# Analyzing E-Government
# Development in Albania. Problems and Conditions

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**Abstract:** E-government development is considered one of the crucial factors for achieving an advanced stage of development in Albania. The number of e-government services introduced to the user in Albania is increasing, although its development and ICT development in general is not in the same level as other countries of the region, due to a lot of problems which Albania faces regarding it. This paper firstly presents a review of e - government for developing countries. The paper then presents the actual situation of ICT development in Albania, with a focus on e – government development stages and services. The paper then proposes an analytical framework for e - government development problems within the context of developing countries, such as Albania.

**Keywords:** E-government; Albania; ICT; developing

**JEL Classification:** O38; R58

## 1. Literature Review

### 1.1. E-government for Developing Countries

A key aspect is the country's context where the phenomenon is deployed and operates. A developing country is generally defined as one that has a per capita gross national product less than USD$ 2,000 (Ball, 1990). Nearly 80% of the world's population is living in developing countries. The developing terminology doesn't imply that all developing countries are experiencing similar development. Each country has its unique setting and constraints such as political and economic

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ones. Ultimately, those constraints will impose different issues relevant to e-government security management. It has been suggested that in an environment of low level of democratization initiatives and low level of e-government readiness, there would be less emphasis on privacy, security, and confidentiality issues (Nour, 2007). It is, therefore, necessary to gain an understanding of cultural dimensions that cover both organizational and national culture (Mendonca, 1996; Molla, 2005; Ciganek, 2004; Hofstede, 2001) by taking into account the overall context in which e-government operates.

According to Heeks (2002; 2003) most ICT programs such as e-government in developing countries fail with 35% being classified as total failures and 50% partial failures. The author attributes these figures to the gap between the current reality (physical, cultural, economic and other contexts) and the design of the ICT program - the greater the gap, the greater the chances of failure. Security has always been identified as one of an information system's important components. Contemporary information assurance management recognizes the imperative to include people and processes, as well as the more traditional technology security issues, in ensuring the quality of information in all modern organizations. To a large extent technological solutions for the majority of security issues have been previously developed. There are however still many application challenges, the people and processes components of information assurance management. This leads to the need for the socio-technical approach to focusing on these issues in the required context for technologically developing countries.

ICT in developing countries is generally under-represented in the open literature. A few publications fleetingly concede that there can be major issues with transitional countries developing their systems, but the subject is not treated in any depth or breadth. Given the widespread prescription of IT, particularly e-government for developing countries, the urgency of their needs, and the often paucity of their economic resources, it would be useful to understand in depth the factors and issues that underpin them. Yet there are very few published empirical studies directly addressing the issue.

## 2. A Brief View of ICT Development in Albania

Telecommunication sector in Albania is characterised by the presence of new service operators, improvement and expansion of existing services and new services present in the market. The number of fixed telephone lines users is increased with 32% in 2009 in comparison with 2001 data.
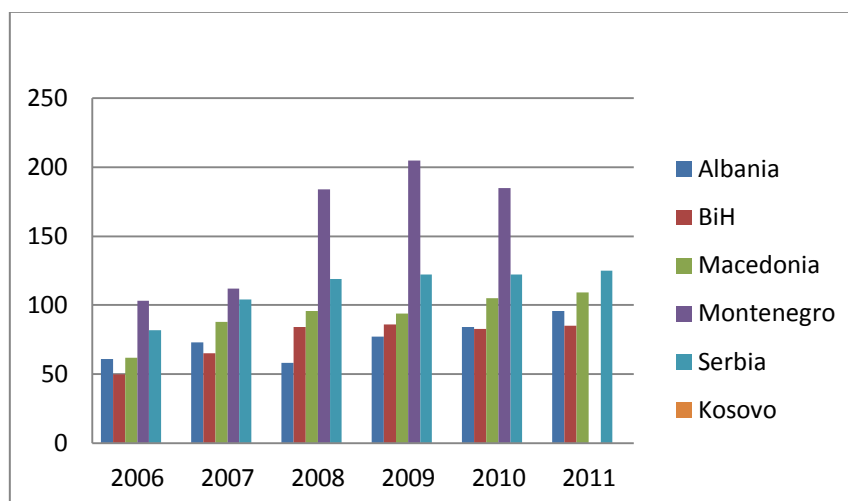
**Figure 1. Mobile cellular subscribers (per 100 people)**

*Source: http://data.worldbank.org/indicator/IT.CEL.SETS.P2/countries*

Despite the rapid growth, telecommunications sector infrastructure in Albania still needs to be enhanced when compared with the achievements of other countries in the region. Figure.1 give a view of the situation in cellular line subscribers per 100 people in the region, ranking Albania behind Montenegro, Serbia, etc.

