E-government is a new concept of administration that has been accepted in many, especially well developed countries. Along with the development of communication technology and the enlargement of state functions and responsibilities of those who work within it, e-government became the condition without which a democratic, transparent, efficient and socially acceptable society cannot be achieved. EU suggests the use of Internet, as an instrument for achieving the standards of good governance and best practices in rendering public services to citizens. Currently, Serbia is on the road of introducing e-government in its public administration. In this context e-government was addressed in the Strategy for the Reform of the State Administration. Also, significant legislation has been adopted, including the Law on the Organization and Jurisdiction of State Organs against High-Tech Crime (2005), the Law on Electronic Signature (2004), the Law on Free Access to the Information of Public Significance (2004), etc. The paper analyses the state of affairs relevant to e-government in Serbia, and its impact on administrative reform. Key Words: E-government. Administrative reform. Strategy for the Reform of the State Administration in Serbia.
INTRODUCTION [1]
Technological development in the 20th century has transformed the activities of wealth-creating work. Technology and knowledge are now the key factors of production. With increased mobility of information and the global workforce, knowledge and expertise can be transported instantaneously around the world, and any advantage gained by one company can be eliminated by competitive improvements overnight.

We now live in an information society and in a knowledge economy where knowledge management is essential.¹ "Knowledge-based economy is not an ordinary branch of economy. It is a compatible system of legal and economical preconditions, as well as managerial and economic mechanisms together with modern technologies and human recourses. This system appears in the process of market economy development, supported by new technologies. The new growth opportunities can only be achieved through a comprehensive strategy, based on a policy mix that is suited for each region or country."²

In the environment of the knowledge-based economy, the idea of e-government is taking effect in terms of efficiency and effectiveness. There are three basic elements of e-government: a) ensuring open government and transparency in the activities of government agencies; b) providing on-line services enabling citizens to use the Internet to pay taxes, access registries, make applications or undertake procedures, elect their representatives, express their opinions, as well as participate in administrative decision-making processes, and c) interconnecting government agencies. "With e-government, a new box is being opened and one which might potentially further increase the problems of government use of technology - and it may be that we will see that the underlying tension of government technology is actually a legal tension: that is, that there is something about the legal nature of government which makes technology much more difficult to apply than it is in a commercial environment. This is obviously important;

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¹ For Internet resources related to the field of knowledge-based economy and knowledge management in information societies, see: www.enterweb.org/know.htm.
since the message of e-government is that the state should take the techniques and methodology of commerce and apply them to this new relationship of the ICT-based state and ICT-based citizen.”

THE CONCEPT AND BASIC MODELS OF E-GOVERNMENT [2]
Creating e-government is an essential part of widespread public administration reform that includes the redefining of the role of modern government. E-government is closely linked to concepts (e.g. New Public Management) that are to ensure a new quality in managing complex social environments, particularly in view of the knowledge-based economy. The main premise of e-government is that information and services must be accessible to all citizens, without personal privilege or discrimination. However, this also means that some information is classified and that these protected zones must be under strict legal control.

The United Nations define e-government as the capacity and will of the public sector to develop the use of information and communication technology in order to upgrade rendering of public services to the citizens. Of the 179 countries, that according to the 2005 UN Report, have implemented some form of e-government, the highest rate of implementation has been achieved by the US, Denmark, Sweden and the UK. Within the European Union, e-government is defined as "using information and communication technology, especially using the Internet as an instrument for implementation of good governance". The concept "good governance" means implementation of administrative efficiency and optimizing government activity in the way which also protects citizens' rights. Today, good government operates through a network of legal data bases and automated administration which represents the substance of e-government. Therefore, e-government is a concept and reality defined as the use of information and communications technologies (ICT) in all activities of public and political government to transform the public administration and civil service. The most import-

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5 Stevan Lilić, Pravna informatika (Legal Informatics), Belgrade, 2006, p. 80.
The benefits of e-government are better efficiency, accountability and accessibility to public services.

Access to information and rendering on-line public services (e.g. issuing of permits, personal documents and applications) by an "open government" is creating a new quality of public services. This kind of communication offers the citizens many new forms of participating in democratic decision-making processes. The potentials of information and communication technology enabled governments to develop the concept of e-government. The basic modalities of e-government which can be enforced on developed countries are:  

G2C – Government to Citizens. This modality is viewed as “citizens’ service” and includes services such as issuing of IDs, birth certificates, etc., and enables citizens to say in public their opinions about performance of the public administration and on public affairs. The difference between e-government and the traditional government is in the fact that citizens, by means of e-government, can access information and services instantly, conveniently, from anywhere, by use of multiple channels.

G2E – Government to Employee. Government to Employee is composed of the following items: a relationship toward government officials, "chat room", a notice board, advanced training, information and data bases required by public officers to perform their duties transparently and efficiently.

