/E-Gov_Complete_Survey-2014.pdf)



the student data together with their identification numbers and grades on the school certificates, as well as the basis of teacher data containing information pertaining to their skills and knowledge, is currently **non-functional**.

The Electronic Higher Education Database, which includes the National Register of Students, albeit existing, presents many issues. The Financial Module which manages the finances and budget of the educational institutions in the central and local level, functions only **partially** in a few Regional Educational Directorates.

Investments in the direction of development of human resources in utilization of these systems have been extremely **reduced** and this has resulted in a very limited utilization of them.

In 2012, the piloting scheme of the application for the Online System of the State Matura Test using form A2, distribution of the winners as per the Merit-Preference principle, as well as the online registration of students at the universities in both stages of the first round were completed successfully.

The limit values of students for the distribution of computer laboratories, respectively 5 desktops/students and one for the teacher; 10 desktops/students and one for the teacher; as well as 15 desktops/students and one for the teacher have been up to 300 students, from 300 to 600 students and over 600 students. The equipment according to the above configurations is connected through internal cable networks with Switch, without any management programme, or application for subject content. Amongst the ICT issues in education, it is worth mentioning the following:

- the ratio of computer use per student, varies from school to school; approximately, this ratio is 1:27 and in some cases even lower;
- students may obtain information only in the computer laboratories, but not in the other school locations, i.e. the library;
- in more than 1/3 of schools, students

have limited opportunity in obtaining information online;

- there is a complete lack of digital content in the mother-tongue; only internet content that varies from the used source is used;
- there is a risk of exposure towards inappropriate content;
- there is no awareness for children in internet utilization for phenomenon, such as, mocking, cyberbullying or grooming.

***Despite the investments already carried out, utilization of ICT in the education institutions is limited. There is a need for more investments and attention for the ICT in education in order to provide a society based on knowledge and to widely increase the skills of ICT utilization.***

## SCIENTIFIC RESEARCH AND INNOVATION

Policies undertaken in the field of scientific research during the period of 2009-2013, intended reforming of this important sector for the economy and development of the country. Implementation of this reform in the science system, as noted, resulted in a few modest achievements with the main aim to integrate higher education with science.

The Agency of Research, Technology and innovation (ARTI) was established during this period. The agency made a few efforts to increase participation in scientific research projects in the EU and international programmes. The Albanian Government set up funds from the state budget for 550 new vacancies and supported the best PHD students through the Brain Gain and the Excellency Fund Programmes.

One of the main indicators of the lack of progress in the field of scientific research is the extreme low number of inclusion of the Albanian research institutions in the international scientific research programmes and benefits from them. This comes as a result of the lack of the necessary institutional and

human capacities.

There were 245 applications with 34 won projects for the Seven Framework Programme FP7, which expressed in percentage is a total of 13.87%. This is a very low result in comparison with the regional countries. The above situation highlights the need for further efforts in stimulating applications by Albanian researchers in the EU scientific research programmes.

An agreement between the European Union and the Republic of Albania on the participation in the Horizon Framework 2020 – Programme for Research and Innovation was signed in July 2014.

Future challenges are related to the new reforms that the government is undertaking in the higher education and scientific research and innovation field, intending to: (i) expand and increase the quality of the scientific research and innovation in Albania based on the OECD indicators; (ii) actively increase the inclusion of the scientific research institutions in the European Research Area (ERA), (iii) improve the quality and orientation of the scientific research toward the market needs through the strengthening of ties of national and international programmes with the business.

## SECURE INFORMATION SOCIETY

### SECURE COMMUNICATIONS, ELECTRONIC CERTIFICATION

The National Authority on Electronic Certification has been functioning since 2009. This institution is responsible for overseeing the implementation of the law, other sub-legal acts as well as standards and technical requirements that must be met by the Provider of the Certification Service, which issues electronic qualified certificates.

Currently, there are two CSPs registered at the ANEC:

-The National Agency for Information Society (NAIS), which offers its service for the

employees of the public administration. This service is free of charge for these employees.

- ALEAT SHPK, which offers its service for the state and private sectors, pursuant to the concession contract this institution has with the Ministry of Internal Affairs. Based on the digitalization of services provided to the citizens, efforts are being made for the electronic services, such as, the electronic authentication and signature, which allows for the user's identity verification and that of the signed document, in order to facilitate their utilization in distance and to guarantee the safety in relation to the required standards in the field.

A new law on the Electronic Signature and Identification is on its way. This new law intends to transpose the European Regulation No. 910/2014 of the European Parliament and Council, dated 23 June 2014, "On the Electronic Identification and the Credibility Services related to Electronic Transactions in the Internal Market" and repeal Directive 1999/93/EC.

## ON COMPUTER SECURITY

Apart from the amendments of the Criminal Code in 2008 and the inclusion of provisions for the cyber crime pursuant to the European Council Convention (CoE 185), the sector for the cyber crime was established within the State Police and ALCIRT (National Agency for Computer Security) in 2011.

Currently, the website of the State Police offers the service of online reporting of computer crime by reporting the types of violations or cyber crime in [http://www.asp.gov.al/denonco\\_kk/raportim.php](http://www.asp.gov.al/denonco_kk/raportim.php). It is necessary to have more information and awareness by the users of this website and the cyber crime.

A draft of the document related to computer security expected to be adopted soon, is in process.

***The increase of using ICTs technology presents the need for strengthening the ca-***

***pacities of inter-institutional cooperation in pursuing and preventing the dangers deriving from cyber crime. Closer cooperation on the regional and global levels as well as the improvement of legislation for the security of networks and information in line with the EU practices is necessary.***

## SAFER INTERNET PRACTICES

Albania has adopted an action plan for the protection of children's rights (DCM No. 182/2012). This document also foresees a few activities for the online protection of children. Pursuant to this plan, in February 2013 the largest electronic communications companies in Albania and the IT association company, AITA signed the Code of Conduct, as a self-regulatory practise. Upon the signing of this code the companies engaged in delivering technical filtration techniques and parental advice for the protection of children and young people from the illegal and harmful electronic communications.

In the last few years Albania has periodically carried out awareness activities for a safer internet, as well as activities on the international day of Safer Internet.

***Raising the awareness for parental control, protection of children from the illegal and harmful internet and online media content requires more attention and the engagement of different institutions and actors, such as, the private sector, NGOs, media, schools and parent community.***

Albania is part of the Global Alliance against the Sexual Exploitation of Children in the Internet, established on December 5, 2012. The alliance countries have agreed to work in achieving four objectives:

- Increase the efforts for the identification of victims and ensuring that they will receive the necessary assistance, support and protection;
- Increase the efforts in investigating

the sexual exploitation cases against children on the internet and identify and prosecute persons violating the law;

- Increase the awareness of children, parents, educators and the community in general in relation to the dangers;
- Reduce the availability of child pornography on the internet and re-victimization of children.

## OPEN GOVERNANCE THROUGH ICT

The Open Governance Partnership (PQH-OGP) is one of the most important instruments to stimulate government transparency at the global level, to increase civic participation in public life and to use the new technologies for the improvement of administrative efficiency and fighting corruption. The first OGP Action Plan for 2011-2013 was mainly focused in the increase of efficiency for the management of public resource services, by implementing measures in the field of fiscal transparency, access to information, utilization of information technology (IT) and participation of citizens in the process of development of public policies.

Work was carried out during 2014 to draft a second OGP action plan. The drafting of this plan was carried out through a long consultation process with a wide participation of the interest groups. The second action plan entered into force in July 2014. Pursuing the government programme and the OGP plan, the document of the policy for the implementation of the open data was drafted and adopted by way of the Decision of the Council of Ministers No. 147, dated 18.2.2015.

The portal for the transparency of budgetary expenses as a special feature in the website of the Ministry of Finance<sup>10</sup> was established pursuant to the engagements for an open governance.

<sup>10</sup> <http://www.financa.gov.al/al/raportime/thesari/pagesa-te-kryera-nga-drejtoria-e-pergjithshme-e-sherbimeve-financiare;>

All of the official ministerial websites, as well as the website of the Prime Minister's Office contain a feature on reporting corruption and receiving civic opinion related to different issues.

The government plan for 2013 – 2017, foresees the "Fulfillment of a wide consultation process with the civil society regarding the new legal initiatives, as well as their monitoring and evaluation". Pursuant to this programme and engagements in the OGP, two laws were adopted, the "Law for Public Notification and Consultation" and the "Law on the Right of Information".

## INFRASTRUCTURE FOR GEOSPATIAL INFORMATION

The Geographical Information (GI) and the geo spatial data service are a necessary part of the information society and e-Government. ASIG was established pursuant to Law No. 72/2012. The basis for the establishment of the national geo-portal, were laid during 2014. The establishment of the National Geo-Portal is a new innovation of specific importance in respect of the online service, cartography information and geo-information together with the database. The establishment of this service for the very first time in Albania, makes the unification of information possible based on the 'INSPIRE'-standards, avoids the overlapping related to property relations, eliminates communication bureaucracy and facilitates utilization of cartography information.

## PREPARATION OF LOCAL GOVERNANCE FOR E-GOVERNMENT

ISSIS strategy for 2008-2013, was focused in the development of e-governance at

the central level. This strategy related a few general objectives for the e-governance at the local level accompanied by some activities in the action plan intending to raise the awareness regarding the e-governance. Periodical observations on the e-governance at the local government carried out by NAIS indicate that there are town halls (like Tirana, Durres, Korca, Elbasan, Shkodra, Lezha, etc.) and a few municipalities (like the municipalities of Shkodra and Lezha districts) that have developed e-governance practices, such as providing information related to services, e-participation, etc.

The use of ICT by these Local Units improved the administrative processes, facilitated access to information as well as improved the quality of services in a number of fields of the local government activities, such as, taxes, budgets, territory planning and management, inspection, emergencies, inclusion of citizens and business in decision-making and the more advanced models of establishing the one-stop-shops, etc.

***In the mean time there are a large number of municipalities and city halls that are still far away from the ICT e-government utilization.*** Despite the efforts, only in very few cases the LG strategic documents cite objectives, programmes and projects related to e-local governance (i.e. Lezha<sup>11</sup>), which indicates lack of a long-term vision in the field of e-governance of the local government. The limited presence of the LGUs in the web, according to the approved standards, is a sign of a low scale development of the sector.

***The unified and harmonized e-governance development, both on the central and local level, as well as the support for the development of the LG e-governance is necessary to expand the benefits of ICT utilization in all layers and levels.***

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<sup>11</sup> Strategic Plan of Lezha City Hall, 2013-2030

## CHALLENGES FOR THE DIGITAL AGENDA 2015-2020

Conclusions based on the current situation indicate that there is still a need for the following:

- Legal and regulatory amendments and improvements that would respond to the dynamic development of this field and the establishment of the single digital market ready to become part of the regional and global developments;
- ICT infrastructure developments which should be oriented toward the growth and expansion of the fast and super fast broadband in the whole territory of the country;
- Increase of Internet penetration in the family and business in the framework of reducing the digital gap;
- Increase of numbers of online services that facilitate their utilization partially or fully in electronic ways ranging from information to a complete online transaction;
- Development of the proper ways of providing public services through the online contact points and one-stop-shops;
- Implementation of the interaction framework of systems and services;
- Standardization of ICT as a guarantee for an integrated and sustainable development of information society extended in all sectors;
- Stimulation of the private sector in relation to development of applications in the interest and response to the needs of citizens and businesses;
- Development of supporting infrastructure in the public administration, both at the central and local level, intending to advance both systems and services;
- Increase of knowledge capacities of ICT for the administration and other users, i.e. citizens and businesses;
- Inter-institutional cooperation even at the regional and global level for a safer Internet and information society;

CHAPTER II

# 2

# VISION, POLICIES AND STRATEGIC PRIORITIES

## VISION

The Cross-cutting “Digital Agenda of Albania 2015-2020” aims toward the more coordinated and efficient direction of investments in the sector of Information Technologies and Communications, with the emphasis of providing quality services for the citizens and the improvement of livelihood. These policies are harmonized with the sectorial strategy and they are also approximated with European Agenda 2020, as well as with the Regional Strategy SEE-2020.

<i>Vision</i>
A society based in knowledge and information, through the consolidation of digital infrastructure in the whole territory of the Republic of Albania; improvement of the quality of online public services and increase of governance transparency

The major priorities of this strategy are: the improvement of national infrastructure of information and communication technology; the development of electronic governance and the establishment of a multi-purpose Cadaster. These are long-term priorities foreseen in the NSDI and extended in time for the 2015-2020 period.

1. Improvement of national infrastructure of the information and communication technologies, as the main pillar of a fast development of the information society and the growth of electronic readiness.
  - Increase of access with a high transmission speed, of at least 100 Mbps in 50% of families, and at least, 30 Mbps for the whole population;
  - Growth of population percentage that utilizes the Internet from 50 % at the end of 2013 to 90% by the end of 2020;
  - Number of businesses using ICT for e-commerce purposes should be at the rate of 50%;
  - All schools with access to broadband Internet;
2. Development of electronic governance and providing of interactive public services through the Internet for the citizens and businesses.
  - Delivery of interactive public services for individuals and businesses from 30% in 2013 to 50 % by the end of 2017;
  - Increase of electronic governance, ensuring a change of up to 10 places until 2020. (Growth of the electronic governance readiness index according to UNPAN<sup>12</sup>, from 0.5046 at the end of 2013 to 0.7 by the end of 2017);

<sup>16</sup> United Nations Public Administration Network.

- Simplification of administrative procedures and reorganization of processes;
  - Establishment of a services model that puts the citizen at the centre through the creation of a unique till for public services, as well as the improvement of access to services for the citizens and the increase of transparency for the services of each public institution, mainly through the utilization of information and communication technology;
  - Basic systems interrelated at the rate of 100%;
  - Basic vital services for citizens and businesses provided electronically, both at the central and local level;
  - 30-50% growth of the scale of users of electronic services and e-governance;
3. Implementation of the national policy for the Establishment of National Geospatial Data Infrastructure (NSDI) and that of the Multi-Purpose Cadaster Office through the following:
- Creation of the Gravimetric geo-portal and network;
  - Establishment of a Multi-Purpose Cadaster Office;
  - Functioning and certification of the active network ALBPOS, as well as that of the passive network ALBPOS;
  - Establishment of the levelling network, Class I and II, and acquisition of European certifications;
  - Maintenance and update of networks pursuant to the European standards;

## MAIN PRINCIPLES FOR THE DEVELOPMENT OF THE DIGITAL AGENDA

Delivering Services to the Citizens and Businesses will be the main engine of this strategy. Amongst other things, this strategy will be based on the **following principles**, which

determine the process of development for the information society in Albania:

- ▶ **People come first.** Each programme, project and activity must respect the citizens' rights, by also including the privacy right.
- ▶ **Individual empowerment.** Individual empowerment as a result of the transforming power of the digital technologies in all our economy and society. The growth of utilization of digital technologies will also result in the growth of individual empowerment.
- ▶ **Access to services delivered by the Government.** The Government will invest in systems, infrastructure and services that intend to reduce corruption, increase transparency and increase interaction with citizens and businesses.
- ▶ **Full compliance with the European Union Policies.** The establishment of the information society in Albania should be in compliance with the *aquis* of the European Union. It should also be in compliance with the International Telecommunications Union (ITU) policies, Council of Europe policies and other international and regional organisations policies while taking into account the level of national development and country's situation.
- ▶ **National integration of ICT resources.** Improvement of efficiency of ICT public investments based on the integration of data for complete suitability between systems. Compliance with the EU standards for a single digital market.
- ▶ **Transborder and regional cooperation and beyond.** This cooperation will be focused in a few fields, such as, research and innovation, information and communication technologies competitiveness of small and average enterprises, social inclusion, harmonization of the online digital protection, etc, pursuant to Pillar 1 of the European Digital Agenda 2020 - Single Digital Market<sup>13</sup>.

<sup>13</sup> <http://ec.europa.eu/digital-agenda/en/our-goals/pillar-i-digital-single-market#Article>



- ▶ **CG-LG Cooperation.** The Government will draft supporting and regulatory policies for the digitalization of local governance services, as well as will coordinate the inter-operability for the joint and delegated e-services.
- ▶ **Trust and security of information networks.** The Government will implement a system of norms, sanctions and resources in order to guarantee the data and ICT systems security. All the efforts undertaken in the field of information society must follow the agreed principles and security standards in order not to create additional conditions that may compromise or violate the personal data or those of a third party. These efforts include the identification and authentication, data protection, protection from cyber crime, protection of intellectual data, consumer protection, etc.
- ▶ **Effectiveness and efficiency.** Development of the information society should be implemented through projects that support the goals and priorities of state policies, as determined by the strategy at the national, regional and local level through the more efficient and effective use of limited resources.
- ▶ **Quality of digital content.** Each activity, project or initiative that leads to the establishment of the digital content, especially those that are of a national

character, will be supported and structured as part of the national digital inheritance.

- ▶ **Private-Public Cooperation – Partnership (PPP).** In its activities, the Government will cooperate, based on the knowledge, skills and flexibility, with businesses, universities, non-profitable organizations and NGOs in Albania, for an efficient development of the information society in the country.
- ▶ **Technological Neutrality.** The principle of technological neutrality in the regulatory activities related to the development of electronic communications will be applied in order to protect the interest of citizens and consumers, as well as to ensure an open Internet.

The Digital Agenda 2015-2020 expands its effects in all of the economic and social sectors of the country. This is based on the nature of ICT, as a technology of a general interest and also because of the increased influence of its utilization.

Development of information society in Albania constitutes a joint objective of all actors, such as, the public sector, the academic world, NOGs, civil society and private organizations. The successful completion of this objective is related to the proper coordination and harmonization of developments among all sectors and actors.

CHAPTER III

# 3

# POLICY OBJECTIVES AND MAJOR PRODUCTS

ISSDA strategy 2015-2020, is part of the strategic framework drafted by the Albanian Government that covers all the development fields of society and governance. In order to have a society based on knowledge and information, a sustainable economic and social development, a consolidation of the digital infrastructure in the whole territory of the Republic of Albania, is needed in order to develop these fields. At the same time, the strategy will strictly respect the European principles of a free and honest competition, by improving the quality of public services and increasing governance transparency.