Another indicator of infrastructure in the telecommunications sector is internet users per 100 people. As presented in Figure.2 the number of internet users in Albania is still below that of other countries in the region, despite of the fact that in 2009 is noticed a considerable increasing in the number of internet users, which makes Albania comparable with Bulgaria, Montenegro and BiH.
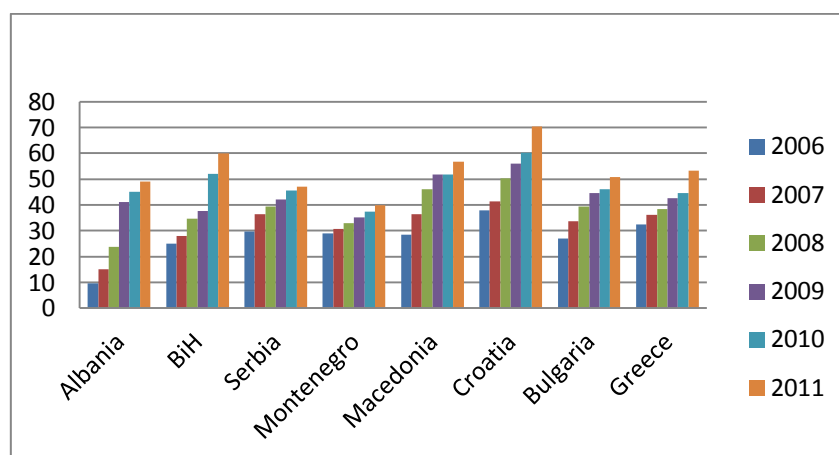
**Figure 2. Internet users per 100 people**

*Source : http://data.worldbank.org/indicator/IT.NET.USER.P2/countries (2010)*

## 3. E - government Development in Albania

In Albania the re-organization and public administration reform requires a much greater streamlining of Government electronic data gathering, exchange and integration. There is an urgent and growing need for the synergistic development of a well-integrated and extensive Government information infrastructure based on advanced ICT. Moreover, following years of un-coordinated development of technical infrastructure in Albania, many local policy makers and donor organizations have come to realize that the success of many projects will depend heavily not only on how efficiently the high-speed communications networks are constructed, but also on how effectively they are utilized and shared by all Government institutions.

### 3.1. E - government development stages in Albania

Although in the first stages, important steps have been made to improve the electronic communication of the government with all the citizens. The ministries and public agencies' web pages can be an efficient mass medium to convey and distribute information, or messages that can serve to different publics and cannot be interpreted by someone other than the organization itself. On the other hand, it is a trans active two-way communication that facilitates procedures for all actors involved in the process, thus stimulating the public feedback mechanism as a subset of two-way interactions between citizens/businesses and governments that

are channeled to a direct point of contact, and might be both internally and externally traceable.
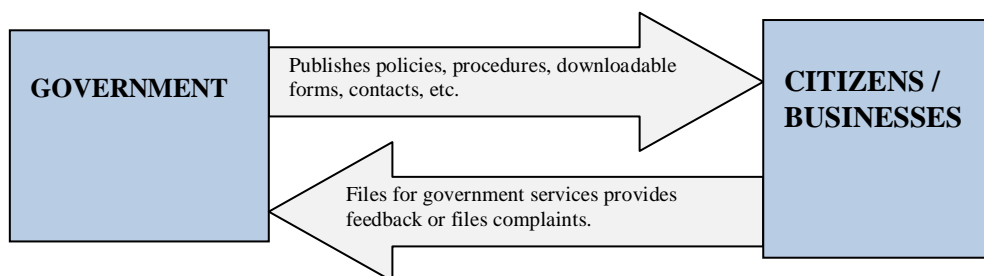


