# E-GOVERNMENT IN BULGARIA TODAY 

Maria Nikolova<br>New Bulgarian University, Montevideo Str. 21, Sofia<br>e-mail: nikolovamaria@hotmail.com<br>Bulgaria


#### Abstract

A research for e-government in Bulgaria is made. The strategy for future development is discussed with the action plan activities. Indicative services for a current and future period are discussed. Technological concepts of e-government are discussed. Facts on different criteria are established for the position of Bulgarian e-government compared with European countries


Key words: e-government, strategy, e-services, IT (information technologies).

## 1. INTRODUCTION

Under the definition of World Bank eGovernment represents the use of IT by the State Administration for a transformation of relations with the citizens, business and other state administrations. These technologies can handle multiple end results: better administrative services for the citizens, improved interaction with the business and industry and enlarged rights of the citizens by an access to the information and as well more efficient government.

E -Government focus is on administrative services. The goal is to move from
organization focused on administration needs to services, directed to events of the citizens and businesses' live. Different forms for a real contact with the administrations are utilized. E -Government is conducive to the interactions between the administrations. The focus is on improvement of the efficiency of institutions by optimizing and automating work processes. The following definitions are accepted:

- Administrative service. The interaction between the Administration and third parties where direct requests based on legitimate interests are granted, including information
and documents provision, and the issuing of certain acts.
- Administrative service delivery: The process of service provision with the respective organization of the administration.
- Social service: The services provided by authorized public organizations as well as the services provided to the public by legal entities.
- Public service: The totality of administrative services (in the broad sense of the term) and the social services.
- Integrated administrative service delivery: The service provision that uses integrated information either within one administration or between separate administrative structures and/or legal entities that provide public services on the basis of a major information database.
- E-government: The electronic and IT provision of services to citizens and business by the public administration which aims at encouraging participation in the democratic process, facilitating citizens' lives and relaxation of constraints on business.


## 2. RESEARCH FOR THE CURRENT STATUS OF E-GOVERNMENT IN BULGARIA

The Report UN Global e-Government Survey 2003 is based on a survey, which
assesses e-Government readiness worldwide. The survey provides a benchmark to gauge the comparative state of e-Government readiness and e-participation for development in a rapidly world of globalization. The total index given to Bulgaria 0.548 positions the country on $35^{\text {th }}$ place among 173 countries worldwide. The e-Government Readiness Index 2003 is a composite index comprising the Web Measure Index, the Telecommunication Infrastructure Index and the Human Capital Index. Web Measure Index is based on the model, which is quantitative five-stage model.

Sofia is on $36^{\text {th }}$ place among 100 cities in the world, according the report Digital Governance in Municipalities Worldwide. The study is published at the end of 2003. 100 towns with more than 100,000 citizens in 98 countries, which have the highest percentage of Internet users, were selected. The ranking is by 5 criteria: protection of the personal information and security, utilizing, content, providing services, citizens' participation. Sofia is on $10^{\text {th }}$ place by the provided services.

According the study of Democracy Researching Center, Vitosha Research and CCICMT (Coordination Center for Information, Communication and Management Technologies) conducted in the summer of 2004-47\% of Bulgarian Municipalities are presented in Internet. The same percentage
show the cities in Massatchuzet in 2002 (the territory of $90000 \mathrm{~m}^{2}$ and 6 mln citizens, 345 towns). The Bulgarian municipalities however offer mainly information and rarely interactive service for the citizens and business

These were various classifications, according to which Bulgaria is placed at different positions but the most general classification is the report "Global eGovernment". The report was published in September 2004 and assigns Bulgaria and Sudan 81/82 place. 1935 Web sites of State Institutions in 198 countries have been analyzed. The study follows out the development of e-Government from 2001 till now. The interesting fact is that more of the countries including Bulgaria have done back step in the development according to the results. (The data for 2003 are better then for 2004.)

## 3. DEVELOPMENT OF THE EGOVERNMENT STRATEGY

The Strategy is conceived as a key element in the overall Bulgarian public administration reform, which should result in increased transparency, improved quality of public service delivery and reduced corruption practices. A special Work Group on drafting the e-Government Strategy was established. The e-Government Strategy was adopted by
the Council of Ministers on December 28, 2002.