The objectives and foreseen activities to be carried out according to the determined fields have been specified as follows:

## **STRATEGIC PRIORITY 1: POLICIES FOR THE DEVELOPMENT OF ELECTRONIC GOVERNANCE AND DELIVERY OF INTERACTIVE PUBLIC SERVICES FOR CITIZENS AND BUSINESSES**

Policies of developing electronic governance aim at providing digital quality services for citizens. This new approach will increase the opportunity for a better performance in the work of CG and LG institutions as a result of the joint efforts for more sustainable, long-term and safer solutions. The final goal is

work coordination and cooperation among the actors in the ICT field in the delivery of digital services.

### **Objective 1**

*Increase and promote the electronic services and e-services by 30% for citizens and businesses. Increase of transparency and improvement of public administration services according to the Open Government Partnership initiative will remain a priority. Taking into consideration the above objective all the decisions for ICT budgetary investments should be in line with the mid-term government budgetary programmes which serve also as a tool for the application of priorities of the Albanian Government. Achievement of this objective will be aimed through the following activities:*

➤ *Improvement of public services;*

Improvement of public services includes the establishment of front and back-office systems, receipt of documents issued by the Albanian state in the central and local level, applications and claims, financial actions, etc intending the delivery of these services through unique centers for the integrated services, like the one stop shops.

➤ *Improvement of government efficiency in the administration of income and expenses;*

This section intends to improve the existing systems and establish new ICT systems that include the following ones, such as, taxation, customs, contract and concession management, social assistance and disabled persons programmes, administration and management of state properties, administration of agricultural, health, education, justice, LG expenses, etc.

- *Assistance of ICT systems in the successful application of the administrative, territorial and justice reforms;*

Implementation of the large reforms undertaken by the Albanian Government, such as, the territorial, administrative and justice reforms, clearly require the support of the ICT systems, as auxiliary elements of their fruition. Taking into consideration this goal the objective aims at the establishment and operation of the following: the Address System and its connection with the National Population Register, ICT systems that assist in increasing the performance of LG, improvement of ICT systems serving the courts, public notary and bailiffs offices, property registration, efficient management of correctional services, increase the levels of central and local administration, etc.

- *Increase of efficiency in the production, agriculture, tourism and industry sectors through the ICT systems;*

This section intends to modernize the production sectors in the country through the ICT utilization, in order to facilitate the fulfillment of standards and the quality of products and services in line with the directives of European Community, aiming at the increase of exports for agricultural, farming, food and mineral products, as well as for the transfer of technologies.

- *Administration and standardization of state data, as an auxiliary tool in the well-functioning and administration of information serving the growth of services for citizens and businesses, public safety and fight against crime;*

This activity will aim at the consolidation of current databasis as well as the establishment of new state databasis, their interaction and intervention with the online data and application systems. We need to bear in mind that the basis for the establishment and consolidation of these databasis will be the unique identification number for individuals and businesses.

- *Increase of human capacities by starting to utilize new technologies from the pre-school systems to the public administration and high ranking officials;*

Albanian society needs to be prepared for the new challenges which emphasize the acquisition of new information technologies. On the other hand, each current or new ICT system cannot be operational without the assistance of human resources who need to be prepared for their utilization. Thus, it is necessary to apply ICT education systems, starting from the pre-school, elementary, high school, university, professional education up to the enhancement of ICT knowledge for the civil servants of central and local administration, in all levels.

- *Enhancement of performance and efficiency of LG through the utilization on the new ICT systems and methodologies;*

The goal of the Albanian Government is to establish a relationship of quality service between central and local administration and the public by treating each citizen according to the customer care principle in regard to governmental services. Thus, the enhancement and consolidation of ICT utilization in the central administration cannot be separated by their utilization in the local administration, which is responsible for a large number of public services.

- *Increase transparency for the public. This serves the interest of communication with the public and the fight against corruption;*

This activity aims at increasing the pu-

blic credibility towards the Government, enhancing information related to governmental income and expenditure, for the recruitment process and operation of state administration, for governmental obligations and engagements, current legislation and legal initiatives, decisions and orders, international engagements, etc.. This part of the programme also included the obligations deriving from the initiative for an open partnership (OGP).

➤ *Integration of all IT systems and electronic services through the practical implementation of interaction of connected IT systems and “e-Services”;*

This activity intends to:

- Increase the number of complete electronic services accessed from every equipment connected to the Internet, such as, computer, mobile telephone, iPad, etc...;
- Facilitate access and improve electronic services for the citizens and businesses through their online option in the unique governmental portal e-albania.
- Fighting against corruption by reducing bureaucracy in the public administration;
- Increase efficiency, effectiveness and governmental transparency based on the principles of the initiative for an open governance;
- Enhance citizens participation in governance and decision making, etc.

## Objective 2

*Innovation against corruption – One Stop Shops.*

For the first time ever, the Albanian Government has undertaken the reform for delivering integrated public services. These services will be provided by the public administration in the One-Stop-Shops.

The ‘Innovation against Corruption’ programme aims at reforming the concept of

public service by contributing to the modernization of public services, by simplifying, integrating and unifying the service delivery in a single center (The Public Service Center). The programme will also provide its contribution to one of the government priorities – the fight against corruption.

This dual mission (improvement of public services and the fight against corruption) will be achieved by implementing a series of reforms: innovation of administrative procedure, as well as the necessary ICT tools and instruments for the distribution of services in a PSM format. Enhancement of benefits, improvement of service delivery and reduction of corruption leads to the following:

- Reduction of time and expenses for citizens in obtaining public services;
- Obtaining of services from one single window;
- Improvement of quality services by utilizing new innovative solutions;
- Increase the credibility and enjoyment by the citizens in relation to the manner the services are delivered from the administration;

In order to achieve this major objective, a few steps which consist of the following will be carried out:

- Improvement of the regulatory environment and reconstruction of the new engineering structure by also building up the institutional coordination;
- Establishment of the necessary infrastructure (Digitalization and Modernization + Establishment);
- Putting in place of an internal monitoring system;
- Centralized model of service delivery;
- Increase the accountability by publishing performance results;
- Improvement and consolidation of ICT infrastructure development.

## Objective 3

*Ammendment and improvement of the legal and regulatory framework for the e-gove-*

*rnance and information society.*

The mid-term plan foresees the following:

- Drafting and adoption of the law on electronic governance with its sub-legal acts to be used for its implementation;
- Drafting and adoption of the sub-legal act for the implementation of the law “On Public Notification and Consultation”;
- Draft decision “Establishment and rules for the administration of Electronic Register for public notifications and consultations”;
- Drafting and adoption of the law for the electronic identification in line with the EU *acquis*.

#### Objective 4

*Development of Electronic Governance (e-Governance), intending to improve the e-governance index by 5 points (places).*

Developments related to e-Governance will be led by the principles of good and transparent governance by stimulating a cooperation culture and aiming towards an open, flexible and cooperating administration with citizens and businesses. As a candidate country, Albania will pursue the EU practises related to the e-Governance and will aim toward the implementation of the EU ministers declaration for the e-Governance.

Implementation of Objective 3 will be fulfilled through the following activities:

- Implementation of the National Interaction Framework, based on the European Interaction Network in order to complete the interaction of electronic systems;
- Promotion of electronic services for citizens and businesses provided through the Governmental Interaction Platform, as well as the increase of new services in the governmental portal e-Albania.al, and the increase of online payment services, etc...;

- Implementation of the electronic exchange documents system, ERDMS in all the line ministries and the central administration and improvement of the e-cabinet service;
  - Establishment of the open data portal, as part of the unique services portal [www.e-albania.al](http://www.e-albania.al);
  - Establishment, implementation of the tracking system for the requests addressed to the line ministries;
  - Implementation of the electronic signature whilst delivering official services and communications;
  - Further development of the foreign finances management system, EAMIS;
  - Increase of security of the physical and logistical infrastructure of the governmental network, GovNET ;
  - Continuous improvement of capacities of the Center for Governmental Data;
  - Development of e-governance in the Local Government Units (LGUs) through the following:
    - o Implementation of the unified informative portal and electronic services for the Local Government Units (LGUs);
    - o Fruition of interaction between the Governmental Platform of System Interaction of the LGUs with the central systems, starting with ZRPP, NRC, RKGJC;
    - o Integration of services related to LGUs in the service portal e-Albania, starting with the display of information related to the local tax obligations for the citizens;
    - o Establishment of IT platforms for the administration of documents and tracking of service dissemination in the LGUs;
  - Awareness against the danger from cyber crime. Different activities will take place in this regard in order to enhance the inter-institutional cooperation between the different structures of information technology for the awareness of the different interest groups and prevention of these dangers as well as the development of safer internet practices;
- *Close cooperation with the national and*

*international research and development centers in order to support the exchange of geo-information between authorities (techniques) and to improve geo-information technologies;*

- *Establishment of the National Electronic Cadaster of Water Resources;*
- *The establishment of the National Electronic Cadaster for the underground and surface drinking waters, highlighted as a national priority, will require the carrying out of the following activities:*

*Establishment of the infrastructure for the management of water resources from the qualitative and quantitative perspective at the level of the national basin through the GIS system.*

Integrated management through the GIS system of water resources thanks to the realization of balance between water resources, analysis of water resources users, control of the quantity and quality of utilization of water resources.

- *Electronic access to the Protected Areas*

This is related to the security of transparency with the public and other interested actors during the decision-taking process and legal initiatives in the nature field. The planned activities consist on the establishment of an online portal with access by the public and actors to legally drafted documents which are in process. Expected results consist of the following:

- *Implementation of international access standards on the online official ministerial websites for disabled persons (e-accessibility **WACG/Web 2.0**).*

## **STRATEGIC PRIORITY 2: POLICY FOR THE DEVELOPMENT OF ELECTRONIC COMMUNICATIONS IN ALL SECTORS (HEALTH, EDUCATION, ENVIRONMENT, AGRICULTURE, TOURISM, CULTURE, ENERGY, TRANSPORT, ETC)**

Development of the advanced electronic communications infrastructure together with the fast and super fast broadband constitutes one of the main directions of the Digital Agenda. This will facilitate the completion of requests for access in the fast and super fast networks for all economic sectors, for citizens, businesses and the government itself, as a large consumer of ICT.

### Objective 1

*Advanced infrastructure of electronic communications and delivery of the sufficient spectrum for Broadband (NGN/LTE/5G) infrastructure development aiming at the coverage with service in the whole territory and 90% of population until 2020;*

Achievements of this objective will be carried out through the following activities:

- *Drafting of spectrum policy in order to facilitate the necessary resources for the frequency spectrum for the future network generation, such as, NGN, 4G/5G in compliance with the EU practices and the SAA engagements;*
- *Improving the legal and regulatory framework for the efficient administration of the spectrum under the conditions of technological convergence and implementation of the principles of technological neutrality to provide for an open Internet;*
- *Undertaking of the necessary steps to simplify the procedures for the establishment of the infrastructure of electronic communications which responds to*

- *future requirements;*
- *Stimulating joint investments and utilization of the broadband infrastructure all over the country.*
- *Promoting and protecting of personal data for the online services, mobile applications, cloud services, big data and the Internet of Things, as well as the protection of intellectual property rights in the internet field.*

## Objective 2

*Improvement of ICT infrastructure in the public administration for harmonized and integrated developments according to the international standards and e-governance in all sectors (health, education, environment, agriculture, tourism, culture, energy, transport, etc...) aiming at 100% connectivity of all systems by the end of 2020.*

The state infrastructure will facilitate the connectivity and communication of all information systems, in order for them to be able to communicate with each-other, to exchange information by avoiding the practices of separate systems and, specifically, the data duplication.

Achievement of this objective will be aimed through the following activities:

- *Consolidation of digital infrastructure in the Public Administration;*
- *Providing of access to the safer, qualitative and ultra fast Internet for the Public Administration and providing of the “Unified Communication Service” (Lync Server) in GovNet;*
- *Increase of security through the establishment of the Business Continuity Center and the Backup for governmental services, as well as the establishment of the Disaster Recovery Centre –DRC for governmental systems;*
- *Improvement of functionality for services provided through the national registers and state databasis (Registry Office);*

- *This activity intends to improve and strengthen the capacities of the current ICT infrastructure, (services and information), that are delivered and will be delivered by these systems, such as, National Register of the Registry Office and the National Address Register.*
- *Establishment of the System of the National Address Register.*
- *The establishment of a complete operational system of the National Address Register and its integration (online connection with the National Register of the Registry Office) is an important priority. This register is a necessary tool that improves, ensures and strengthens the public services, the national security system and the implementation of reforms in the country.*

## Objective 3

*Digitalization of the education system in order to increase the quality of education and contribute in the establishment of a society based on knowledge through the increase of access into digital curriculums and the facilitation of their internet connectivity up to 100%.*

Integration of ICT utilization in a contemporary level in teaching and learning, where all actors, such as, teachers, parents, students, policy makers and service providers play specified roles in the creation of e-education spaces, remains the main step for a gradual transition toward a knowledge based society. Achievement of this objective will be carried out through the following activities:

- *Establishment of a suitable infrastructure for modern teaching:*
  - *Equipment for schools with operational infrastructure for utilization of information (computers, laptops, smart tablets);*
  - *High speed internet and the possibility of online access in other parts inside schools and not just in laboratories;*
  - *Technical support that ensures efficiency of infrastructure utilization;*
  - *Access possibility into education portals*



in compliance with the planned curriculum, as well as in portals that allow for the monitoring of student results by teachers and their parents;

- Access possibility into portals by disabled students;
- Specification of the legal and infrastructural framework for the exchange of online information between the education structures. Exchange of information for specific period of times is mandatory and that is carried out through digital technologies, such as, blogs, file sharing, social networking, video conferencing, etc...
- Development of competencies in obtaining these services provided through the optimization of software systems;

#### Objective 4

*Improvement of digital infrastructure in the health sector aiming at increasing the quality of medical services through the 30% increase of e-services.*

Special attention in the EU digital agenda is paid to the digital management of e-Health, which has been determined at the European level as one of the main social challenges.

Achievement of this objective will be carried out through the following activities:

- *Establishment of data collection and reporting system by service providers of the health care, public or private.*

The aim of this system is to collect and report the data and to standardize the health information that will be reported by all of the health care providers, public and private, who exercise their activity in the Republic of Albania.

- *Establishment of drugs registration and control*

The aim of this activity is to establish the Electronic Register for registering medical drugs.

- *Establishment of the medical drugs tracking system (Track and Trace) as well as processing of e-prescription*

The aim of this activity is to establish a system that would track the drug location bearing a specific label, as well as to eliminate the generated prescriptions in the card with the e-prescription. Online access by the involved parties (doctors, patients, pharmacists)

- *Establishment of a computer system for hospital management (Hospital Information System)*

The aim is to establish a computer system for hospital management which would allow for:

- *The efficient management of hospitals through the hospital management system, ADT (Admission Discharge Transfer), admission, hospitalization, medical laboratory examinations, patient card, bed management, hospital pharmacy management, patient discharge medication, hospital discharge;*

- The improvement of patient care;
- The logistical and financial management of the hospital as an enterprise;
- The improvement of work efficiency;
- The improvement of hospital activity inspections.

- *Establishment of the Registration of Inoculation System and Vaccine Inventory*

This activity will facilitate the expansion of the electronic register for inoculations and vaccine inventory in the health centers.

- *Establishment of the national system Patient Portal and that of electronic services for citizens*

The establishment of the Electronic Patient Portal will facilitate the complete medical history of patients.

- *Establishment of performance indicators for monitoring the health care system*

Establishment of softwares for data integration, consolidation, monitoring of health care systems, as well as establishment of indicators and analysis for reporting which will create the opportunity for the generation of statistics and reports as per the fields of activity of health care institutions. The objective of this system will be the consolidation of data from the health care institutions on an integrated database, as an integral part of the statistical and analytical report system.

➤ *Establishment of staff and medical assets management system*

This activity will lead to the establishment of a computer system for the management of staff and medical assets.

➤ *National Electronic Health Register*

The aim is to secure access into the patient medical data by the health care professionals all over the country through the fruition of a safe electronic information system. Institutions foreseen to be included in this system are all of the regional, county and university hospitals, as well as all of the county polyclinics, a total of 78 institutions.

## Objective 5

*Innovation and ICT development for the Small and Average size businesses through increasing by 50% the number of businesses using ICT and by increasing the number of businesses in ICT by 10%.*

Taking into consideration the fact that ICT is one of the main instruments serving for the economic growth and for a faster growth of SMEs, and also in support of the Digital Agenda and the main EU industrial policy the focus remains in: *the maximum utilization delivered by ICT potentials, not only*

*in the field of bidding, for new digital products and services, but also by the demand, for a smarter utilization of these technologies.* SME investments in the communication technologies create the premisses and opportunities for the increase of competition for them. In relation to this, work will be carried out to stimulate the skills of Albanian businesses to develop, utilize, adjust and commercialize technologies and ICT.

The innovation and ICT programme will include the following activities:

➤ *Innovation support for businesses<sup>14</sup>– by stimulating the human capacity growth in the auditing of technology in general and specifically, for the ICT.*

➤ *Establishment of incubators for ICT (in terms of physical space as well as the development of those services for business support, scientific research and innovation in the ICT field) with the duty to deliver a more favorable environment for the manifestation of new innovative business initiatives, by creating new businesses, jobs and added value through the healthy growth of these businesses.*

➤ *Cluster support for ICT businesses, pursuant to Pillar 52 of European Digital Agenda 2020<sup>15</sup>, by offering support for cooperative platforms, which may also facilitate and support the strategic cooperation between enterprises and other organizations for the increase of the chain of value for ICT products and services, by favoring globalization and access to new markets.*

➤ *A better utilization of the information and communication technology (ICT) in order to assist future business development.*

This will be carried out through the process of integration and delivery of governmental and banking services related to SMEs as well as services in general. All sectors may be-

<sup>14</sup><http://ec.Evropa.eu/digital-agenda/en/content/small-and-medium-sized-enterprises-users-and-suppliers>

<sup>15</sup><http://ec.Evropa.eu/digital-agenda/en/content/action-52-propose-measures-%E2%80%98light-and-fast%E2%80%99-access-eu-research-funds-ict>

nefit from entering online and utilizing modern technology for the promotion, sale and distribution of their products in the markets and up to the final consumer.

- *Strengthening and supporting of start-up businesses in relation to the digital and online services, as well as offering of the alternative of financial support, such as the innovation scheme ICT voucher;*

## Objective 6

### *Safe Information Networks and Systems*

Development of Electronic Governance, Digital Administration and Digital Economy cannot be done without having an efficient guarantee on the security of information networks, which also results in increasing the credibility of citizens for the online services. This is a necessary condition for people to be able to utilize these services by allowing more efficiency in the whole system.