**Figure 3. The communication process between government and citizens/business**

Most governments realize the potential for e-government initiatives to disseminate information, improve service delivery, increase transparency, decrease corruption, and widen democratic participation. e-Government initiatives can be categorized as internal, which are government to government (G2G) and government to employee (G2E), or external, which are government to business (G2B) and government to citizen (G2C). e-Government transforms the governments' external relationships, whether G2B or G2C, by enabling citizens to directly receive government services from anywhere in the world without making personal visits or going through bureaucratic procedures. Interactions with the government can either be one-way, from government to citizen/business, or two-way, which allows citizen/business to communicate to Government (Figure 3).

Most e-government initiatives that deal with external relations begin with a web presence and evolve into a platform for transactions of government services to take place. Two-way interactions between the citizen/business and government can actually occur from the very beginning with a mere web presence. For example, a website that publishes government policies on registering a business can contain the email or other contact information of the civil servant in charge.

This enables the citizen to initiate a two-way interaction by emailing or calling the person. Online government transactions of course, are two-way interactions where the government first offers the service, the citizen provides relevant information, and the government completes the service.

As shown in the figure below the communication process of e- Government services in Albania has evolved from the passive model of just distributing information on the web, to downloading templates for different services and lastly to direct services delivered online.
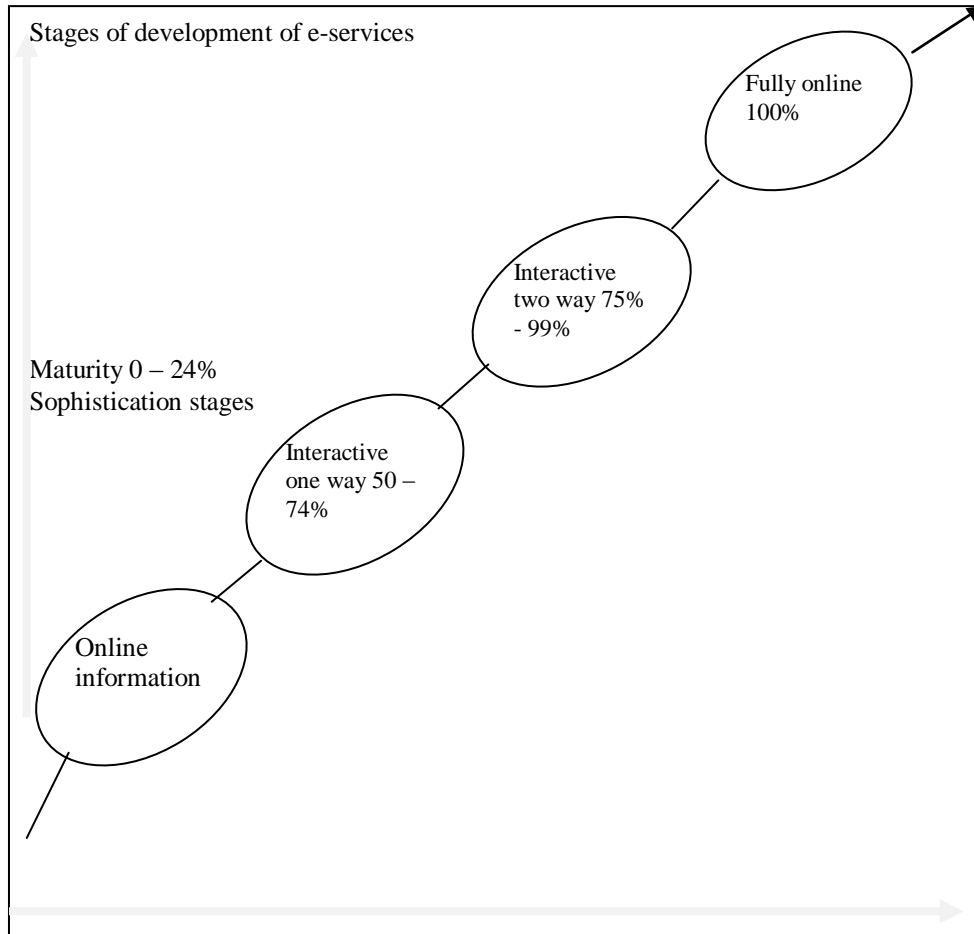
Stages of development of e-services