G2B – Government to Business. The e-government concept is becoming attached to business and economic reforms since it enables e-interactions between government and the private sector, reduces red tape and simplifies administrative processes, helping thus private owners to become more competitive. To this effect, private owners may not only be users of e-government, but also suppliers of hardware, equipment, software applications and packages.

G2G – Government to Government. Government to Government includes implementation of an inclusive e-government system, as well as a single access point to government. To make this possible, the sharing of data bases, resources and capabilities among various departments and agencies is necessary.

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6 For Internet sources on e-government modalities, see: www.digitalgovernance.org.
E-GOVERNMENT AS THE KEY ELEMENT OF GOVERNMENT - REFORMS IN SERBIA [3]

There are two stages in e-government development. First, ICT enables users to have an overview of procedures, processes, information. The second stage represents a direct approach of users in the system through the Internet. The goal of e-government development is to secure an efficient path of the public administration to the 21st century and that citizens can conduct as many administrative procedures in the future through the Internet as possible. Such action would exclude unnecessary waiting and would save precious time. Within this context, e-government is the key part of public the administration reform strategy in Serbia.

The Government of Serbia has in 2004 adopted a Strategy for the Reform of the State Administration\(^7\) with the aim of public administration modernization. This includes, among other things, the introduction of communication technologies in administrative agencies and governmental bodies.

The Strategy defines three basic stages according to which the modernization of the administration in Serbia should be implemented. The first stage includes analysis within which it is necessary to analyze the current state of the existing infrastructure; prepare the evaluation of currently used information systems; explore how valid laws and other regulations may impact objectives, and to what extent the laws and regulations should be amended as to support the application of new technologies; prepare and pass regulations that are to be the base for the legal power of electronic documents, sharing of data, filling of requests via computer, etc. The second stage deals with integration and implementation of international standards in projecting and forming of a communication infrastructure of state bodies, while the third stage consists of introducing e-service to citizens and commercial subjects on the levels of both central and local government. These services take care of different public needs (e.g. personal status of citizens, administrative matters, citizenship etc.), through services tied to issuing certain forms of licenses, tax payments, etc. Within the e-service, a special place is reserved for Internet interaction of citizens, which considers the possibility

of citizens to express their opinions, observations, objections and suggestions related to public the activities of the administration and to receive wanted information.

The project of e-government in Serbia began with the transition process, and so far gave noteworthy results: a joint network has been built in Belgrade, Niš and Novi Sad; application for connecting citizens data bases and data bases of business subjects has been successfully tested and finished; success in data bases and applications was also achieved (e.g. master birth, married and deceased registries; central election list; administrative business and documents flow between the state bodies etc.). Vital state agencies are interconnected through out the territory of Serbia (Ministry of Internal Affairs, Customs, certain funds).

As a member of the Initiative for Electronic South Eastern Europe, which functions within the Stability Pact for South Eastern Europe, Serbia in 2002 signed the “eSEE Agenda for Development of Information Society”. This document states that Serbia, as a contracting party, must adopt the policy and strategy of information society development, as well as adopt and implement a legal infrastructure for an information society. Within that goal, Serbia has in October 2006 adopted the Strategy for Development of Information Society, which contains a special part that relates to e-government. The aim of the Strategy is awareness raising, promotion of national dialog, reaching consensus and supporting work commitment. In view of planning e-government in Serbia, according to this Strategy, a detailed and long-term strategic plan should be made, upon which all government bodies and public administration organization will adopt their own plans of development.

All state organizations and public administration organizations should achieve an initial level of e-government development, meaning accessibility of information on the Internet. Other development levels are gradually created, according to defined and adopted global and local plans of e-government development.

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LEGAL REGULATIONS OF E-GOVERNMENT IN SERBIA [4]

For the success of an information society “in which anyone can create, use and distribute information and knowledge, thereby enabling individuals, communities and people to reach their full potential in promoting sustainable development and to enhance the quality of their lives”, it is necessary to establish an appropriate legal surroundings.

Basic conditions for e-government development in Serbia are the creation of legal frames works, the development of economic and technological conditions and the education of citizens. In that context, legal regulation should be prepared and adopted, which is necessary for an undisturbed development of information society.

In Serbia, the Ministry for Telecommunications and Information Society conducts activities of state administration. The jurisdiction of this Ministry is, inter alia, establishing the policy and strategy for an information society, preparation of laws, regulations, standards and measures within the area of electronic business, application of informatics and Internet, providing information services, development and enhancement of academic computer networks, coordination in the creation of strategic documents on the level the Republic of Serbia, development and functioning of information infrastructure and so on. Also, Law on Ministries formed, as a special organization, the Republic Office for Informatics and Internet, which conducts expert activities related to the promotion, development and functioning of information system of the state bodies, local self-government and public services; application and use of Internet in state bodies, local self-government and public services; data protection; development and application of standards in introducing information technologies in state bodies etc. Supervision over the activity of the Republic Office for Informatics and Internet is within the Ministry for Telecommunications and Information Society.