A few trends will be followed in order to guarantee a safer information society and credible e-governance services:

- *Adaptation of the necessary legal and regulatory framework for information and networks safety;*
- *Drafting/implementation of basic requests for the public administration related to the level of the necessary safety in the public sector;*
- *Drafting/implementation of incident management procedure. Periodical monitoring of the implementation of basic requests and procedures;*
- *Awareness campaigns against the danger of cyber crime:*
- *Establishment of a portal for the awareness focusing into computer safety, children in the internet, business, computer security issues and articles;*
- *Awareness campaigns in the ICT universities in the form of open lectures, workshops;*

The respective institutions will undertake measures to increase security in the critical infrastructure of information technology and to implement the high technical requirements for the state database, etc...

Increase of information security and critical infrastructure networks includes a series of vital sectors, apart from the communications sector and governmental networks systems, such as the banking sector, the energy sector, etc.... Within the scope of this programme work will be carried out for the transposal of the EU directive on the safety of networks and information which will include the cooperation of all actors in order to implement it.

## Objective 7

*Minimization of digital differences between regions and cities through 70% increase of internet access and 30% improvement of life quality.*

The Albanian Government new ICT investment programme aims toward the more coordinated and efficient course of investments in this sector, intending to provide qualitative services for citizens and life improvement through the assistance of ICT systems. Taking into account the ERDF priority investments as well as the specific conditions of Albania, the investments are split into few main sub-objectives:

- *Increase of access and utilization of information and communication technological services by the public in the regional and national level through the fixed or mobile e-services, pursuant to ERDF Objectives II and XI on investments for the period 2015-2020 – 70%;*
- *Online services for the public concentrated into front-office desks and the online transparency for the public;*
- *Local government platforms for public services;*
- *Digitalization of services related to land ownership for specific or concentrated*

- regions;
- *ICT infrastructure services (HW+SW) which are the basis for delivering services to the public and deal with the following:*
    1. Consolidation of citizen basic data. Implementation of the Digital Address System based on air photography 2015 and the connection of the address system with the Registry Office Register.
    2. Consolidation of the joint inter-institutional infrastructure at the regional and national level (networks, system inter-connectivity, connectivity of interactive government platform systems, datacenter, BCC, DRC, electronic circulation of documents, tracking citizens correspondence with the administration in all levels, etc...).
    3. Infrastructure serving law and order as well as till and online services for the State Police.
    4. Infrastructure serving health care and till services of the healthcare system at the regional and national level.
    5. Consolidation of state archive data with the establishment and supplementation of electronic registers and services.
    6. Establishment of concentrated or regional digital platforms serving agriculture and tourism.
  - *Technological development in improving citizens life through Smart Cities, pursuant to ERDF Objectives I and VII for investments 2014-2020 – 30%*
  - *Replication of existing multi-user successful systems (schools, City Hall, police, DAR, prosecution): CCTV monitoring of streets, cross roads, schools and other important objects.*
  - *Improvement of local infrastructure serving access development toward broadband and digital services.*
  - *E-library programmes in order to facilitate utilization of resources of each regional and local library at the national level.*
  - *Programmes supporting children in pre-school and school systems.*
  - *Computer systems for the management of the urban and inter-urban traffic in the interest of improving public services.*
  - *OSS or online platform for services delivered by the local government.*
  - *Mobile platforms in the interest of tourist, economic, cultural and educational information at the regional and national level.*
  - *Furnishing of citizens in need with universal decoders in the process of transitioning from the analogue to the numerical broadcasts.*

### STRATEGIC PRIORITY 3: ESTABLISHMENT OF THE NATIONAL GEOSPATIAL DATA INFRASTRUCTURE (NSDI)

The establishment of the **“National Geospatial Data Infrastructure”** will include all of the interactive geospatial information systems that are nationally expanded and will be created by different institutions, for specific topics and according to the European standards.

This policy aims at the development of this infrastructure using its four basic objectives:

#### Objective 1

*Inter-institutional coordination for the collection, processing and updating of the geospatial data, like IMPUT for the NSDI.*

*This coordination is of great importance for the establishment of the national geo database in Albania, (NSDI) as a single GIS database, consisting of multiple and independent layers of data based on a unique cartography system.*

- *Identification of responsible public authorities for the collection, processing and updating of the respective geospatial data, as well as the setting out of standards.*

- *Analysis of the geo-information and the*

*decision taking for the preparation of standards, in line with the INSPIRE directive and according to the needs of the institution.*

- *Establishment of joint working groups for the updating of information according to the topics.*

## Objective 2

*Establishment of a unified geodesy network for the Albanian cartography information by utilizing the national Albanian geodesy network.*

- *Utilization of the AGRF-2010 by all public, private and individual subjects, by ensuring the maintenance and updating of the Geodesy Reference Framework by ASIG.*
- *Utilization of global positioning system (ALBPOS) by all subjects in order to efficiently use the system and secure the funds for its operation and maintenance.*
- *Drafting of the obligatory acts that facilitate the utilization, exchange and efficient management of geodesy networks (AGRF), in line with the uniform standards and rules, in order to secure the interactivity and delivery of services, by stimulating cooperation between the different actor groups.*
- *Designing, establishment, maintenance and updating of the Geodesy Reference Framework.*

## Objective 3

*Establishment of an integrated geo-informational system in Albania according to the INSPIRE directive and its utilization by state institutions and the wider public.*

- *Establishment, implementation and maintenance of the **National Geo-Portal** and of the application systems for the production, management and the integrated administration of the geo-information, in cooperation with the respective authorities, by improving data*

*availability and their access, according to the standards.*

- *Detailed rules for the establishment, preservation and updating of metadata, based on the structure of cataloging metadatas.*
- *Raising the public awareness regarding the benefits of geo-information, coordination regarding the professional development and training opportunities to increase the respective authorities' capacities to stimulate the utilization of geospatial technology in a very efficient way, in cooperation with the academic and private sector.*

## Objective 4

*Establishment of the National Geographical Information*

*The NGIS will serve for the improvement of decision-taking in all levels; development of economic and social mid-term and long-term programmes, as well as for the orientation of investments and demographic movements in the country.*

*Establishment of NGIS according to the INSPIRE and OGC standards and rules in order to provide the geospatial information services according to the topics.*

- *Establishment of a platform to deliver geospatial services, according to the standards of the Dataexchange format and standards relating to the network services, which will be used by the NGIS and beyond.*
- *Training staff for the maintenance of the system, awareness campaign as well as training of staff in relation to the utilization of the National Geo-Portal.*
- *Close cooperation with the national and international research and development centers, in order to support the exchange of geo-information between state authorities and to improve the geo-information technology.*



CHAPTER IV

# 4

## FINANCIAL RESOURCES

Financial resources are determined based on the action plan that accompanies this strategy (Appendix 1), pursuant to the MTBP cost for 2015-2017. Also, other financial resources have been taken into consideration, such as, the IPA funds, donations or grants which are used to cover the financial gaps.

The action plan lists the activities that will be undertaken to implement the above programmes, the responsible institutions, deadlines, costs for each activity and programme, as well as the financial resources.

Also, the Regional Development Fund will be a supplementary mechanism that will aim at the realization of the digital divergence minimization between different regions and cities. This instrument will aim to improve the service quality delivered to the citizens, as well as the life improvement through the technological developments.

The determination of ISSDA financial needs was carried out through the process of the necessary potential evaluation cost from each institution that bears the main responsibility in the implementation of the foreseen activities.

The necessary evaluated funds for the implementation of ISSDA during the period of 2015 - 2017 are foreseen to be at the range of **29.2 billion ALL** or **240.5 million Euro**.

It must be emphasized that the need for financing the strategy implementation has been calculated for the activities for the period of 2015-2017. In the mean time, the calculation of the needs for the implementation of activities for the period of 2017-2020 will be determined in 2017, time this when the mid-term strategy implementation evaluation will be carried out.

	MTBP	Donors	Others
ALL	22 235 164 842	1 452 398 678	5 122 505 695
Euro	158 822 606	10 374 276	36 589 326



CHAPTER V

# 5

# ACCOUNTABILITY, MONITORING AND EVALUATING ANALYSES

The strategy will be monitored by the Inter-Institutional Working Group for the Drafting of the Cross-cutting Strategy “Digital Agenda” of Albania 2015-2020. The group was established by Order No. 13 of the Prime Minister, dated 22.01.2014. The group is composed of the following: respective Minister for Public Administration and Innovation, Department of the Digital Agenda at the Council of Ministers, National Agency for the Information Society, as well as the Department of Development, Financing and Foreign Aid Programming at the Council of Ministers.

The pre-conditions for the efficient and successful implementation of the Digital Agenda 2015-2020, include the following:

- General consensus to implement the proposed objectives and activities;
- Implementation in stages of the selected activities according to priorities and availability of the necessary resources;
- Promotion of objectives towards the public and private sector, as well as citizens;
- An efficient monitoring and evaluation system in order to check the implementation of objectives set out in the strategy. The data and analyses produced as a result of such a system, will assist the decision-makers in renewing their policies, distributing resources, as well as it will regulate the planned activities based on current circumstances at any

- given time;
- Stimulation of cooperation between state authorities, municipalities, NPOs, international organizations and other participants in the process.
- Implementation of the strategy will be based on the utilization of a number of synthetic indicators related to the inputs, processes, products and effects of the action plan. The complete list of indicators is presented in Appendix 4.

The indicators will be evaluated in a periodical manner by the public institutions according to the job division and their jurisdiction field. They will be collected by MSI-PA according to the determined format in the Indicators for the Measurement of Strategy Implementation, in cooperation with the other public institutions as well as INSTAT. Based on these indicators the respective minister will draft annual reports on the strategy performance, which will be of a public nature.

The establishment of an efficient monitoring and evaluating system (every 3, 6 months and annually), will be supported by study activities, activities that aim at the strengthening of human capacities and structures. Public information, as well as monitoring of the strategy implementation and its results by specialized and interested organizations from the civil society or the press, will also constitute one of the basic elements of the monitoring and accounta-

## ACTION PLAN

Strategic Priority 1: Policy for the development of electronic communications infrastructure in all sectors (health, education, environment, agriculture, tourism, culture, energy, transportation, etc.)	Implementation Deadlines	Responsible Institutions	Costs in ALL		
			MBP	Donations	Other
<b>Objective 1:</b> Development of advanced electronic communications infrastructure and delivery of the sufficient spectrum for broadband infrastructure development (NGN/LTE/5G etc), aiming at the coverage with service of the whole territory and up to 90% of population until 2020;					
Drafting of spectrum policy in order to facilitate the necessary resources for the frequency spectrum for the future network generations, such as, NGN, 4G/5G in compliance with the EU practices and the SAA engagements	2015 onward	MIAP	No cost		
Improving the legal and regulatory framework for the efficient administration of the spectrum under the conditions of technological convergence and implementation of the principles of technological neutrality to provide for an open Internet	2015 onward	MIAP	No cost		
Law "On the Electronic Governance" and its implementationsub-legalacts;Sub-legalactfortheimplementation of the law "On the Public Notification and Consultation", Draft decision "Establishment and the Rules of administration of the Electronic Register for the Public Notifications and Consultations"	2015-2016	MIAP/NAIS	No cost		
Adoption of policy document related to the open data	2015	MIAP/NAIS	No cost		
Transposal of Directive 2003/98/EC for the re-utilization of public sector information	2015	MIAP/NAIS	No cost		
Sub-leag act for the implementation of law "On the Public Notification and Consultation", Draft decision "Establishment and the Rules of administration of the Electronic Register for the Public Notifications and Consultations"	2015 onward		No cost		
Promotion and protection of personal data for the online services, mobile applications, cloud services; big data and Internet of Things, as well as the protection of Intellectual Property Right in the field of internet	2015 onward	MIAP	No cost		
Drafting of the National Interaction Framework, based upon the European Framework for Interaction and the international standards	2015	NAIS			
Promotion of connectivity access of Broadband Internet in the area Bjeshket e Namura	2014-2015	MIAP-PIU	2,290,000	47,870,000	

Strategic Priority 1: Policy for the development of electronic communications infrastructure in all sectors (health, education, environment, agriculture, tourism, culture, energy, transportation, etc.)	Implementation Deadlines	Responsible Institutions	Costs in ALL		
			MBP	Donation	Other
<b>Objective 2:</b> <i>Improvement of ICT infrastructure in the public administration for harmonized and integrated developments according to international standards for e-governance in all sectors (health, education, environment, agriculture, tourism, culture, energy, transportation, etc) aiming at 100% connectivity of all systems by the end of 2020</i>					
Establishment of the second BCC, Business Continuity Center of the National Register of the Registry Office	Second half of 2016	MIA(DfRO)	154,000,000		
Establishment of the second BCC, Business Continuity Center of the National Register of the Registry Office	Second half of 2016	MIA(DfRO)	154,000,000		
Further development, increase of new functions of the National Register of the Registry Office, as well as, the establishment of the online website to deliver information to third parties in line with the legal definitions and technological standards in this field	2016	MIA(DfRO)/NAIS	140,000,000		
Establishment and completion of the address system	2015-2017	MIA(DfRO)/NAIS	588,000,000		
Connection and integration of the address system with the National Register of the Registry Office, according to the EU standards and definitions	2015-2017	MIA(DfRO)/NAIS	70,000,000		
Digitalization of the Basic Registers and the Act Books	2015-2017	MIA(DfRO)	1,400,000		
Development, administration and expansion of the governmental GovNet network in three cities: Tirana, Elbasan, Durres	2015 - 2016	NAIS	1,088,619,675		
Delivery of broadband internet access for the public administration. Increase of bandwidth delivered for the public administration; average capacity from three providers of over 150 Mbit/s for the central administration. Increase of capacities foreseen at the average of a total of 600 Mbit/s (by the three suppliers).	2015-2017	NAIS	14,256,000		
Feasibility study for the establishment of the "Relocation and/or work continuity for the governmental Data Center in cases of disasters ( DRC ) and preservation of information	2015-2016	NAIS	9,000,000		
Establishment of the Business Continuity Center and Backup for the governmental systems	2015-2017	NAIS	840,000,000		
Establishment of the Disaster Recovery Center – (DRC) for the governmental systems	2015 -2017	NAIS			229,800,000

Implementation of the document management system ERDMS in all the line ministries and central administration	2014 - 2017	NAIS/Line Ministries			166,541,029
Auditing of State Databasis through the Oracle Audit Vault platform	2015 2017	NAIS			25,344,000
Increase of safety for the physical and logistical infrastructure of the governmental GovNet network, through investments aiming at "Increase of Safety for the governmental GovNet network and the Governmental Data Center"	2014-2017	NAIS/Line Ministries NAIS	351,247,993		
Capacity improvement of the Data Governmental Center	2014-2017	NAIS	256,824,466		
Delivery of safe, qualitative and ultra fast Internet access for the public administration, as well as the delivery of the Unified Communication Service, (Lync Server) in GovNet	2015- 2017	NAIS	119,000,000		
Availability of computers, acces to the internet and broadband services in schools for the development of teachers' training for the utilization of e-learning content	2015-2020		300.000.000		
Further development, expansion of EAMIS system	2015-2017	Ministry of Finance – Department of Priority Implementation/ NAIS	350,000,000		
Expansion and improvement of the e-cabinet system	2015-2017	Council of Ministers, NAIS	25,401,600		

Strategic Priority 1: Policy for the development of electronic communications infrastructure in all sectors (health, education, environment, agriculture, tourism, culture, energy, transportation, etc.)	Implementation Deadlines	Responsible Institutions	Costs in ALL		
			MBP	Donations	Other
<b>Objective 3:</b> <i>Digitalization of the education system in order to increase the quality of education and contribute in the establishment of a society based on knowledge through the increase of access into digital curriculums and their internet connectivity up to 100%</i>					
Digitalization of the education system – implementation of digital classes for the secondary education	2015-2017	MES	3,360,000,000		
Digitalization of the pre-university education system – development of the e-learning system	2015-2017	MES	490,000,000		
Digitalization of pre-university education system – development of data management system in schools (Digital Register)	2015-2017	MES	56,000,000		
Digitalization of pre-university education system – development of online registration system, e-register	2015-2016	MES	35,000,000		
Establishment of the digital library for the pre-university education system	2016-2017	MES	30,660,000		
Training of teachers of the pre-university system in the utilization of systems	2015-2017	MES	28,000,000		
Online networking of the private and public higher education institutions	2016 onward	MES	42,000,000		
Development of the computer system for the logistical and financial management of the institutions under MES	2017 onward	MES	14,000,000		
ICT in pre-school education	2017-2020	MES	350,000,000		

Strategic Priority 1: Policy for the development of electronic communications infrastructure in all sectors (health, education, environment, agriculture, tourism, culture, energy, transportation, etc.)	Implementation Deadlines	Responsible Institutions	Costs in ALL		
			MBP	Donations	Other
<b>Objective 4:</b> <i>Improvement of the digital infrastructure in the health sector aiming at increasing the quality of medical services through the 30% increase of e-services</i>					
Management of check-up data for the 40-65 years old age group	2015	MoH	98,000,000		
Collection and reporting of the data system by the public or private providers of the health care services	2016	MoH	80,010,000		
System of drug registration and control	2015-2016	MoH, AKBPM	23,510,496		
Medical drugs tracking system or Track and Trace system (concession)	2016	MoH, FSDKSH, AKBPM	700,000,000		Concession
Hospital Management Computer System (Hospital Information System)	2019	Negotiations with the World Bank	1,400,000,000		Negotiations with the World Bank
Innoculation and Vaccination Registration System	2016	MoH, ISHP	27,020,000		
National Patient and Electronic Services Portal for citizens	2020	MoH	1,400,000,000		
System for the Monitoring of Performance Indicators of the health sector	2016	MoH	30,100,000		
Staff and Medical Assets Management System	2014	MoH	9,976,080		
On-line service for the regional management of advanced medical examinations	2015-2017	MoH			57,720,000
Electronic signing of medical documents	2015-2017	MoH	To be evaluated		