Maturity 0 – 24%
Sophistication stages

Fully online
100%

Interactive
two way 75%
- 99%

Interactive
one way 50 –
74%

Online
information

**Figure 4. The development stages of e-services**

**Table 1. Services offered by e-government**

| *Public services (G2C)* | *Public services for business (G2B)* |
|---|---|
| - Taxes on income | - Staff social insurance |
| - Job searches and applications | - Taxes for corporations |
| - Social security | - VAT |
| - Personal documents (driving licence, passport) | - Business registration (e – business) |
| - Car registration | - Statistical data |
| - Application for construction licence | - Custom declaration |

| - Police denouncement | - Environmental licences |
|---|---|
| - Public libraries | - Public procurement |
| - Certificates | - Public finance |
| - Register for university ( of e- Education) | |
| - Change of address | - Online trading (e – trade) |
| - eHealth | |
| - eCulture | |

As a medium in itself e Government can offer information strictly related to the government such as political events, projects, visits, press releases, departmental organization or any other relevant information that might be of public interest. Today, a webpage of a ministry can offer the citizen information on job vacancies, how to address a complaint, how to apply online, or even find the electoral center to vote, etc. Therefore, from the commodity of their house the citizen can have the kind of information needed from the government while avoiding queues and beaurocracies if they were to go there in person.

On the other hands, businesses can use web pages to apply online for public tenders, or pay taxes, download application forms, e.g. in registering a new business, or in declaring good at

the custom, etc. In fact businesses are more willing and enthusiastic about the developments that

e-government is implementing, because of the time and money saving benefits.

While e-government is in process of transformation of e-government aiming to get all services online, below are some new more services, on which is still working to get online:

- Treasury System – Computerized System for Public Finances, financed by WB;
- NCR – for business registration;
- E - taxes – modernization of tax system;
- HRMS – HR Management system, DoPA;
- E-Custom – ASYCUDA, modern data processing system;
- Health System Modernization – Financed by WB;

- ALUIZNI – Legalization and Urbanization of Informal Areas/Buildings;
- E-Justice – Penalty Declaration;
- E-Albania;
- Civil Registry – Digitizing of hand-writt en records;
- Addressing System – In progress;
- ID Card & Biometric Passports;
- PKI & CA – In progress with Ministry of Interior;
- National Business Licensing Center & National Planning Registry;
- Future Development of GovNet – (GoA).

### 3.2 Situation of E-Government Services Development in Albania

In the following figure is presented the level of sophistication of e government services in Albania. We notice that social contribution, VAT (value added tax), custom declaration and public procurement are the government services that achieve the highest level of sophistication, in a Lickert scale from 1 to 5. The data used for this evaluation are taken from NAIS (National Agency on Information Society).
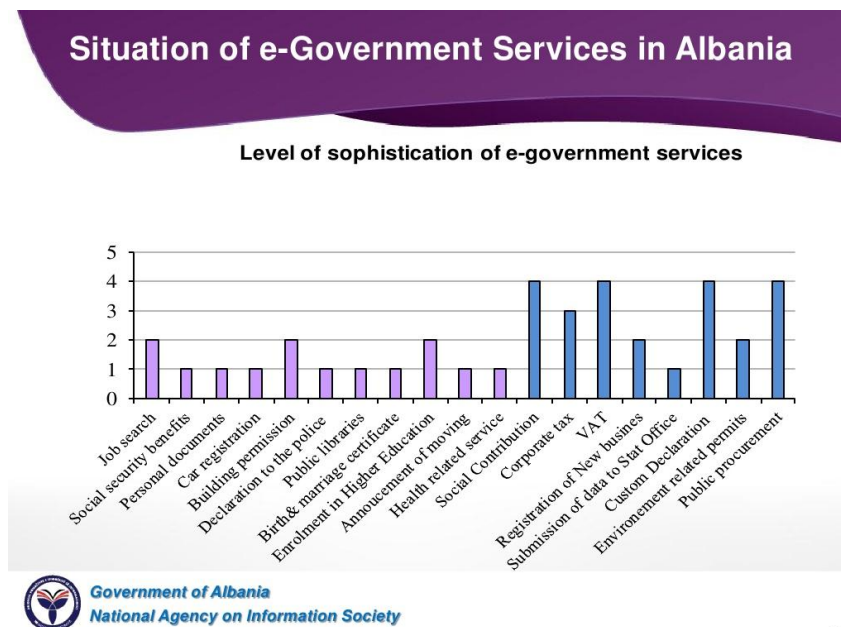