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For the purpose of electronic documents protection, Serbia has in 2004 adopted the Law on Electronic Signature,\textsuperscript{13} which is in direct relation to the e-government introduction in Serbia. For electronic data storage it is essential that the data is signed with an electronic signature, which secures appropriate functions, such as authenticity, integrity and legality, in accordance with the legislation. The Law on Electronic Signature regulates the use of electronic signature in legal conducts and other legal actions, business, as well as the respective rights, duties and responsibilities. According to this Law, an electronic document is a document in an electronic form which is used in legal affairs and other legal actions, as well as in the administrative, judicial and other procedures, while an electronic signature is a group of data in an electronic form, which are joined, or logically connected to an electronic document and which serve for identification of a person who signed it. Also, the Law defines terms such as qualified electronic signature, electronic certificate, qualified electronic certificate, certified body, etc. Provisions of this Law are mostly applied to communication between state bodies, communication between bodies and parties, delivery and creation of decisions of bodies in an electronic form, under conditions prescribed for a certain procedure.

The purpose of the Law on Electronic Signature lays in the fact that a citizen, by using this signature, gets the opportunity to exchange electronic documents in a legal way. But, the Law on Electronic Signature is a general law, which defines only the basic concepts and if it is to be applied to appropriate segments of electronic business, it is necessary to adopt new legal regulations or change the existing ones. These laws would regulate what documents must be signed electronically, in what way will they be signed, in what way their legality is provided and in what way can they be archived electronically. Considering that there is no special law or regulation on electronic commerce, the Law on Electronic Signature represents the first step in that direction.

For the purposes of privacy protection, data manipulation and security of computer data, there is also an appropriate legal regulation. Protection of personal data is guaranteed by the Constitution of the Republic of Serbia,\textsuperscript{14}


and the legislator has the obligation to regulate the protection of personal data by a special law. The existing Law on Personal Data Protection\(^{15}\) has flaws and is far from the European Union standards. It is necessary to adopt a new one, as this is needed for signing the agreement with Europol, as well as for an undisturbed exchange of information with other countries.

The Law on Free Access to Information of Public Significance\(^{16}\) is completely in accordance with international standards. This Law states that everyone has the right to receive information, which he/she considers important, by enabling the citizen to have access to a document containing information of public importance, to a copy of that document, or the right to have that document delivered by mail, fax, e-mail, or in any other way.

The Criminal Code\(^{17}\) prescribes criminal acts which endanger security of computer data. It has introduced seven new criminal acts against the security of computer networks, systems and data-unauthorized use of computers and computer networks, computer sabotage, creation and spread of viruses, disturbing the process and transfer of electronic data, unauthorized access to protected computers or computer networks and protection from unauthorized crossings of limits of public computer networks. The Criminal Code, also, regulates criminal acts related to software piracy. Provisions of this Code that relate to criminal acts against the security of computer data are in accordance with the basic recommendations of the Council of Europe and with the Convention of the Council of Europe on Computer Crime.\(^{18}\)

The Law on the Organization and Jurisdiction of State Organs against High-Tech Crime\(^{19}\) also regulates protection against computer crime in Serbia. This Law regulates education, organization, jurisdiction and authorities of special organization units of state bodies in order to reveal, prosecute and adjudicate criminal acts identified by this Law. The criminal acts that this Law regulates are acts against the security of computer data specified by the Criminal Code and criminal acts against intellectual property. In the sense


of this Law, high-tech crime mean the execution of criminal acts, whose objects are computers, computer networks, computer data, as well as their products in a material or electronic form.

The legislative, political and supervision environment in Serbia, which is necessary for the legal application of information communication technology, awaits realization. The legal system must be harmonized with regulations of the EU in order to secure a stable business atmosphere which will attract foreign investors. In that context, key steps toward a new e-legislation are harmonization with the legal system of the EU, fulfillment of obligations from action plans of the e-SEE, amendments to the existing laws and adoption of new laws and regulations.

CONCLUDING REMARKS [5]
 Reform and modernization of public administration is based on the use of information and communication technology- It represents one of the key elements of the transition process for Serbia to a modern information society. The possibility that all citizens gain electronic access to public services, participate in the process of decision-making and the supervision of state activities, contributes to the democratic development and improvement of relations between the executive branch and citizens. In order to utilize these possibilities, Serbia must adopt means and methods of work based on ICT in all areas and at all levels of public conduct, as well as to approach harmonization of its e-legislation with the legislation of the EU. Only such public administration firmly institutionalized and oriented towards citizens and the economy with e-government can adequately satisfy the needs and challenges of a future knowledge-based information society.