Strategic Priority 1: Policy for the development of electronic communications infrastructure in all sectors (health, education, environment, agriculture, tourism, culture, energy, transportation, etc.)	Implementation Deadlines	Responsible Institutions	Costs in ALL		
			MBP	Donations	Other
<b>Objective 5:</b> <i>Innovation and ICT development for the Small and Average size Businesses through increasing by 50% the number of businesses utilizing ICT and by increasing by 10% the number of businesses in ICT.</i>					
Strengthening and support of start-up businesses for digital and online services, as well as, the delivering of alternatives in relation to financial support, such as the ICT innovation voucher schemes	2015 - 2020	MIAP/MEDTTE	To be evaluated		
<i>Establishment of ICT incubators</i>	2015 -2020	MIAP/Third parties	ppp		
Supporting of ICT cluster businesses in accordance with Pillar 52 of the European Digital Agenda 2020	2016-2020	MIAP/Third parties	No cost		

Strategic Priority 1: Policy for the development of electronic communications infrastructure in all sectors (health, education, environment, agriculture, tourism, culture, energy, transportation, etc.)	Implementation Deadlines	Responsible Institutions	Costs in ALL		
			MBP	Donations	Other
<b>Objective 6: Increase of safety of information networks</b>					
Drafting of Cyber Security Policies Document and its Action Plan	March 2014 – April 2015	NACS, GNP (supported by TAIEX)	-		
Supplementation of the legal/regulatory framework in the field of cyber security:					
1. Drafting of the draft law for cyber security	2015	MIAP, NACS (supported by TAIEX)			
2. Drafting of the minimal security requests for the public administration, monitoring of their implementation	2015 onward	NACS	-		
3. Procedure for Reporting Computer Incidents	2015	NACS	-		
Raising of the awareness for the cyber security:					
1. Establishment of portal for the awareness <a href="http://www.cyberalbania.al">www.cyberalbania.al</a> , focusing on the computer security, children in the internet, business, security articles, etc.	June 2014 onward to be updated	1. NACS (composition: NACS, KMDP, IZHA, NAEC, NAIS, AEPC, ASHSh, as well as, the private sector).	260,000		
2. Awareness campaigns at the ICT faculties in the form of open lectures, workshops, etc.	May 2014 onward	2. NACS, NAEC, KMDP, ASHSh, as well as, public and private institutions invited accordingly.	400,000		
3. Organization of the annual event "Awareness month for computer security"	October 2014 onward	NACS	500,000 / annum		
4. Awareness through informing materials (leaflets, brochures, posters), activities for the protection of children online:	2015 onward	MES, NACS, KMDP	400,000 / annum		
<i>Annual Conference "Safety of Children in the Internet"</i>					
<i>Awareness campaign in 13 DAR for the protection of children online</i>					
<i>Organization of training sessions for Computer Safety for the ICT and DAR/ZA specialists</i>					
5. Organization of competitions for the identification of new talents in this field	The first competition of this kind to be held in the last trimester of 2015	NACS	To be evaluated		
Increasing of knowledge, skills and capacities level for expertise in the field of cyber security:					



1. Organization of training sessions for IT professionals of public administration 2. Inclusion of cyber security issues in the curricula of pre-university education system for a safer internet for children and teenagers, as ICT utilizers, pilot scheme for 6 <sup>th</sup> graders during the academic year 2014-2015 3. Post university studies (master's level) specializing in cyber security 4. Increasing of capacities for personnel responsible for security issues	September 2014 – 2015	NACS, ASPA	1,350,000		
	2014 (in the pilot curricula)	ANCS, IZHA	No extra cost (IZHA functioning cost)		
	2015 – 2016	UT, UPT, ASHSh	To be evaluated		
	2015 - 2017	NACS	5,000,000 and others at no cost (cooperation with foreign structures)		
Identification of the critical information infrastructures (CIIP)	2015	NACS, GNP with public institutions and interest groups	-		
Establishment of Infrastructure for the System of Monitoring and Protection (ISMS)	2016 onward	NACS	70,000,000		

Strategic Priority 1: Policy for the development of electronic communications infrastructure in all sectors (health, education, environment, agriculture, tourism, culture, energy, transportation, etc.)	Implementation Deadlines	Responsible Institutions	Costs in ALL		
			MBP	Donations	Other
<b>Objective 7: Minimization of digital differences between regions and cities through the increase of internet access up to 70% and improvement of life quality up to 30%</b>					
Consolidation of basic citizens data: Implementation of the digital address system based on the air photography 2015 and connection of the address system with that of the Register of the Registry Office	2015 - 2020	MIAP/MEDTTE			
Consolidation of the joint inter-institutional infrastructure on the regional and national level (networks, systems interaction, systems connection with the interactional governmental platform, data center, BCC, DRC, electronic circulation of documents, tracking of citizens correspondence with public administration in all levels, etc.)	2015 -2020	MIAP/Third parties			
Replication of the successful multi-user existing systems (schools, City Hall, police, DAR, prosecution): CCTV monitoring of roads, cross-roads, schools and other important objects	2015-2017	MIA			838,005,339
Establishment of the Digital Archive in 24 local offices of the Immovable Property Registration	2015-2017	MD/ZRPP			509,350,000
Improvement of infrastructure for electronic services of the State Police	2015-2017	MPB			468,600,000
Improve the city	2015-2016	NAIS			30,000,000
Subsidy of decoders for families in need	2015-2017	MIAP			350,000,000
Implementation of the international standards regarding the e-accessibility WACG/Web 2.0 in the official websites of the line ministries (for disabled persons)	2015-2016	MIAP/ NAIS Line ministries NAIS			26,460,000

Strategic Priority 2: Policy for the development of electronic governance and delivery of interactive public services for citizens and businesses	Implementation Deadlines	Responsible Institutions	Costs in ALL		
			MBP	Donations	Other
<b>Objective 1:</b> Increase and promote the electronic services and e-services for citizens and businesses. Increase of transparency and improvement of public administration services according to the "Open Government Partnership" initiative will remain a priority					
Establishment of the open data portal, as part of the unique services portal <a href="http://www.e-albania.al">www.e-albania.al</a>	2015	NAIS	20,000,000		
Re-engineering and modernization of 51 work processes G2G, expansion with 21 new electronic services G2G, G2C and G2B, and the adding of 6 new services in the governmental portal e-albania.al, Versioni 1.0"	2015-2017	NAIS			234,671,040
Project "e-Health – National Electronic Health Record" (Austrian loan)	2017	MoH	1,959,300,000		
Electronic prescription (e-Prescription) in the whole of Albania a) Pilot project for the electronic prescription in Durres	2017 a) 2015	MSH, FSDKSH	569,999,920 35,367,000		
Development, improvement of <a href="http://www.e-Albania.al">www.e-Albania.al</a> portal, addition of paid online services, establishment of the mobile version, etc.	2015-2017	NAIS/ line ministries	423,828,000		
Promotion of electronic services for citizens and businesses provided through the interaction governmental platform and the increase of new services for the governmental portal e-Albania.al, as well as, increase of paid online services, etc.	2015	MIAP/NAIS	To be evaluated		
Strategic Priority 2: Policy for the development of electronic governance and delivery of interactive public services for citizens and businesses	Implementation Deadlines	Responsible Institutions	Costs in ALL		
			MBP	Donations	Other
<b>Objective 2:</b> Amendments and improvement of the legal framework for the e-governance and information society					
Drafting and adoption of the law on electronic governance and its sub-legal implementation acts	2015 – 2016	MIAP/NAIS	No cost		
Drafting and adoption of the sub-legal implementation act "On the Public Notification and Consultation"	2015	MIAP	No cost		
Draft decision "Establishment and drafting of rules for the administration of the Electronic Register for Public Notifications and Consultations"	2015-2017	MIAP/NAIS	No cost		
Drafting and adoption of the law "On the Electronic Identification", according to the EU acquis	2015-2017	MD/NAEC, etc	No cost		
Implementation of the National Interaction Framework based on the European Interaction Framework and the international standards for the fruition of interaction of electronic systems	2015 – 2016	MIAP/NAIS	No cost		

Strategic Priority 2: Policy for the development of electronic governance and delivery of interactive public services for citizens and businesses	Implementation Deadlines	Responsible Institutions	Costs in ALL		
			MBP	Donations	Other
<b>Objective 3: Development of Electronic Governance (e-Governance)</b>					
Implementation of the electronic circulation of documents, ERDMS system, in all the line ministries and the public administration, as well as, the improvement of the e-cabinet system	2015-2017	MIAP/NAIS			
Realization, implementation of the e-Tracking system in the line ministries	2014	Part of the Microsoft Agreement	150,000,000		
Implementation of e-Signature in the delivery of official services and communications, distribution of USB tokens	Realized investment of the PKI infrastructure. Gradual implementation in institutions.	NAIS, NAEC	Distributed costs for each institutions for USB tokens.		
Organization and pursuit of the implementation of the electronic signature in some public services delivered online	2015-2020	MIAP/NAIS/NAEC	Pursuant to the functional duties of NAEC and NAIS. No cost.		
Increasing of capacities and Cloud computing services for the host structure of these services in the public sector	2014-2020	MIAP, NAIS, private sector of the line ministry. Partial costs have been provided in the appendix of document adopted by way of a DCM No. 468, dated 30.5.2013.	234,000,000		
Development of the national e-Tourism programme, establishment of the hotel register, establishment of tourist resources and products, establishment of cultural inheritance, establishment of the tourism portal, coverage of tourist areas with free internet service Wi-Fi	2014-2020	MEDTTE	To be evaluated		
Framework contract for project drafting					10,000,000
Online services for citizens through the e-Albania automatic vending machines installed in public places	2015-2017	NAIS	To be evaluated		
Electronic application for the driving license and obtaining of a fast service	2015	MTI/NAIS	Ongoing		
Establishment of the national database of Economic Assistance	2014 – 2016 (two years a pilot project in three districts, afterwards to be expanded all over Albania)	MMSR, SHSSH	97,800,000 projection for the implementation at the national level which will be realized at a later stage		

Establishment of the state database for Disabled Persons	2015 - 2016	MMSR, SHSSH	175,000,000		
Establishment of the information system for the digitalization of the court archive	2015-2017	MD	14,000,000		
Computerization of the General Correctional Directorate, information system of convicts cards	2015	MD / DPB	30,100,000		
Online connection of the institutions of the General Correctional Directorate	2015-2016	MD / DPB	350,000,000		
Video Recording System of court sessions	2015 - 2017	MD	140,000,000		
Equipment of prisons with digital cameras	2015 - 2017	MD	70,000,000		
Digitalization of the complete Court Archive, in order to preserve and utilize this national wealth of scientific and historic values	2017	MD	28,000,000		
Case Management for the probation service	2016	MD / SHP	7,000,000		
Electronic Register of the free professions at the Ministry of Justice	2016	MD	14,000,000		
Establishment of an information system for the digitalization of the Archive Files for the compensation of former politically persecuted persons	2015	MD	9,800,000		
Centralization of the court case management system ICMIS and the implementation of a focused and unique solution for all the courts in the country	2015-2017	MD	280,000,000		
Integration of ICMIS system with ALBIS		M D / N A I S / ALBIS	28,000,000		
Integration of the prosecutorial case management system with the court case management system, ICMIS	2016	MD			
Drafting of the strategy for the establishment of the digital archive in 25 local offices of the immovable property registration	2015-2017	MD/ZRPP	2,500,000		
Control, inventory, numbering and correct closure of mortgage registers in all the local offices	2015-2016	MD/ZRPP	14,000,000		
Training and certification of ALBSReP system for its utilizers in 35 ZVRPP, as well as training and certification for the IT staff of ZQRPP	2015-2020	MD/ZRPP	21,000,000		
Installation and integration of ALBSReP system in the two governmental data centers	2015	MD/ZRPP	35,000,000		
Development of the Document Management System for ZRPP	2015-2016	MD/ZRPP	14,000,000		
Development of an integrated system for human resources, finances and inventory of ZRPP	2015-2016	MD/ZRPP	14,000,000		
New hardware equipment for the well-functioning of the ALBSReP system in ZVRPP	2015-2020	MD/ZRPP	140,000,000		
Auditing of the IT system and its quality control (as well as its improvement, if needed)	2015-2020	MD/ZRPP	70,000,000		
Drafting of the Strategy and Policies for the increase and maintenance of capacities, work continuation at the IT directorate in ZQRPP	2015-2020	MD/ZRPP	35,000,000		
Designation of a fiscal cadaster system and its connection with the tax authorities	2015-2018	MD/ZRPP			

***Interconnection of electronic systems of the court system links with each-other, on one hand, and their interaction with the electronic systems of justice operators, on the other hand (and not only those)***

Integration of prosecutorial case management system with that of the court case management system ICMIS	2016	MD			
Further development of the web services, integration of the ALBSReP system with the notary register, other governmental registers and actors	2015-2018	MD/ZRPP	70,000,000		
Improvement and supplementation of data related to personal and company ID and the data related to the immovable property in the ALBSReP system	2015-2018	MD/ZRPP	35,000,000		
License for the new modules of the treasury system	2015-2017	Ministry of Finance	27,020,000		
Data protection system for the database of the treasury system	2015	Ministry of Finance	2,100,000		
Other software computer systems	2014-2017	Ministry of Finance	9,100,000		
Expansion of Governmental Financial Computer System SIFQ to 150 budgetary institutions through the web portal and management of documents, foreign funds through the TSA as well as the cost of projects	December 2016 (in case the IPA fund 2013 is approved in November 2014 to be accorded to the Ministry of Finance with the extension of SETS project)	Ministry of Finance	210,000,000		
AFMIS and IPSIS solutions, Albanian Financial Management Information System (MTPB and PIM), Integrated Planning System Information System (Portal + DWH)	Capacity Building and Support to Implement the Integrated Planning System (IPS 2) in Albania Grant Number: TF013972, is managed by the World Bank. 2014 -2016	Ministry of Finance, Ministry of Economy, Prime Minister's Office	182,000,000		
Purchase of computer equipment	2014-2017	Ministry of Finance	7,492,800		
Upgrade of the Checkpoint System. Support for the Check Point (Firewalls) Licenses; backup Check Point for HA Internet Firewall	2015-2020	Ministry of Finance	14,000,000		
Intranet & Internet network	2015-2020	Ministry of Finance	42,000,000		
Support for the video-surveillance system	2015-2020	Ministry of Finance	15,400,000		

Blade servers and equipment for Blade Enclosure and San Storage Array + Software for virtualization	2015-2020	Ministry of Finance	21,000,000		
HW, (PC, Laptops, printers, photocopy, etc.)	2015-2020	Ministry of Finance	28,000,000		
Penetration testing service for the security of the IT networks/systems	2015-2020	Ministry of Finance	1,400,000		
Maintanace of the Server Room	2015-2020	Ministry of Finance	7,000,000		
Trainig sessions for the IT staff	2015-2020	Ministry of Finance	2,800,000		
Support infrastructure purchasing for the new E-taxation system	December 2014	D. P. T	126,512,020		
HW purchase	December 2014	D. P. T	42,487,900		
Integration with EUIS Fiscalis 2020 (Entry ticket)	December 2015	D. P. T	3,500,000		
Development and Improvement of m-TAX	December 2015	D. P. T	48,749,960		
Realization of the draw for the tax coupon	May 2015	D. P. T	PPP		
Realization of the e-bill project	December 2015	D. P. T	PPP		
Establishment of an online portal for acces by the public and actors in legal draft-documents still ongoing for the protected areas	2015	Ministry of Environment in cooperation with UNDP-GEF project for the naval and coastal ZMs		(UNDP) 245,000	
Speedy Project IPA Adriatic CBC on the regional cooperation on the air data quality	2015	Ministry of Environment in cooperation with The National Agency of Territorial Planning	With IPA funds. Project cost for the Albanian part is 175.000 Euro	24,500,000 IPA funds	
Application of the monitoring camera systems of the forestry areas, aiming at prevention of fires and evidencing of illegal woodcutting	2015-2017	MM and the State Inspectorate of Environment, Forestry and Waters	145,000 Euro, unsecured funds		30,300,000.00
Establishment of the National Electronic Cadaster of Water Resources	2018	Ministry of Environment in cooperation with the World Bank	1.176.400 Euro, for the World Bank project		World Bank 164,696,000
<b>Objective 4: Innovation against corruption – One-Stop-Shop (this objective has been fully broken down at the SNRAP)</b>					
Reform of services in the Public Administration (digitalization)	2015-2018	MIAP/ADISA/NAIS	2,113,850,000	1,211,000,000	3,689,000,000

<b>Objective 5: Local Electronic Governance (e-LG)</b>					
Inter-operability systems CG-LC Implementation of the unified informative portal and electronic services for the Local Governance Units. Uploading of the original content and establishment of systematic update mechanisms	2015-2017	USAID PLGP/ NAIS	22,000,000		
e-Participation and local open governance: data kept and managed by the local governance should be open and at the public's disposal	2015 - 2017	MIAP/NAIS/ etc.	To be evaluated		
Establishment of suitable mechanisms at the NAIS infrastructure, in order to secure the necessary data from the main systems of the central governance for the LGUs systems, starting with ZRPP, NRC and RKGJC. The first exchange of data and the establishment of systematic updating mechanisms for 11 LGUs	2014-2015	USAID PLGP/ NAIS	33,000,000		
Integration of services related to LGUs in the e-Albania portal, starting with the loading of information on the local tax obligations	2015	USAID PLGP/ NAIS	11,000,000		
Establishment of the IT platforms for the administration of documents and tracking of services distribution; platforms that may be easily replicated from the other city halls through the personalization of training sessions by users. Implementation of the NAIS infrastructure for the first city hall. Implementation for at least another 5 city halls.	2015	USAID PLGP/ NAIS	44,000,000		

<b>Strategic Priority 3:</b> Policies for the establishment of the National Geospatial Data Infrastructure (NSDI)	<b>Implementation Deadlines</b>	<b>Responsible Institutions</b>	<b>Costs in ALL</b>		
			<b>MBP</b>	<b>Donations</b>	<b>Other</b>
<b>Objective 1:</b> <i>Inter-institutional coordination for the collection, processing and updating of the geospatial data, such as, IMPUT for the NSDI</i>					
Identification of responsible public authorities for the collection, processing and updating of the respective geospatial data, as well as, for the definition of standards	2015 – 2017	ASIG		105,000,000	
Analyses of the geo-information and decision taking for the drafting of suitable standards in accordance with the INSPIRE directive and according to the institution's need	2015 - 2020	ASIG		35,000,000	
Establishment of joint working groups for the updating of information according to the topics	2015-2020		No cost		

<b>Objective 2: Establishment of a unified geodesy network for the Albanian cartographic information utilizing the National Albanian Geodesy Network</b>					
Utilization of AGRF-2010 by all public, private and individual subjects, ensuring the maintenance and updating of the Geodesy Reference Framework by ASIG	2015 – 2020	ASIG		119,000,000	
Drafting of different obligatory acts that facilitate the utilization, exchange and efficient management of geodesy networks AGRF, in accordance with the uniform standards and rules, to ensure interaction and delivery of services, by stimulating cooperation between actors' groups	2015 – 2017	ASIG	No cost		
Designing, establishment, maintenance and updating of the Geodesy Reference Framework.	2015-2020	ASIG			World Bank 4,800,000 US\$
<b>Objective 3: Establishment of an integrated geo-information system in Albania according to the INSPIRE directive and its utilization by the state institutions and the wider public</b>					
Establishment, implementation and maintenance of the National Geo-Portal and the applications system for the production, management and integrated administration of geo-information, in cooperation with the respective authorities, by improving the availability and accessibility of data, according to the standards	2015-2020	ASIG		105,000,000	
Detailed rules for the establishment, preservation and updating of metadata, according to the metadata cataloging structure	2015-2017	ASIG		14,000,000	
Raising the public awareness regarding the benefits of geo-information, coordination for the professional development and training opportunities in increasing the capacities of the respective authorities, in order to stimulate the utilization of geospatial technology in a very efficient way, in coordination with the academic and private sector.	2015-2017	<b>ASIG</b>		105,000,000	



<b>Objective 4: Establishment of the National Geographic Information System</b>					
Establishment of NGIS in accordance with the INSPIRE and OGC standards and rules, in order to deliver services related to the geospatial information according to topics	2015-2017	<b>ASIG</b>		35,000,000	
Establishment of a platform to deliver geospatial data according to the Dataexchange format standards, standards on the network services that will be utilized by in the NGIS by the wider public	2015-2020	<b>ASIG</b>		105,000,000	
Training of staff for maintenance purposes, awareness campaign and training for the utilization of the National Geo-Portal	2015-2019	<b>ASIG</b>		21,000,000	
Close cooperation with the national and international research-development centers, in order to support the exchange of geo-information between the state authorities, as well as, to improve the geo-information technologies	2015-2020	<b>ASIG</b>		7,000,000	

## OVERVIEW OF THE ELECTRONIC COMMUNICATIONS MARKET

During 2013, the electronic communications sector sustained an increase in relation to utilization of mobile networks and broadband Internet services. In the mean time, for the same period there was a reduction in relation to the fixed telephony segment. These tendencies are similar to the tendencies of the recent years, whereupon the utilization of fixed telephony was decreasing and was being replaced by the mobile telephony. Also, the access to the broadband segment has sustained growth on both of its segments: from the fixed networks as well as from the mobile networks.