Bulgarian strategy was developed under the concept: "Strategy for building a society and economy based on knowledge". The vision for Bulgarian e-Government is: The government of republic of Bulgaria will carry out modern and effective governance with the means of modern information technologies to meet the real needs of the citizens and the business in any time and any place.

## 4. ACTION PLAN FOR EXECUTING THE E-GOVERNMENT STRATEGY

An Action Plan for executing of the eGovernment Strategy was accepted 2 years later. The activities in the Plan are in conformity with the priorities of National Plan for Economical Development of Bulgaria: Increasing the competitive power of Bulgarian economy; Development of the human resources; Improvement of the basic infrastructure; Balanced and steady districts development.

With realization of e-Government the Government of Republic Bulgaria set before itself the following strategic goals:

- Providing via electronic way quality, economically effective and easy to access administrative services to the citizens and business.
- Expansion of the technological capabilities for citizens and business for participation in the State governance.
- Establishing of organizational, communicational and information environment for effective and transparent functioning of State Administration in accordance with the principals, norms and best practices of European Union.

Implementing these strategic goals will decrease the expenses for State Administration support, will improve the quality of services and will limit the corruption. In order to achieve these strategic goals the Bulgarian Government set 4 main directions:

- Provision of e-services based on existing information technologies and resources in the administrations.
- Creating meta-information system, establishing information environment for integrated administrative services.
- Applying Internet based technologies for notification, communication and services for citizens and organizations.
- Development of technological infrastructure.

In July 2004 the Council of Ministers accepted the Decision 153 stating that the Ministry of Transportation and Communications will begin to accept and issue documents signed with e-signature since Sept.
$1^{\text {st }} 2004$. According to the Decision the other Ministries start to accept and issue documents, signed with e-signature since January $1^{\text {st }}$, 2005.

The Strategy required by the Government to implement 20 administrative services, provided electronically: 12 for citizens and 8 for business. The administrations responsible for implementing each service are pointed out. The individual plans of the administrations are included in the general plan in extend they are known at the moment the Plan was worked out.

## 5. TECHNOLOGICAL CONCEPT OF BULGARIAN E-GOVERNMENT

Already built Information Systems of Bulgarian State Administration have to be built-in in the emerging e-Government.

On the current stage it is found the best way to go is to build an e-Government portal, behind which an application server will provide a uniform environment for integrating Information Systems of Administration. Each individual administration has to build connectors and adapters for data exchange with the integrating environment under the clear defined rules. These rules will guarantee the security of data, protection of personal information of the citizens and safeguarding of companies' secretes. The result will be services
to the citizens and business with guaranteed quality.

And it is important to say that the citizen or the company is not interested in the work process. They are only interested what kind of documents (input data) are needed for starting the procedure and what will be the final result of the e-services.

The important element of Bulgarian eGovernment Strategy is building of optical backbone network of State Administration, which to ensure connectivity to all computers in the State Administration and independence from outside providers. Realization of the backbone network will give the possibility State Administration officers to use advanced technologies (transfer of voice and video information). The result will be decreasing of expenses for phone calls, especially for longdistance calls. The project for building such optical network is prepared in 2001 and the one segment (Sofia-Pazardjik-Plovdiv) is already built. Since then there are no budget approved for the continuing of the work.

The government has been working for five years now to create a backbone network for internal communication between ministries, regional government, municipalities, etc. The network use an Intranet/VPN solution, opened to the public with own security system, opticfiber channels for high speed (T-1; T-3; OC-
3); supporting systems for national registries with public access and support of internal document management system, and two way Internet connection of at least 2 MB . The project was launched in June 2002. Currently it is operating in Sofia and some of the larger towns.

The National Statistical Institute collected information on IT resources in public administration in the last three years but the data is not available even to senior state officials. Most recently IDC and the Council of Ministers conducted a survey among central government ministries (with the exception of Ministry of Interior, Ministry of Defense and Ministry of Finance) on IT equipment and human resources. The results of this survey are shown in figure 1.