**Graphic 1.**

Also, is noticed that the majority of e - government services have not the adequate level of sophistication, which gives us the right to think that e government services are not developed in the right way.

### 3.3 Planning of e - government infrastructure and services development

In the last years, Albanian government has been focused on e - government development in a special way. National Agency on Information Society has planned to build the new e - Government infrastructure and services in four phases as following:

- Build the reconfigured physical fiber network that connects all the Goa Institutions in the country.

- Build the network nodes and services point, implement the physical security, administration and monitoring, build the base centralized electronic directory services, starting to implement first layer of Data center Services.

- Implementing interoperability service layer.

- Implementing the full Data center services and G2G, G2C, G2B services.

## 4. Problems Related to E-Government Development in Albania

### Security Culture

Security culture represents the prevailing attitude towards approaches to a secure organizational environment. Regulatory intervention is particularly important in formulating rules for using and protecting information assets. These factors are affected by legislative and regulatory frameworks, and national and organizational cultures.

### Management

Information assurance also depends on the management rules, responsibility, awareness and commitment of senior management and users, and relevant policies. These factors are affected by a variety of issues such as available budget, information security management standards and skilled staff.

### Information Systems Structure

According to Heeks (1999) there are three possible approaches to information systems responsibilities: Centralized decisions are taken at the most senior or central level; Decentralized decisions are taken at some level lower than the most senior; typically by individual work units within the organization or even by

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individual staff; and Core-periphery decisions are taken at both senior and lower levels, either separately or in an integrated manner. Heeks suggests that Core-periphery is most effective for ICT usage and information systems development (Heeks, 1999).

In developing countries governments often exert more influence over industries and organizations, for example controlling access to key resources and setting costs. In developing countries a heavily-centralized management approach is most likely to be favoured over a decentralized one. This centralized approach usually forces organizations to accept limited information security solutions that might not fit their real needs (Atiyyah, 1999).

## 5. Conclusions and Recommendations

The network established and other services applied on top of it require from the Government of Albania a long-term strategy in order to sustain it. The Government should designate adequate financial and human resources in order to address the issues formulated in the National ICT Strategy and more specifically the ones related to network maintenance and operation. Ensuring funding and controlling disbursement of financial resources and ensuring a correct awareness of the costs associated to ICT services will be an immediate need the Government has to face. In addition, the Government has to appoint a special ICT structure that will direct, manage, coordinate and supervise all the ICT projects within the Government and at the same time will have a central role in designing and planning for the network. Specialized IT experts will have

to be hired and motivated for working directly in maintaining and operating the network, the e-mail system and many other applications that are and will be implemented on top of the network. The IT staff that has been trained during the implementation of the project should remain at work and given more responsibilities in running the network.

Also, the Government needs to adapt and utilize a generally applicable and accepted standard for good IT security and control practices to support management's needs in determining and monitoring the appropriate level of IT security and control for their organizations, otherwise serious risks will soon appear from improper use of IT equipments and systems. These standards will ensure that users are making effective use of technology and are aware of the risks and responsibilities involved in using the ICT tools. Government has to recognize that the issues exist and need to be addressed immediately.

For countries which are still developing, as Albania, technologically e-government security management has added issues, mostly to do with environmental factors which differentiate them from the implicit assumptions of leading countries.

Potential key problems are security culture, security and privacy legislation, management commitment, management style, senior management and user awareness, skills and training, management change and information security infrastructure.

This paper contributes to the open literature in general and to ICT policy developers in transitioning environments in particular. In today's Information Age this is a very topical issue which is yet to be widely addressed.

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