The number of active mobile phone users (subscribers who have utilized mobile services in the last 3 months) by the end of 2013 reached 3.7 million, compared to 3.5 million at the end of 2012. This consists of an annual growth of 4% for the four operators, whilst the number of users of the mobile telephony according to the active SIM cards, sustained a decrease by 6%, by reaching 5.3 million compared to 5.6 million by the end of 2012. The penetration rate (number of users per 100 inhabitants) in 2013 was 130% according to the active users and 187% according to the SIM card users.

The number of fixed telephony subscribers by the end of 2013, reached approximately 281 thousand compared to 311 thousand by the end of 2012, thus consisting in a reduction by 10%. The reduction of the number of

subscribers for the fixed telephony was following the reduction trend started in 2010 (with the exception of 2011 where a growth was sustained). This reduction came as a result of the continuous decrease of the Altelecom subscribers by 9%, as well as the decrease by 13% of subscribers of the alternative operators. The penetration rate of the fixed telephony by the end of 2013 was about 10%.

The number of subscribers with fixed and mobile broadband access (3G USB/modem cards) by the end of 2013 reached approximately 294 thousand, consisting in a 36% growth in comparison with 2012. In 2013, both broadband access segments, fixed and 3G (with USB/modem cards), sustained a growth of respectively 14% and 101%. The penetration rate for both types of access together is 10.4% per population and 37% per family.

Below is an overview of the development of the number of subscribers for the mobile telephony (active users) and that of the fixed telephony in relation to the broadband access of mobile and fixed networks. The figures indicate clearly that the rates of growth for the broadband access in both networks are higher than those of the telephony. The fixed networks are even noticing opposite trends: growth of the broadband access and reduction of fixed telephony. In 2013, only 33% of active mobile users utilized the 3G broadband access and

the number of subscribers with broadband access in the fixed networks consists of 65% of subscribers of the fixed telephony.

## FIXED TELEPHONY

Even during 2013 the fixed telephony continued the decreasing trend of the recent years. Despite the fact that this trend is in line with the EU countries, the penetration rate of 10% is lower than that of the EU countries. The number of fixed telephony subscribers reached approximately 281 thousand by the end of 2013, compared to 311 thousand at the end of 2012, thus a reduction by 10%. The reduction came as a result of the continuous decrease by 9% of the number of Albtelecom subscribers and the reduction by 13% of the number of subscribers of the alternative operators. Figures below present the development of the number of fixed telephony subscribers and Albtelecom, as well as the alternative operators for the period of 2000-2013.

## MOBILE TELEPHONY

The number of active mobile users by the end of 2013 reached in 3.7 million, compared to 3.5 million at the end of 2012. This consists of an annual growth of 4% for all four operators. In the mean time, the growth rate differs according to the operators: Operators Plus and Vodafone have sustained a growth of respectively 9% and 11%, while operators Albtelecom (EM) and AMC have sustained a reduction of respectively 2% and 3%. Table 2 presents the development of the number of active mobile users for the period of 2010-2013.

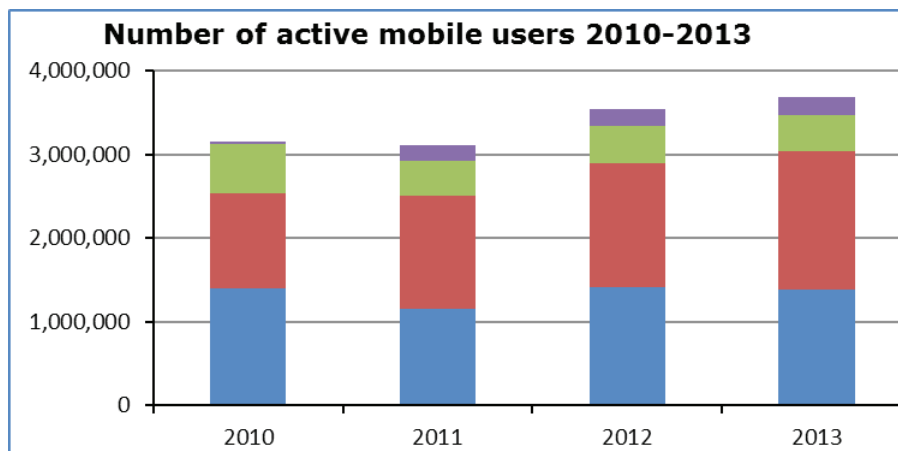


Table 1: Development of the number of active mobile users 2010-2013

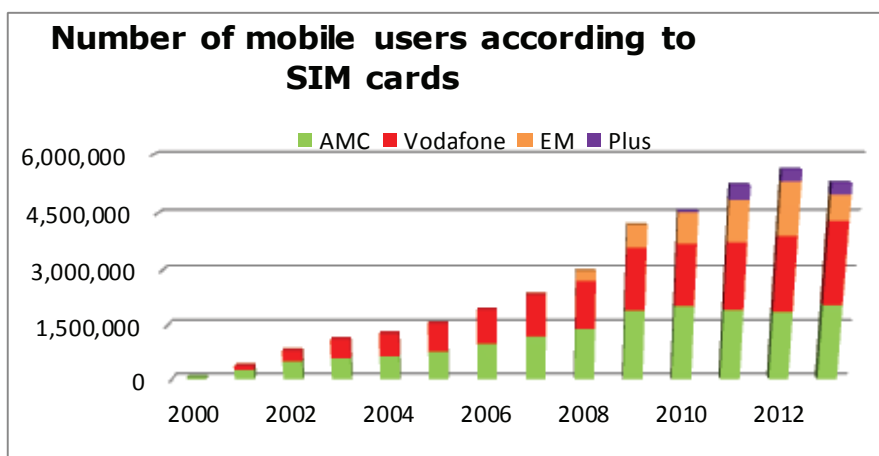
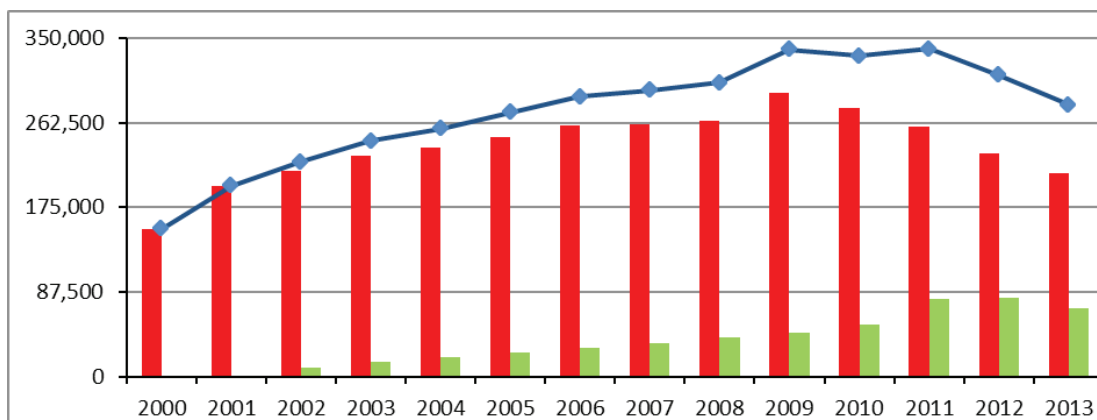


Table 2. Development of the number of mobile users according to SIM cards 2000-2013



**Table 3. Development of the number of fixed telephony subscribers during the period of 2000-2013**

## INTERNET

The following table presents the development of the number of fixed telephony subscribers for the main operators during the period of 2010-2013.

The number of subscribers with fixed and mobile broadband access (3G with USB/modem cards) reached approximately 294 thousand by the end of 2013, which consists

	Albtelecom	Abcom	ASC	Nisatel	AMC Fixed	OA Others	Total Fixed
<b>2010</b>	277,763	19,975	7,408	5,900	-	20,456	331,502
<b>2011</b>	258,943	27,167	10,129	4,950	7,565	30,090	338,844
<b>2012</b>	230,397	33,000	7,649	5,500	6,119	28,996	311,661
<b>2013</b>	210,382	13,680	15,047	7,166	6,950	27,975	281,200
<b>Difference 2013/2012</b>	-9%	-59%	97%	30%	14%	-4%	-10%

**Table 1. Number of fixed telephony subscribers for the period of 2010-2013**

In relation to the fixed telephony, Albtelecom continues to have 76% of the market, followed by Abcom with 5.4%, ASC with 6%, Nisatel with 3.2%, etc. In the mean time the number of fixed telephony subscribers has reduced by 23% for the period of 2010-2014

of a growth of 36% in comparison with 2012. The following table presents the number of Tabela e mëposhtme paraqet numrin e pajtimtarëve broadband fiks dhe 3G, dhe numrin e pajtimtarëve si përqindje e popullsisë dhe numrit të familjeve (penetrimi).

	Number of subscribers			Penetration				
	Total Fixed	Total 3G	Total Fixed + 3G	Population			Family	
				Fixed	3G	Fixed +3G	Fixed	Fixed +3G
<b>2011</b>	139,697	34,493	174,190	4.9%	1.2%	6.2%	17%	22%
<b>2012</b>	160,088	55,405	215,493	5.7%	2.0%	7.6%	20%	27%
<b>2013</b>	182,556	111,367	293,923	6.4%	3.9%	10.4%	22%	37%
<b>Difference 2013/2012</b>	14%	101%	36%					

**Table 2. Number of subscribers with broadband access and penetration rates for the period of 2011-2013**

In 2013, both segments of fixed broadband and 3G access (USB/modem cards) sustained a growth of respectively 14% and 101%. The penetration rate for both types of access together is 10.4% per population and 37% per family.

of 2013, which constitutes a growth of 21% from 2012. A large growth has also been sustained by Abissnet and ASC operators, as the two other largest operators with respectively 16% and 31%.

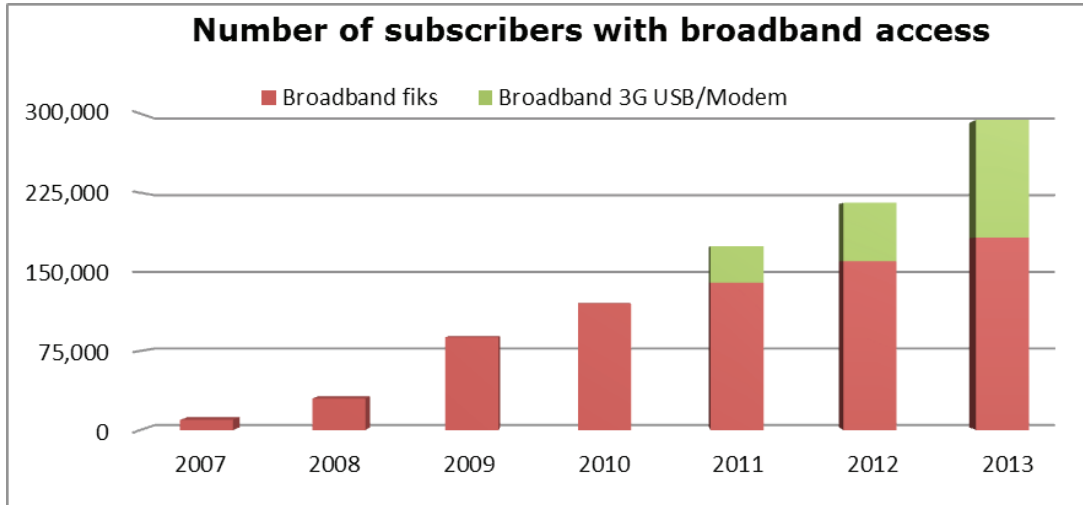


Table 5. Development of the number of subscribers with broadband access for the period of 2007-2013

The number of subscribers with broadband access to the fixed networks sustained an increase of 14%, where the majority of operators have witnessed an increase of the number of prescribers. In 2013, Albtelecom sustained a growth by 10% of the number of broadband subscribers. Amongst the alternative fixed telephony operators, Abcom continues to remain the operator with the largest number of broadband connections, with approximately 43 thousand by the end

By the end of 2013 the number of subscribers with mobile broadband access (3G USB/modem card for computer use) reached approximately 111 thousand from 55 thousand at the end of 2012, which consists of a growth of twice the number of prescribers, or in percentage a growth of 101%. Both mobile operators Vodafone and AMC, have sustained a significant growth, with respectively 76% and 80%. Eagle Mobile, as the most recent operator that

	Albtelecom	Abcom	Abissnet	ASC	OA others	Total Fixed Broadband
2010	70,597	13,575	7,000	5,666	23,162	120,000
2011	60,055	29,321	15,321	10,129	24,871	139,697
2012	66,757	35,870	17,719	11,777	27,965	160,088
2013	73,242	43,430	20,562	15,432	29,890	182,556
Difference 2013/2012	10%	21%	16%	31%	7%	14%

Table 3. Number of subscribers with fixed broadband access for the period of 2010-2013

started delivering its 3G services in 2013, has managed to obtain approximately 13 thousand subscribers during 2013.

A significant growth of 88% was also observed in the number of users with 3G broadband access from the mobile phones, by reaching approximately 1.1 million users by the end of 2013, compared to 594 thousand users in 2012.

The total number of users with 3G broadband access (mobile phones and USB cards) in 2013 reached 1.2 million compared to 694 thousand in 2012.

## ADMINISTRATION OF THE CC.TLD.AL DOMAIN, UNDER ITS DOMAINS, AS WELL AS ENUM:

Domain.al is one of the measuring instruments for the Internet vitality in Albania. The transfer from the system Register-Recorder took place in 2013<sup>1</sup>. These changes liberalized the recording market of the domain under.al by transferring from the Registry-Registrar system, only in AEPC in the Registry AEPC system and the liberalized registrar, by giving the right of registration to other certified subjects by AEPC based on the criteria determined in this regulatory document. This process was completed through the public consultation with the entrepreneurs. In 2013 the number of registered domains was 3320 by reaching a total number of the registered domains to **12888**.

	AMC		Vodafone		EM		Total	
	USB/Modem	Mobile Phone	USB/Modem	Mobile Phone	USB/Modem	Mobile Phone	USB/Modem	Mobile Phone
<b>2011</b>	<b>9,000</b>	46,000	<b>25,493</b>	202,756	<b>N/A</b>	N/A	<b>34,493</b>	248,756
<b>2012</b>	<b>17,833</b>	222,882	<b>37,572</b>	371,426	<b>N/A</b>	N/A	<b>55,405</b>	594,308
<b>2013</b>	<b>32,138</b>	279,428	<b>66,086</b>	568,207	<b>13,143</b>	272,257	<b>111,367</b>	1,119,892
<b>Difference 2013/2012</b>	<b>80%</b>	25%	<b>76%</b>	53%	<b>N/A</b>	N/A	<b>101%</b>	88%

**Table 4: Number of subscribers with 3G broadband access for the period of 2010-2013.**

<sup>1</sup>Based on Decision No. 2252, dated 23.01.2013, AEPC Executive Council adopted the paper "A few amendments in Regulation No. 2, for "The Registration and Administration of Domain Names under .AL and under domains .gov.al, .mil.al, .edu.al, .com.al, .org.al dhe .net.al".

## DEVELOPMENT OF IDI, IPB, NRI AND E-GOVERNANCE INDICATORS FOR THE PERIOD OF 2002-2013

Based on the periodical reports of the ITU related to “Information Society Measurement”, the periodical reports of “The Global Information Technology”, as well as the periodical reports of UNPAN related to the e-government, we present below the development of these indicators:

- IDI – ICT development index
- IPB- ICT price basket
- NRI- index of network readiness
- e-government index- index of e-governance readiness
- e-participation indeks – index of decision-taking participation

11 individual indicators. The calculation methodology is provided in the ITU “Information Society Measurement” Report.

The table below presents the development of this indicator in Albania for the period of 2002-2012 in comparison with the regional and world average.

As seen, the IDI index for Albania remains under the world average and the last one in Europe, despite the annual growth. Worldwide, Albania is ranked in the group of countries with average results of this index and is closer to the upper limit to move into the group of countries with above average results.