According to the origin of computers, $45 \%$ of respondents indicated that they had computers manufactured by leading EU or US producers, $45 \%$ reported leading Bulgarian assemblers, $18 \%$ - producers from Far-Eastern countries and $9 \%$ - small unknown or even non-brand computers.

Expert estimates suggest that around $18 \%$ of workplaces in the central and local government administrations are equipped with computers. The regional governments have the most up-to-date equipment and almost 90 $100 \%$ of the workplaces are computerized.

Problems related to computer usage in the public administration could be summarized as follows:

- outdated equipment - many departments still have 16 bit PC 386,486 ;
- cutting edge technology - mainly bought through loan schemes or public procurement; due to the high cost of this equipment it often impossible to buy appropriate software and consumables for effective use of the equipment;
- low interoperability of databases and specialized software.


Figure 1. Number of computers in central government ministries (Source: IDC 2002)

All computers are not yet connected in a network. More than a third of respondents say that Intranets do not cover all units or branches of a given ministry. The predominant type network used in government is Ethernet (44\% of respondents) and Fast Ethernet ( $39 \%$ of respondents). $11 \%$ responded that had FDDI and $6 \%$ - Gigabit. Connectivity to Internet varies from $80-100 \%$ in regional administrations, trough $70-80 \%$ in the ministries to less than $20 \%$ in local government administrations. The average level would be $20 \%$ connectivity of computers to Internet.

Building e-Government will provide citizens Internet access to administrative services. In the same time the efficiency of administration-to-administration services will increase dramatically. The capacity and efficiency of one-shop stop services will also have a significant growth.

Up to this moment $100 \%$ of the State employees have computers (March, 2004). 95\% have Internet access. Practically all administrations have presence in Web with site or portal. $47 \%$ of Municipalities have official Web sites. Still the sites are mainly with static information and not updated. Somewhere applicable downloading of forms is possible. In 2005 with recently published secondary ecommerce legislation necessary for the
implementation of the Law on electronic document and electronic signature, more government sites will become interactive and will allow for e-payments and electronic submissions of documents.

Table: Government sites (Source: Expert assessment by Bazar.bg)

| Total sites of Ministries | 15 |
| :---: | :---: |
| Providing dynamic information | 3 |
| Allowing for feedback | 9 |
| E-Payments, B2G | 0 |
| Good design | 3 |

Nine sites of ministries provide feedback possibilities through email or web form. The same option is provided by three to five regional administrations ( $15 \%$ ) and around $15-$ 25 of the municipalities ( $7-8 \%$ of all). Sofia Municipality is a big exception at the municipal level providing tracking services for the citizen's requests.

Only $4.3 \%$ of the population visit public administration web pages. Firms visit more often government Internet sites due to their interest in public procurement - around $6 \%$ of the companies use the public-procurement registry, Bulstat, tax administration sites or other company-related online services.

The overall assessment of e-government in Bulgaria is that it is in its early stage of development, but if good coordination and
project management is applied, and adequate training of civil servants is provided, it is possible to achieve at least 90 percent of the ambitious government program in egovernment.

## 6. CONCLUSIONS

E-Government will be reality in Bulgaria. This is the technological and economical challenge of the modern times. The European Union works intensely for provision of administrative e-services. The following things need to be changed:

1. The services have to be structured as events of live: The state employees have to change the way of their thinking and focus their activities on needs of citizens and business.
2. The approach has to be process-oriented: There is need of change in organizational structure of administrations in conformity of work processes.
3. Independence of technologies: eGovernment has to be built in the way ensuring it will not depend technologically from 1-2 companies.
4. Standardization: Hardware and software products used in administration have to correspond to the defined set of general accepted open standards.
5. Web-based solutions: They assure significant savings in the processes of implementing, support and development. The requirements to the end users are also very low (only PC connected to the Internet and Web browser).
6. Administrative structure directly responsible for building of e-Government together with political will and clear vision.

## 7. REFERENCES

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