### ICT DEVELOPMENT INDEX (IDI) DEVELOPMENT & COMPARISONS WITH THE WORLD AND EUROPEAN AVERAGE

IDI indicator is a composite indicator with three sub-groups/sub-indicators that include

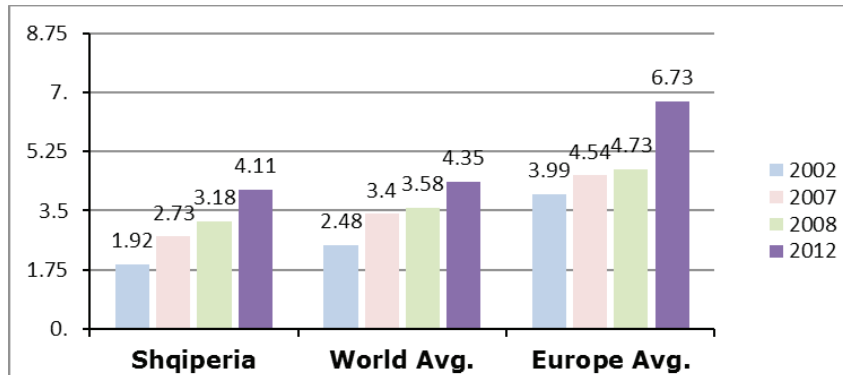


Table 6: IDI Indicator 2002-2012

Source: ITU, “Information Society Measurement”, Reports for the period of 2010-2013

IDI Index Levels: low, average, above average, high

	2007		No. of countries	2008		No. of countries	2012		No. of countries
	Min.	Max.		Min.	Max.		Min.	Max.	
<b>High</b>	5.29	7.50	33	5.67	7.85	33	6.19	8.57	40
<b>Above Average</b>	3.41	5.25	33	3.64	5.64	33	4.17	6.11	39
<b>Average</b>	2.05	3.34	44	2.16	3.54	47	2.40	4.11	39
<b>Low</b>	0.82	2.03	44	0.79	2.04	46	0.99	2.33	39

Table 5: IDI Index worldwide

In the mean time, all the European countries have an IDI index value of above world average and approximately half of them have an IDI index value of above the index of developed countries at 6.78. However, the reports for Albania in the recent years indicate that our country is one of countries with the largest growth of the access sand utilization sub-indexes (The latter is presented in the ITU Report, MIS/2013).

In order to understand what the important factors that influence the IDI level are, the following table carries out a comparison of the IDI sub-indexes:

- The access sub-index includes:
  - o Penetration of the fixed and mobile telephony, the international bandwidth (connectivity) for Internet users
- The utilization index includes:
  - % of families with PCs, % of families with Internet, Internet Users, penetration of fixed broadband subscribers, penetration of broadband wireless subscribers
- The proficiency sub-index includes:
  - o % of individuals registered in high school, % of individuals registered in university, educated individuals

result marked as the target for the indicator (the maximum indicator changes, i.e. the bandwidth for the international internet has grown several times during the period of 2010-2013).

It is clear that:

- the standard sub-index for the penetration of the fixed telephony remains almost at the same level for the period of 2002-2012.
- the standard sub-index for the % of families connected with PCs and the internet remains low
- the standard sub-index for the broadband fixed connections remains extremely low (this depends on the low penetration of the fixed telephony).

It can also be said that last year's ITU Report contained a wrong finding in relation to the market of the mobile telephony in Albania (the market has not reached maturity yet) – and this is also reflected in the following table. In fact, the penetration of the mobile telephony is on the upper limit used as the maximal indicator for the standard of this sub-index (190%).

	2002		2007		2008		2012	
	World Av	Albania	World Av	Albania	World Av	Albania	World Av	Albania
<b>IDI</b>	2.48	1.92/93	3.40	2.73/85	3.6	3.12/84	4.35	4.11
<b>Access sub index</b>	2.68	1.87/ 78	3.91	2.83/96		3.27/88	4.74	3.73/96
<b>Utilization sub index</b>	0.54	0.01/ 130	1.43	0.63/78		0.91/84	2.85	2.71/65
<b>Proficiency sub index</b>	5.95	5.82/92	6.31	6.69/ 78		7.25/64	6.59	7.65/57

**Table 6: IDI sub-indexes for the period of 2002-2012**

*Source: ITU, "Information Society measurement" Reports for the period of 2010-2013*

The study of the subsequent reports indicates that the ITU calculated results are not consistent and that they have differences.

The table below presents the standard of each of the 11 indicators used to calculate the IDI index together with the maximum

## IPB (ICT PRICE BASKET) INDEX

The IPB index is also a composite indicator, based on the calculation of three sub-baskets:

- fixed telephony sub-basket
- mobile telephony sub-basket
- Internet sub-basket



According to the ITU Report for 2013, the IPB index for Albania shows the following results:

- Albania is ranked on the 100<sup>th</sup> place with an IPB value of 4.5% against the GDP/p.c. with a slight improvement from 4.6% of the GDP/p.c in 2011.
- The fixed telephony sub-basket is valued at 2.2 % against the GDP/p.c in comparison with 2.3% of the GDP/p.c in 2011,
- The mobile telephony sub-basket is valued at 7.8% against the GDP/p.c in comparison with 7.9% of the GDP/p.c in 2011.
- The fixed broadband sub-basket is valued at 3.6% of the GDP/p.c.

## MOBILE BROADBAND PRICES

It is for the first time in 2012 that the ITU collected data on the mobile broadband prices through the IPB index questionnaire.

- Albania is on the 34<sup>th</sup> place with a value of 1.5 % of the GDP/p.c, for the pre-paid services and on the 46<sup>th</sup> place with a value of 1.5 % of the GDP/p.c for the post-paid services/500MB from the mobile phone.
- Albania is on the 28<sup>th</sup> place with a value

of 1.6% of the GDP/p.c in relation to the delivery of mobile broadband internet from the computer or the pre-paid services and on the 85<sup>th</sup> place with 5.1% of the GDP/p.c for the delivery of the 1GB internet from the computer (postpaid services).

In general, the mobile broadband prices per 500 MB for both the pre-paid and post-paid packages in comparison with other regional and world countries are in low levels (affordable) almost at the level of the developed countries. The mobile broadband service for 1 GB is at an average level in comparison with other countries.

## E-GOVERNANCE AND E-PARTICIPATION INDEXES

UPAN periodical reports (UN Public Administration Network)<sup>1</sup> carry out an evaluation of the e-governance and e-participation readiness indexes. Even these indicators are composite ones and take into account the infrastructure and web observations. The results for the web access and online services are issued based on the independent observation of official internet sites.

The following tables show the development of these indicators for Albania.

Year	2003	2004	2005	2008	2010	2012	2014
e-government Index	0.311	0.340	0.3732	0.4670	0.4519	0.5161	0.5046
Web measurement Subindex/ online services	0.083	0.162	0.1615	0.3913	na	0.425	0.4488
Telecommunication Subindex/ infrastructure	0.049	0.058	0.068	0.1251	na	0.337	0.3548
Human Capital Sub index	0.80	0.80	0.89	0.8869	na	0.7863	0.7100

**Table 7: e-government index for Albania for the period of 2003-2012<sup>1</sup>**

Source: UN reports

Comparison with the region and the world average to be used for the e-gov index:

	2014	2012	2010
<b>Albania</b>	0.5046	0.5161	0.4519
<b>European Average</b>	0.6936	0.6574	0.5566
<b>World Average</b>	0.4712	0.4882	0.4406

**Table 8: Comparison with the region and the world average to be used for the e-gov index**

<sup>1</sup> <http://unpan3.un.org/egovkb/ProfileCountry.aspx?ID=2>

This indicator shows that Albania is above the world average indicator, but below the European average index.

e-participation indicator.

There is a growth in relation to the e-participation indicator (change of

Year	2003	2004	2005	2008	2010	2012	2014
e-participation Index	0.017	0.0328	0.0317	0.0227	0.1286	0.105	0.5294

**Table 9: e-participation index for Albania**

**Source: UN reports**

UN periodical reports indicate a change in the methodology used, which may have influenced the result with lowering of the

methodology). Albania is ranked on the 59<sup>th</sup> place according the UNPAN 2014.

Indicators	Measuring Institution	Definition and Purpose	Current Status and Periodicity
<b>Telecom Sector</b>			
<b>Total revenue from the electronic communication sector</b>	AEPC	<b>Abbreviation:</b> tel_ardh <b>Definition:</b> Total revenue includes wholesale and retail revenue provided from the secure electronic communications annually from all the telecom operators (excluding the VAT).	Currently measurable. Periodicity: Annual.
<b>Total investments in networks by the electronic communications sector</b>	AEPC	<b>Abbreviation:</b> tel_inv <b>Definition:</b> Total investment includes both tangible and intangible investments in the telecommunications (without license payment) from all of the telecom operators.	Currently measurable. Periodicity: Annual.
<b>Broadband Development and Coverage</b>			
<b>Standard coverage/availability with fixed broadband and mobile (expressed as a family %)</b>	AEPC/INSTAT	<b>Abbreviation:</b> bb_mbst <b>Definition:</b> Coverage is an indicator of the offer determined as the percentage of families residing in the areas covered by xDSL, cable (basic and NGA <sup>1</sup> ), FTTP or WiMax, LTE networks.	Currently measurable by AEPC, not on family basis. Periodicity: Annual. May be retrieved through INSTAT family surveys.
<b>Standard rural coverage with fixed and mobile broadband (expressed as a family %)</b>	AEPC/INSTAT	<b>Abbreviation:</b> bb_mbrst <b>Definition:</b> Coverage is an indicator of the offer determined as the percentage of families residing in the areas covered by xDSL, cable (basic and NGA), FTTP or WiMax, LTE networks. Rural areas are defined as those areas having less than 100 residents per km <sup>2</sup> .	Currently measurable in general by AEPC and not on family or area basis. May be retrieved through INSTAT family surveys.
<b>Coverage/availability of NGA broadband (expressed as a family %)</b>	AEPC	<b>Abbreviation:</b> bb_ngamb <b>Definition:</b> Coverage is an indicator of the offer determined as the percentage of families residing in the areas covered by NGA. Access to the Next Generation includes the following technologies: FTTH, FTTB, Cable Docsis 3.0, VDSL and the other super fast broadband (at least downloading of 30 Mbps).	Currently measurable by AEPC on a similar definition, but not on family basis. Periodicity: Annual. May be retrieved through INSTAT family surveys.
<b>Fixed broadband subscribers</b>	AEPC	<b>Abbreviation:</b> bb_linja <b>Definition:</b> Number of subscribers (routes) per fixed broadband.	Currently measurable by AEPC. Periodicity: Annual.
<b>Penetration of fixed broadband (subscribers/100 persons)</b>	AEPC	<b>Abbreviation:</b> bb_penet <b>Definition:</b> Number of subscribers (routes)/100 persons for fixed broadband. Penetration of fixed broadband.	Currently measurable by AEPC. Periodicity: Annual.
<b>Families with broadband connection</b>	AEPC	<b>Abbreviation:</b> sh_broad <b>Definition:</b> Utilized broadband connections used by families include: DSL, fixed connection (cable, fiber, Ethernet, PLC), fixed wireless (satellite, WiFi, WiMax) and wireless mobile (3G/UMTS). <b>Note:</b> This includes families with at least one member aged 16-74 years old.	Currently measurable by AEPC. Periodicity: Annual.

<sup>1</sup> NGA - Next Generation Access Networks (NGA) or in Albanian Rrjetet e Aksesit të Gjeneratës Tjetër

<b>Enterprises with fixed broadband connection</b>	AEPC	<p><b>Abbreviation:</b> nd_broad</p> <p><b>Definition:</b> Fixed broadband connection includes DSL, xDSL, connection with rented cables, Rele type, Metro-Ethernet, PLC-Communications via power lines, fixed wireless connection, etc.</p> <p><b>Note:</b> Enterprises with 10 or more employees. All of the production and services sectors.</p>	Currently measurable by AEPC. Periodicity: Annual.
<b>Part of the market of new actors of fixed broadband subscriptions</b>	AEPC	<p><b>Abbreviation:</b> bb_pr</p> <p><b>Definition:</b> Part of the market based on fixed broadband subscription (connections). New actors means operators with no special or exclusive rights or the monopoly for delivering voice telephony service before the market liberalization.</p>	Currently measurable by AEPC. Periodicity: Annual.
<b>Part of DSL fixed broadband subscribers</b>	AEPC	<p><b>Abbreviation:</b> bb_dsl</p> <p><b>Definition:</b> Part of the DSL (Digital Subscriber Line) in the total fixed broadband subscriptions.</p>	Currently measurable by AEPC. Periodicity: Annual.
<b>Broadband Speed and prices</b>			
<b>Part of fixed broadband subscribers with &gt;= 2 Mbps –advertised downloading speed</b>	AEPC	<p><b>Abbreviation:</b> bb_shpejt2</p> <p><b>Definition:</b> Based on the advertised downloading speed.</p>	Currently measurable by AEPC. Periodicity: Annual.
<b>Part of fixed broadband subscribers with &gt;= 10 Mbps –advertised downloading speed</b>	AEPC	<p><b>Abbreviation:</b> bb_shpejt10</p> <p><b>Definition:</b> Based on the advertised downloading speed.</p>	Will be measured by AEPC. Periodicity: Annual.
<b>Part of fixed broadband subscribers with &gt;= 30 Mbps – advertised downloading speed</b>	AEPC	<p><b>Abbreviation:</b> bb_shpejt30</p> <p><b>Definition:</b> Based on the advertised downloading speed.</p>	Will be measured by AEPC. Periodicity: Annual.
<b>Part of fixed broadband subscribers with &gt;= 100 Mbps – advertised downloading speed</b>	AEPC	<p><b>Abbreviation:</b> bb_shpejt100</p> <p><b>Definition:</b> Based on the advertised downloading speed.</p>	Will be measured by AEPC. Periodicity: Annual.
<b>Current downloading speed of fixed broadband subscribers</b>	AEPC	<p><b>Abbreviation:</b> shpejtakt</p> <p><b>Definition:</b> Average downloading speed during peak times (current speed), measured by a specifically configured equipment for this purpose (SamKnows Whitebox), which carries out testing of the different aspects of Internet performance. Measured speed is referred to a subscription sample by utilizing similar products delivered by the internet service providers. Offers are not weight with the market part, therefore the measured speed cannot be interpreted as an average speed benefited by the consumers.</p>	Will be measured by AEPC. Periodicity: Annual.
<b>Monthly cost only for the internet access</b>	AEPC	<p><b>Abbreviation:</b> vetëm_çmimi_internetit</p> <p><b>Definition:</b> Cost of offers only for the fixed broadband access, including the VTA and excluding the additional costs of the telephony or cable line (if any). Minimal and average costs refer to the similar subscription groups delivered by the internet service providers. Offers are not weight with the market part, thus the average offer cost cannot be interpreted as an average cost paid by the consumers.</p>	Monitored by AEPC.

<p><b>Monthly cost of fixed broadband internet access inclusive of fixed telephony</b></p>	<p>AEPC</p>	<p><b>Abbreviation:</b>çmim_fiks_internet_tel  <b>Definition:</b> Monthly cost for fixed broadband internet access, including the fixed telephony, the VAT and excluding the additional costs of the telephony or cable line (if any). Minimal and average costs refer to the subscription groups delivered by the internet service providers. Offers are not weight with the market part, thus the average offer cost cannot be interpreted as the average cost paid by the consumers.</p>	<p>Monitored by AEPC.</p>
<p><b>Monthly cost of the joint offer of access to the Internet+Fixed Telephony+TV</b></p>	<p>AEPC</p>	<p><b>Abbreviation:</b> çmim_fiks_Internet__Tel_TV  <b>Definition:</b> Monthly cost of offers for the fixed broadband access including the fixed telephony and the TV (analog or digital), also including the VAT and excluding the additional costs of telephony or cable line (if any). Minimal and average costs refer to the subscription groups delivered by the internet service providers. Offers are not weight with the market part, thus the average offer cost cannot be interpreted as the average cost paid by the consumers .</p>	<p>Monitored by AEPC.</p>

<b>Advanced 3G (HSPA) mobile broadband coverage (expressed as a family %)</b>	AEPC	<b>Abbreviation:</b> mbb_hspamb <b>Definition:</b> Coverage is the offer indicator defined as the percentage of families residing in an area covered by the advanced third generation broadband (HSPA protocol).	Currently measurable in total by AEPC and not according to the family and area basis. May be retrieved through INSTAT family surveys.
<b>4G mobile broadband coverage (LTE) (expressed as a family %)</b>	AEPC	<b>Abbreviation:</b> mbb_ltemb <b>Definition:</b> Coverage is the offer indicator defined as the percentage of families residing in an area covered by the advanced fourth generation broadband (LTE protocol).	To be measured by AEPC upon delivery of service. Currently there is no 4G/LTE coverage.
<b>3G coverage</b>	AEPC	<b>Abbreviation:</b> mbb_3gmb <b>Definition:</b> Coverage is the offer indicator defined as the percentage of population residing in the 3G - third mobile generation broadband networks.	Currently measurable by AEPC. Periodicity: Annual.
<b>Total number of subscribers (SIM cards)</b>	AEPC	<b>Abbreviation:</b> mob_subs <b>Definition:</b> Mobile subscribers are defined as the active SIM cards number. This includes both the voice and data service, installed telephone, modem, USB telephone or other equipment.	Currently measurable by AEPC. Periodicity: Annual.
<b>Mobile penetration – active SIM cards</b>	AEPC	<b>Abbreviation:</b> mob_penet <b>Definition:</b> Number of active SIM cards in proportion with the population. This includes both the voice and data service, installed telephones, modem, USB modem USB or other equipment.	Currently measurable by AEPC. Periodicity: Annual.
<b>Mobile broadband penetration (subscribers/100 persons)</b>	AEPC	<b>Abbreviation:</b> mbb_penet <b>Definition:</b> Mobile broadband penetration is defined as the number of active SIM mobile broadband cards per 100 persons.	Currently measurable by AEPC.
<b>Part of the market of the main operator (expressed in active SIM card %)</b>	AEPC	<b>Abbreviation:</b> mob_pt <b>Definition:</b> Part of the market of the main operator based on the number of active SIM cards.	Currently measurable by AEPC.
<b>Individuals accessing the internet from the mobile phone utilizing UMTS (3G)</b>	INSTAT	<b>Abbreviation:</b> i_iu3g <b>Definition:</b> Individuals using a mobile phone or a smartphone, through the UMTS, HSDPA (3G or 3G+) in order to access the internet in the last 3 months.	May be retrieved through INSTAT family surveys.
<b>Enterprises delivering portable equipment to their personnel</b>	INSTAT	<b>Abbreviation:</b> e_pmd <b>Definition:</b> Portable equipment (portable computers, tablets, smartphones, PDA telephones, etc.) delivered for business purposes, for which the enterprise pays in full or in part a limited cost of subscription and utilization.	This indicator is not currently measurable. To be foreseen by INSTAT in the future ICT business survey.
<b>Average revenue per user (AMP) in the retail mobile market</b>	AEPC	<b>Abbreviation:</b> mob_arm <b>Definition:</b> Total revenue in the retail mobile market divided by the active SIM cards.	Currently measurable by AEPC.

<b>Average retail sale/minute of voice communication</b>	AEPC	<b>Abbreviation:</b> mob_arpm <b>Definition:</b> Total of voice communications related to the retail sales divided by the total number of voice communications.	Currently measurable by AEPC in total and not as a special service. This is to be considered in the future.
<b>Cost of mobile roaming/minute</b>	AEPC	<b>Abbreviation:</b> mob_roam <b>Definition:</b> Average retail sale/minute (in €-ALL) according to calls made in relation to the area division.	Monitored by AEPC.
<b>Internet Utilization</b>			
<b>Families with Internet access at home</b>	INSTAT	<b>Abbreviation:</b> h_iacc <b>Definition:</b> Every family member has internet access at home. <b>Note:</b> This includes families that have at least a member of 16-74 years old.	Retrieved by INSTAT through the family surveys. Periodicity: Every two-three years.
<b>Individuals that have utilized the internet in the last 3 months.</b>	INSTAT	<b>Abbreviation:</b> i_iu3	Retrieved by INSTAT through the family/individual surveys. Periodicity: Every two-three years.
<b>Individuals that have utilized the internet in the last 12 months.</b>	INSTAT	<b>Abbreviation:</b> i_ilt12	Retrieved by INSTAT through the family/individual surveys. Periodicity: Every two-three years.
<b>Individuals that are regular internet users (at least once a week)</b>	INSTAT	<b>Abbreviation:</b> i_ipërd <b>Definition:</b> Individuals that utilized the internet at least once a week in the last 3 months.	Retrieved by INSTAT through the family/individual surveys. Periodicity: Every two-three years.
<b>Individuals that are frequent internet users (daily or almost daily)</b>	INSTAT	<b>Abbreviation:</b> i_iditë <b>Definition:</b> Individuals that utilized the internet daily or almost daily, in the last 3 months.	Retrieved by INSTAT through the family/individual surveys. Periodicity: Every two-three years.
<b>Individuals that use a laptop/tablet to access the internet, when not at work or home</b>	INSTAT	<b>Abbreviation:</b> i_iumc <b>Definition:</b> Individuals that used a portable computer (touch screen laptop and tablet) to access the internet when not at work or home through the wireless connections (WiFi or mobile networks), in the last 3 months.	Retrieved by INSTAT through the family/individual surveys.
<b>Individuals that have never used the internet</b>	INSTAT	<b>Abbreviation:</b> i_iux	Retrieved by INSTAT through the family/individual surveys. Periodicity: Every two-three years.

Diversity of online activities performed by the internet users	INSTAT	<p><b>Abbreviation:</b> i_ia12ave</p> <p><b>Definition:</b> Diversity index is based on the calculation of the number of activities, out of a list of 12 of them, performed at least once in the last month. This is calculated on an individual level for those individuals that have utilized the internet in the last 3 months.</p> <p><b>Note:</b> The 12 activities included in the index are the following: sending/retrieving of the electronic mail (e-mail), information on goods and services, online reading of newspapers/ news, information on travel services/accommodation, posting of messages for the social media, interaction with public authorities, internet banking, telephone or video calls, sales of goods or services, content purchase (films, music, programmes, etc), purchasing of goods, purchasing of services.</p>	Retrieved by INSTAT through the family surveys. Periodicity: Every two-three years.
Readiness of IPv6 – websites that have an AAAA coverage of the DNS registers (expressed as % of the majority of visited sites)		<p><b>Abbreviation:</b> AAAA_mbl</p> <p><b>Definition:</b> Websites ready for IPv6 are those websites that have at least one AAAA in their DNS registers (this means that the internet page is visible/ may respond to users that already have an Ipv6 connection). Tests are carried out on a quarterly basis through a script of the Ipv6 Observatory study of the list of over 1 million most visited pages provided by Alexa.</p>	This indicator is not currently measurable. Monitoring of this indicator to be debated and decided upon.
<b>Utilization of Internet Services</b>			
Search of online information on goods and services	INSTAT	<p><b>Abbreviation:</b> i_iuif</p> <p><b>Definition:</b> Individuals that have utilized the internet in the last 3 months to find information on goods and services.</p>	This indicator is not currently measurable. To be foreseen by INSTAT in the future ICT business / individual surveys. This indicator is not currently measurable.
Online reading/ online downloading of newspapers/ magazines	INSTAT	<p><b>Abbreviation:</b> i_iunsh</p> <p><b>Definition:</b> Individuals that have utilized the internet in the last 3 months to read/ download online newspapers/news.</p>	To be foreseen by INSTAT in the future ICT business / individual surveys. This indicator is not currently measurable.
Online playing or downloading of games, images, movies or music	INSTAT	<p><b>Abbreviation:</b> i_iugm</p> <p><b>Definition:</b> Individuals that have utilized the internet in the last 3 months in order to play or download games, images, movies or music.</p>	To be foreseen by INSTAT in the future ICT business /individual surveys.
Utilization of online banking	INSTAT/ Bank of Albania	<p><b>Abbreviation:</b> i_iubk</p> <p><b>Definition:</b> Individuals that have utilised the internet in the last 3 months for the purposes of Internet banking.</p>	To be foreseen by INSTAT in the future ICT business / individual surveys.
Video calls or video telephony (through the webcam) in the internet	INSTAT	<p><b>Abbreviation:</b> I_IUPH1</p>	This indicator is not currently measurable. To be included in future INSTAT surveys.



<b>Internet uploading of content created by the user itself in order to be shared with others</b>	INSTAT	<b>Abbreviation:</b> i_iuupl <b>Definition:</b> Individuals that have utilized the internet in the last 3 months for the purposes of online uploading of content created by them (texts, images, pictures, videos, music, etc.)	This indicator is not currently measurable. To be included in future INSTAT surveys.
<b>Participation in social networks in the last 3 months</b>	INSTAT	<b>Abbreviation:</b> i_jusnet <b>Definition:</b> Individuals that have utilized the internet in the last 3 months in order to participate in social networks (creation of users profile, posting of messages or other contributions in Facebook, twitter, etc.)	This indicator is not currently measurable. To be included in future INSTAT surveys.
<b>Online search for jobs or job applications</b>		<b>Abbreviation:</b> i_jupunë <b>Definition:</b> Individuals that have utilized the internet in the last 3 months in order to search for a job or send a job application.	This indicator is not currently measurable. To be included in future INSTAT surveys.
<b>Completion of online courses (in any subject)</b>		<b>Abbreviation:</b> i_juolc <b>Definition:</b> Individuals that have utilized the internet in the last 3 months in order to do online courses (in any subject)	This indicator is not currently measurable. To be included in future INSTAT surveys.
<b>Online search for information related to offers in education, training or courses</b>		<b>Abbreviation:</b> i_jueduif <b>Definition:</b> Individuals that have utilized the internet in the last 3 months in order to search for information related to education, training or course offers.	This indicator is not currently measurable. To be included in future INSTAT surveys.
<b>Online interaction with the public authorities in the last 3 months</b>	INSTAT/ NAIS	<b>Abbreviation:</b> i_juqev <b>Definition:</b> Individuals that have used the internet in the last 3 months for interactions with the public authorities. This includes the information from the public authorities online websites, downloading of official forms and returning completed forms.	This indicator is partially measurable by LSMS/ASN. To be included in future INSTAT surveys.
<b>Returning completed forms to the public administration through the internet in the last 3 months</b>	INSTAT	<b>Abbreviation:</b> i_iqevrt	This indicator is partially measurable by LSMS/ASN. To be included in future INSTAT surveys.
<b>Participation in online consultation or voting in order to practice civil or political issues</b>	INSTAT	<b>Abbreviation:</b> i_iuvote <b>Definition:</b> Individuals that have utilized the internet in the last 3 months in order to participate in online consultations or voting to determine civil or political issues (i.e. urban planning, signing of a petition).	This indicator is not currently measurable. To be included in future INSTAT surveys.

**Electronic Governance  
(e-Governance)**

Essential public services for citizens that are completely online	GoA NAIS	<p><b>Abbreviation:</b> FOA_cit</p> <p><b>Definiton:</b> Percentage of public services for citizens from the basket of 12 basic services (income tax, job search, social insurance benefits, personal documents, vehicle registration, construction permit, police statement, public libraries, certificates, higher education registration, transfer statement, health services), for which the whole procedure may be completed online.</p>	This indicator has been periodically measured. Periodical measuring to be continued every six months.
Essential public services for enterprises that are completely online	GoA NAIS	<p><b>Abbreviation:</b> FOA_ent</p> <p><b>Definition:</b> Percentage of public services for enterprises from the basket of 8 basic services (social contributions, corporate tax, VAT, company registration, statistical data, customs form, environmental permits, public procurement), for which the whole procedure may be completed online.</p>	This indicator has been periodically measured. Periodical measuring to be continued every six months.
Individuals who interacted with public authorities in the last 12 months	INSTAT	<p><b>Abbreviation:</b> i_juqev12</p> <p><b>Definition:</b> Individuals that have utilized the internet in the last 12 months in order to interact with public authorities. This includes information retrieval from official websites of public services, downloading of original forms and sending of completed ones.</p>	This indicator is partially measurable by LSMS. To be included in future INSTAT surveys.
Individuals who sent completed forms via the internet to public authorities in the last 12 months	INSTAT	<p><b>Abbreviation:</b> i_iqev12rt</p>	This indicator is partially measurable by LSMS. To be included in future INSTAT surveys.
Enterprises that interact online with public authorities	INSTAT next year	<p><b>Abbreviation:</b> e_iqev</p> <p><b>Definiton:</b> Utilization of the internet for interaction with public authorities in the last calendar year includes the following: information or form retrieval from the internet websites, sending of completed forms, following of the complete procedure in an electronic manner or delivering of products in the public procurement system (e-Tender). <b>Note:</b> Enterprises with 10 or more employees. All of the production and services sector, with the exception of the financial sector.</p>	This indicator is partially measurable by ASN. To be included in future INSTAT surveys.
Enterprises that return the completed forms to the public authorities through the internet.	INSTAT next year	<p><b>Abbreviation:</b> e_iqevkth</p> <p><b>Definition:</b> Activity carried out through the internet in the last calendar year, before the study. <b>Note:</b> Enterprises with 10 or more employees. All of whole production and services sector, with the exception of the financial sector.</p>	This indicator is not currently measurable. To be included in future INSTAT surveys.
Enterprises that deliver a proposal to the public procurement system (e-Procurement)	INSTAT next year /APP	<p><b>Abbreviation:</b> e_iqev2pr</p> <p><b>Definition:</b> Tender proposals should be delivered to the system and not send by e-mail. Proposals delivered by this method in the last calendar year before the survey. <b>Note:</b> Enterprises with 10 or more employees. All of the production and services sector, with the exception of the financial sector.</p>	There is some data with the APP. To be included in future INSTAT surveys.

<p><b>Results of centralization of electronic governmental services (e-Gov) by utilizers</b></p>	<p>INSTAT/ NAIS</p>	<p><b>Abbreviation:</b> përd_qend_eqev  <b>Definition:</b> Results of centralization by utilizers show to what extend (information about it) is a service delivered online and how usable that is (i.e. if there are assistance, reply and support services) as an evaluation of quality of services by users on issues related to the facilitation and rapidity of service utilization.  <b>Note:</b> E-Governance evaluation determines a series of vital events, as well as shows how a country performs in the support of all of the interactions between citizens and the public administration, when moving to each of these vital events. The result refers to the vital events analyzed during a year as well as the previous year.</p>	<p>This indicator is not currently measurable. To be analysed and evaluated for inclusion in future INSTAT surveys.</p>
<p><b>Transparency results for E-Gov services</b></p>			
<p><b>Transparency results for E-Gov services</b></p>		<p><b>Abbreviation:</b> transparent_eqev  <b>Definition:</b> Transparency results show to what extend are the e-Gov services transparent. This indicator evaluates three aspects of transparency: to what extend are the public authorities transparent in relation to their responsibilities and performance; to what extend are the public authorities transparent in relation to the service delivery process; and, to what extend are the public authorities transparent in relation to the personal data included in the service delivery process.  <b>Note:</b> Evaluation of the e-Governance indicator determines a series of vital events, as well as it carries out an evaluation of how a country performs in support of all of the interactions between citizens and the public administration, when moving to each of these vital events. The result refers to the vital events analyzed during a year as well as the results of the previous year.</p>	<p>This indicator is not currently measurable. To be analysed and evaluated for inclusion in future INSTAT surveys.</p>
<p><b>Electronic Commerce</b></p>			
<p><b>Individuals that order goods or services online.</b></p>	<p>INSTAT</p>	<p><b>Abbreviation:</b> i_blt12  <b>Definition:</b> Individuals that have carried out this activity in the last 12 months, for personal use.</p>	<p>This indicator is not currently measurable. To be included in future INSTAT surveys.</p>
<p><b>Individuals that order content or programmes that are sent or updated online</b></p>	<p>INSTAT</p>	<p><b>Abbreviation:</b> i_bgoodo  <b>Definition:</b> Content and online programmes include the following: movies, music, books, magazines, materials for online learning (e-learning), computer programmes or video games that have been ordered/purchased through the internet in the last 12 months, not for personal use.</p>	<p>This indicator is not currently measurable. To be included in future INSTAT surveys.</p>
<p><b>Individuals that sell goods or services online (i.e. through auctions)</b></p>	<p>INSTAT</p>	<p><b>Abbreviation:</b> i_jushes  <b>Definition:</b> Individuals that have used the internet in the last 3 months to sell goods and services (i.e. through auctions)</p>	<p>This indicator is not currently measurable. To be included in future INSTAT surveys.</p>

<b>Totality of electronic sales by enterprises, (expressed as % of their total turnover)</b>	INSTAT	<p><b>Abbreviation:</b> e_eturn</p> <p><b>Definition:</b> Values of performed sales in the previous calendar year through the computer networks, expressed as a % of the total value of the turnover (in monetary terms, by excluding the VAT). Computer networks include internet websites, writing EDI systems as other forms of the electronic transfer of data, by excluding the e-mails typed manually.</p> <p><b>Note:</b> Enterprises with 10 or more employees. All of the production and services sector, excluding the finance sector.</p>	This indicator is not currently measurable. To be included in future INSTAT surveys.
<b>Enterprises that utilize any electronic network for sales (at least 1%)</b>	INSTAT	<p><b>Abbreviation:</b> e_eshitje</p> <p><b>Definition:</b> Sales performed in the previous calendar year through the computer networks should represent at least 1 % of the total value of the turnover (in monetary terms, by excluding the VAT). Computer networks include internet websites, writing EDI systems as other forms of the electronic transfer of data, by excluding the e-mails typed manually.</p> <p><b>Note:</b> Enterprises with 10 or more employees. All of the production and services sector, excluding the finance sector.</p>	This indicator is not currently measurable. To be included in future INSTAT surveys.
<b>Enterprises that utilize any electronic network for purchases (at least 1%)</b>	INSTAT	<p><b>Abbreviation:</b> e_eblerje</p> <p><b>Definition:</b> Purchases made during the previous calendar year through the networks should represent at least 1 % of the total value of the turnover (in monetary terms, by excluding the VAT). Computer networks include internet websites, writing EDI systems as other forms of the electronic transfer of data, by excluding the e-mails typed manually.</p> <p><b>Note:</b> Enterprises with 10 or more employees. All of the production and services sector, excluding the finance sector.</p>	This indicator is not currently measurable. To be included in future INSTAT surveys.
<b>Electronic Business (e-Business)</b>			
<b>Enterprises that electronically share information on sales/purchases</b>	INSTAT	<p><b>Abbreviation:</b> e_sisorp</p> <p><b>Definition:</b> Information on sales/purchases is shared electronically and automatically through the programme that uses every internal function, such as, management of inventory levels, accounting system, production management or distribution management.</p> <p><b>Note:</b> Enterprises with 10 or more employees. All of the production and services sector, excluding the finance sector.</p>	This indicator is not currently measurable. To be included in future INSTAT surveys.
<b>Enterprises that electronically share information between them through enterprise resource planning (ERP)</b>	INSTAT	<p><b>Abbreviation:</b> E_ERP1</p> <p><b>Definition:</b> Utilization of a computer software package, enterprise resource planning ERP, sharing of information between different functional areas (i.e. accounting, planning, production, marketing).</p> <p><b>Note:</b> Enterprises with 10 or more employees. All of the production and services sector, excluding the finance sector.</p>	This indicator is not currently measurable. To be included in future INSTAT surveys.

Enterprises that utilize a programme in order to manage client relations (CRM)	INSTAT	<p><b>Abbreviation:</b> e_crman</p> <p><b>Definition:</b> CRM refers to the utilization of any software programme used to analyze information on clients for the purposes of marketing.</p> <p><b>Note:</b> Enterprises with 10 or more employees. All of the production and services sector, excluding the finance sector.</p>	This indicator is not currently measurable. To be included in future INSTAT surveys.
Enterprises that exchange business documents suitable for automatic processing	INSTAT	<p><b>Abbreviation:</b> e_ade</p> <p><b>Definition:</b> Indicator refers to sending/retrieving of messages (orders, bills, payment transactions, transport documents, tax statements, etc) to/from other enterprises, public authorities or financial institutions on a previously agreed format or standard (i.e. EDIFACT, XML, etc) that allows for the automatic processing without the need of writing an individual message.</p> <p><b>Note:</b> Enterprises with 10 or more employees. All of the production and services sector, excluding the finance sector.</p>	This indicator is not currently measurable. To be included in future INSTAT surveys.
Enterprises that send or retrieve electronic bills in a suitable format for automatic processing	INSTAT	<p><b>Abbreviation:</b> e_inv</p> <p><b>Definition:</b> Indicator refers to sending/retrieving of bills on a previously agreed format or standard (i.e. EDIFACT, XML, etc) that allows for the automatic processing without the need of writing an individual message.</p> <p><b>Note:</b> Enterprises with 10 or more employees. All of the production and services sector, excluding the finance sector.</p>	This indicator is not currently measurable. To be included in future INSTAT surveys.
Enterprises that share electronic information related to the supply chain	INSTAT	<p><b>Abbreviation:</b> e_sisc</p> <p><b>Definition:</b> Indicator refers to the sending/retrieving of the whole information on the supply chain (i.e. inventory levels, production plans, forecasts, delivery performance) through the computer networks or internet websites, excluding e-mail messages written manually.</p> <p><b>Note:</b> Enterprises with 10 or more employees. All of the production and services sector, excluding the finance sector.</p>	This indicator is not currently measurable. To be included in future INSTAT surveys.
Enterprises that have internet websites or their own personal website	INSTAT	<p><b>Abbreviation:</b> E_FAQEINTERNET</p> <p><b>Note:</b> Enterprises with 10 or more employees. All of the production and services sector, excluding the finance sector.</p>	This indicator is measurable by INSTAT in the annual ASN survey.
Enterprises that use technology for the identification of radio frequencies (RFID)	INSTAT	<p><b>Abbreviation:</b> e_rfid</p> <p><b>Definition:</b> RFID labels and transponders are equipment that may be applied or included in a product or object which transmits data through radio waves. Indicator includes their utilization for person identification, tracking of the supply chain and the inventory for the post sale product identification.</p> <p><b>Note:</b> Enterprises with 10 or more employees. All of the production and services sector, excluding the finance sector.</p>	This indicator is not currently measurable. To be included in future INSTAT surveys.
Enterprises that offer their employees remote access to the e-mails, documents or applications	INSTAT	<p><b>Abbreviation:</b> e_ra</p> <p><b>Note:</b> Enterprises with 10 or more employees. All of the production and services sector, excluding the finance sector.</p>	This indicator is not currently measurable. To be included in future INSTAT surveys.

Enterprises that offer portable equipment to more than 20 % of employees	INSTAT	<p><b>Abbreviation:</b> e_empmd_gt20</p> <p><b>Definition:</b> Portable equipment (portable computers, tablets, smartphones, PDA telephones, etc.) should be delivered for business use and the enterprise pays in full or in part for the subscription and utilization cost limit.</p> <p><b>Note:</b> Enterprises with 10 or more employees. All of the production and services sector, excluding the finance sector.</p>	This indicator is not currently measurable. To be included in future INSTAT surveys.
Employed personnel who have been given a portable equipment by their employer (business sector)	INSTAT	<p><b>Abbreviation:</b> P_EMPMD</p> <p><b>Definition:</b> Equipment (i.e. portable computers, tablets, smartphones PDA telephones, etc.) should be delivered for business use and the enterprise pays in full or in part for a subscription and utilization cost limit. Only enterprises with 10 or more employees. All of the production and services sector, excluding the finance sector are included.</p>	This indicator is not currently measurable. To be included in future INSTAT surveys.
<b>ICT Skills</b>			
Individuals who have written computer programmes by utilizing a specialized programming language	INSTAT/ MES	<p><b>Abbreviation:</b> i_cprg</p> <p><b>Definiton:</b> Individuals who have written a computer programme utilizing a specialized programming language. Activity may have been carried out sometime. Only those who have used the internet are elibigle to reply to this question.</p>	This indicator is not currently measurable. To be included in future INSTAT surveys.
Individuals who have created websites	INSTAT	<p><b>Abbreviation:</b> i_cqfaqeb</p> <p><b>Definition:</b> Activity may have been carried out sometime. Only those who have used the internet are elibigle to reply to this question.</p>	This indicator is not currently measurable. To be included in future INSTAT surveys.
Individuals with average or high computer skills (3 or more computer activities)	INSTAT/ MES	<p><b>Abbreviation:</b> i_csk_ge_me</p> <p><b>Definition:</b> Indicator calculates the number of individuals that have carried out at least 3 out of 6 following activities: copying or moving card indexes or files, utilization of copy and paste commands, utilization of the basic mathematical formulas on a work sheet, card index compression, connection and utilization of new equipment, writing of a computer programme utilizing a special programming language. Only those who have used the internet are elibigle to reply to this question.</p>	This indicator is not currently measurable. To be included in future INSTAT surveys.
Individuals with average or high internet skills (3 or more internet activities)	INSTAT/ MES	<p><b>Abbreviation:</b> i_isk_ge_me</p> <p><b>Definition:</b> Indicator calculates the number of individuals that have carried out at least 3 out of 6 following activities: utilization of an engine search to find information, sending of e-mails with attached card indexes, posting of messages in the chat rooms, news groups or online discussion forums, utilization of internet to make calls, utilization of sharing of the card indexes with friends (peer to peer) to exchange movies or music, to create an internet website. Only those who have used the internet are elibigle to reply to this question.</p>	This indicator is not currently measurable. To be included in future INSTAT surveys.
Individuals that have gained ICT skills through the formal education institutions	INSTAT/ MES	<p><b>Abbreviation:</b> i_skedu</p> <p><b>Definition:</b> Individuals that have gained ICT skills through the formal education institutions (schools, colleges, universities, etc).</p>	This indicator is not currently measurable. To be included in future INSTAT surveys.

Employees who utilize computers with internet access at the work place (business sector)	INSTAT/ MES	<p><b>Abbreviation:</b> P_IUSE</p> <p><b>Definition:</b> Computers (desktops, laptops, smartphones, etc.) should have internet access and be utilized at least once a week. Only enterprises with 10 or more employees of all of the production and service sectors, excluding the finance sector are included.</p>	This indicator is not currently measurable. To be included in future INSTAT surveys.
Employees who consider their ICT skills insufficient to change the position within a year of employment	INSTAT	<p><b>Abbreviation:</b> i_cisk_sfjobx</p> <p><b>Definition:</b> Individuals who are employed under a profession, self-employed individuals or family workers, are asked if they consider that their computer or internet skills are sufficient (yes/no) for them if they were looking for a job or change of the current job within a year.</p>	This indicator is not currently measurable. To be included in future INSTAT surveys.
Employees who consider their ICT skills sufficient to change the position within a year of employment	INSTAT	<p><b>Abbreviation:</b> i_cisk_sfjob</p> <p><b>Definition:</b> Individuals that are employed under a profession, self-employed individuals or family workers, are asked if they consider that their computer or internet skills are sufficient (yes/no) for them if they were looking for a job or change of the current job within a year.</p>	This indicator is not currently measurable. To be included in future INSTAT surveys.
Enterprises that hire ICT specialist	INSTAT	<p><b>Abbreviation:</b> E_ITSP2</p> <p><b>Definition:</b> ICT specialists are those employees, whose primary work is ICT. For instance, development, operation and maintenance of ICT systems or applications.</p> <p><b>Note:</b> Only enterprises with 10 or more employees of all of the production and service sectors, excluding the finance sector are included.</p>	This indicator is not currently measurable. To be included in future INSTAT surveys.
Enterprises that report difficulties in filling vacancies for ICT specialists	INSTAT	<p><b>Abbreviation:</b> E_ITSPVAC2</p> <p><b>Definition:</b> Vacancies difficult to fill in the previous calendar year refer to those situations where companies have difficulties in finding personnel with specific skills (vacancies difficult to be filled because of lack of skills).</p> <p><b>Note:</b> Only enterprises with 10 or more employees of all of the production and service sectors, excluding the finance sector are included.</p>	This indicator is not currently measurable. To be included in future INSTAT surveys.
Employed persons with ICT specialized skills	INSTAT	<p><b>Abbreviation:</b> specialist_tik</p> <p><b>Definition:</b> Vacancies for ICT specialists are based on the ISCO 08 classification. This includes ICT service managers (code 133), ICT professionals (code 25), ICT technicians (code 35) and ICT services and monitors (code 7422).</p>	This indicator is not currently measurable. To be included in future INSTAT surveys.
Employed persons with ICT specialized skills (a wider scope)	INSTAT	<p><b>Abbreviation:</b> ict_spec3_përgjith</p> <p><b>Definition:</b> Vacancies for ICT specialists are based on the ISCO 08 classification. This classification includes the following codes: 25, 35, 742, 133, 2152, 2153, 2166, 2356, 2421, 2434, 3114, 3139, 3155, 3211, 3252, 8212. Where the four digit data is not possible, they are calculated based on the three digit data.</p>	This indicator is not currently measurable. To be included in future INSTAT surveys.
Indicator of digital skills	INSTAT/ MES	<p><b>Abbreviation:</b> indeksaftdixhit</p> <p><b>Definition:</b> Persons who have utilized the internet in the last 3 months may be attributed a result of above the four competency fields: information, communication, content creation and problem solving, based on the activities they were able to perform. Outcomes are: lower than beginner, beginner and above beginner. Individuals that do not utilize the internet are classified as persons without digital skills.</p>	This indicator is not currently measurable. To be included in future INSTAT surveys.

<b>Individuals with basic or a little more than basic digital skill level</b>	INSTAT/ MES	<p><b>Abbreviation:</b> indeksiaftësive_bazëmësipër</p> <p><b>Definition:</b> In order to be classified for this group, the individual must have a beginner level or a little more than a beginner level in all of the fields of the digital skills contained in the index: information, communication, content creation and problem solving.</p> <p><b>Note:</b> Persons who have utilized the internet in the last 3 months may be attributed a result of above the four competency fields: information, communication, content creation and problem solving, based on the activities they were able to perform. Outcomes are: lower than beginner, beginner and above beginner. Individuals that do not utilize the internet are classified as persons without digital skills.</p>	This indicator is not currently measurable. To be included in future INSTAT surveys.
<b>Individuals with few or no digital skills</b>	INSTAT/ MES	<p><b>Abbreviation:</b> indeksaftdixh_pakaspak</p> <p><b>Definition:</b> This group consists of individuals who have not carried out any of the activities of one or more than the four digital skills included in this index: information, communication, content creation and problem solving.</p> <p><b>Note:</b> Persons who have utilized the internet at least in the last 3 months may be attributed a result of above the four competency fields: information, communication, content creation and problem solving, based on the activities they were able to perform. Outcomes are: lower than beginner, beginner and above beginner. Individuals that do not utilize the internet are classified as persons without digital skills.</p>	This indicator is not currently measurable. To be included in future INSTAT surveys.
<b>ICT in Education</b>			
<b>Computer for general purpose</b>	MES /ISHA	<p><b>Abbreviation:</b> komp_përgjith</p> <p><b>Definition:</b> Utilized computers for education purposes include the following: desktop, laptop, netbook or tablet, connected or not to the internet.</p>	There is data from MES. Should be periodically reported.
<b>Schools that have their own internet website</b>	MES ISHA	<p><b>Abbreviation:</b> faqe_int_shkoll</p> <p><b>Definition:</b> Schools that have their own internet website.</p>	There is data from MES. Should be periodically reported.
<b>Ratio student/ computer at school</b>	MES	<p><b>Abbreviation:</b></p> <p><b>Definition:</b> Ratio of students utilizing the same computer inside the school environment.</p>	There is data from MES. Should be periodically reported.
<b>Internet bandwidth service in schools</b>	MES	<p><b>Abbreviation:</b></p> <p><b>Definition:</b> Internet bandwidth service delivered in schools.</p>	There is data from MES. Should be periodically reported.
<b>Awareness of the teacher-student-parent community to utilize the online education portal</b>	IZHA MAS	<p><b>Abbreviation:</b></p> <p><b>Definition:</b> Number of individuals who access the online education portal in order to benefit from online education services.</p>	This indicator is not currently measurable. To be evaluated and included in reports depending on their development.
<b>Teacher training for the creation of digital content</b>	IZHA MES	<p><b>Abbreviation:</b></p> <p><b>Definition:</b> Number of trained teachers</p>	This indicator is not currently measurable. To be evaluated and included in reports.



Services delivered by IAL in AAN (Albanian Academic Network)	MES	<b>Abbreviation:</b> <b>Definition:</b> Number of IALs included in this network and accessing of their services in the network.	This indicator is not currently measurable. To be evaluated and included in reports depending on their development.
<b>e-Health</b>			
Searching of online information related to health	INSTAT/ MH	<b>Abbreviation:</b> i_ihif <b>Definition:</b> Individuals that have utilized the internet in the last 3 months to search for information related to health: injuries, diseases, food, health improvement, etc.	This indicator is not currently measurable. To be included in future INSTAT surveys.
Making a doctor's appointment by internet website	INSTAT/ MH	<b>Abbreviation:</b> I_IUMAPP <b>Definition:</b> Individuals that have used the internet in the last 3 months in order to make a doctor's appointment through the website (i.e. a hospital or a health center website)	This indicator is not currently measurable. To be included in future INSTAT surveys depending on the development.
<b>Research and Development</b>			
Government budgetary spending for research and development	RTIA/ INSTAT	<b>Abbreviation:</b> SHBKZH <b>Definition:</b> Government budgetary spending and expenses in the field of research and development include all government expenses allocated for this purpose from the government budget.	This indicator is not currently measurable. To be included in future INSTAT surveys depending on the development.
Public spending on research and development (Government budgetary spending for ICT research and development)	RTIA/ INSTAT	<b>Abbreviation:</b> SHBKZH_TIK <b>Definition:</b> Evaluation of the ICT part in the disaggregated data of public expenses, based on the presumption that the part of ICT research in the field of public expenses is proportional with the part of ICT specialists in this field (public expenses), under the labour cost for research and development.	This indicator is not currently measurable. To be included in future INSTAT surveys depending on the development.
Total of EC funds for the ICT projects - Horizon 2020	RTIA	<b>Abbreviation:</b> Horizon2020_Fonde KE <b>Definition:</b> Value of financing from the European Commission through the grants delivered during the year, with participants in ICT research projects within the scope of Horizon 2020. Projects at the stage of application are not included.	RTIA will follow the development for periodical reporting.
Total cost of ICT projects Horizon 2020	RTIA	<b>Abbreviation:</b> Horizon2020TIK_KostTOT <b>Definition:</b> Value of the total cost of the ICT research projects for which grant agreements were signed during the respective year, within the scope of Horizon 2020. The total cost of the project is the total sum of participants.	RTIA will follow the development for periodical reporting. To be monitored in the future.

ICT Sector			
<b>ICT export of goods and services</b>	INSTAT/ Customs	<p><b>Akronimi:</b> TIK_exp  <b>Përcaktimi:</b> ICT goods include the following: computers and peripheral equipment, communication equipment, electronic equipment for customers, electronic components and others. ICT services include the following: communication services, information services and computer services. Value of exports toward the EU and other countries.</p>	To be monitored in the future.
<b>ICT import of goods and services</b>	INSTAT/ Customs	<p><b>Akronimi:</b> TIK_imp  <b>Përcaktimi:</b> ICT goods include the following: computers and peripheral equipment, communication equipment, electronic equipment for customers, electronic components and others. ICT services include the following: communication services, information services and computer services. Value of exports toward the EU and other countries.</p>	To be monitored in the future.
Different Variables			
<b>Number of families</b>	INSTAT	<p><b>Abbreviation:</b> nrfam  <b>Definition:</b> Determination of the number of families with at least one member aged 16-74 years old, for the purposes of surveying ICT utilization by individuals and families.</p>	
<b>Number of individuals aged 16-74 years old</b>	INSTAT	<p><b>Abbreviation:</b> pop  <b>Definition:</b> Determination of the number of families with at least one member aged 16-74 years old, for the purposes of surveying ICT utilization by individuals and families.</p>	
<b>Total number of population</b>	INSTAT	<p><b>Abbreviation:</b> Popullata  <b>Definition:</b> Evaluation of the total number of population according to INSTAT, on January 1st of each year.</p>	
<b>PBB – Internal Gross Product with the market prices</b>	INSTAT	<p><b>Abbreviation:</b> PBB  <b>Definition:</b> Evaluation of IGP and its main components according to INSTAT – current prices.</p>	

## Local Governance Units

<p><b>Application of e-Participation for citizens and businesses at the level of local governance (expressed in %).</b></p>	NAIS	<p><b>Abbreviation:</b>  <b>Definition:</b> Application of e-Participation is an indicator that includes the standard of application in the website, the level of presence in the internet, the level of transparency and accountability of LGUs in relation to citizens and businesses. Transparency &amp; accountability are determined by the number and % of previous publications and online consultations of the decision taking process at the level of local governance.</p>	<p>There have been periodical observations regarding the LGUs e-governance. To be monitored in the future as a separate indicator.</p>
<p><b>Transactional services that LGUs deliver through websites for citizens and businesses (expressed in figures or %).</b></p>	NAIS/LGUs	<p><b>Abbreviation:</b>  <b>Definition:</b> Number of public and transactional services that LGUs deliver for citizens and businesses which are digitalized, in the web platform. These services include payment of local taxes and tariffs, certificate, permits, licenses applications, etc.</p>	<p>This indicator does not currently exist. To be monitored in the future.</p>
<p><b>Integration of the LGUs database with the central government database.</b></p>	NAIS	<p><b>Abbreviation:</b>  <b>Definition:</b> Number of LGUs that integrate their database with the central government database.</p>	<p>This indicator does not currently exist. To be monitored in the future.</p>
<p><b>Services delivered by LGUs through the mobile platforms (expressed in figures of %).</b></p>	NAIS/ LGUs	<p><b>Abbreviation:</b>  <b>Definition:</b> This is an indicator that includes the number of the digitalized services the LGUs deliver through the mobile platforms. (This includes mainly information or services in relation to local tax payments &amp; tariffs).</p>	<p>This indicator does not currently exist. To be monitored in the future.</p>
<p><b>e-Services that LGUs provide through e-Albania portal</b></p>	NAIS	<p><b>Abbreviation:</b>  <b>Determination:</b> Delivery of LGUs services is an indicator that includes the number of transactional services provided also through e-Albania portal.</p>	<p>This indicator does not currently exist. To be monitored in the future.</p>
<p><b>e-one-stop-shop (e-Z1N) established for LGUs services (expressed in figures or %)</b></p>	LGUs	<p><b>Abbreviation:</b>  <b>Determination:</b> Establishment of e-Z1N by the LGUs includes the number of tills established as well as the level of services the LGUs deliver through e-Z1N.</p>	<p>This indicator does not currently exist. To be monitored in the future.</p>