

**MINISTRY FOR DEVELOPMENT OF INFORMATION TECHNOLOGIES
AND COMMUNICATIONS OF THE REPUBLIC OF UZBEKISTAN
TASHKENT UNIVERSITY OF INFORMATION TECHNOLOGIES**

Manuscript right

UDC: 342.5:004 (575.1)

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**IMPROVEMENT OF THE STATE INTERACTIVE SERVICES
ON THE BASIS OF ICT**

5A350301 – Economics and management in sphere of ICT

WRITTEN FOR MASTER DEGREE

DISSERTATION

Professor of Economics

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Tashkent-2016

**МИНИСТЕРСТВО ПО РАЗВИТИЮ ИНФОРМАЦИОННЫХ
ТЕХНОЛОГИИ И КОММУНИКАЦИИ РЕСПУБЛИКИ УЗБЕКИСТАН**

**ТАШКЕНТСКИЙ УНИВЕРСИТЕТ ИНФОРМАЦИОННЫХ
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АННОТАЦИЯ МАГИСТРСКОЙ ДИССЕРТАЦИИ

Обоснования темы магистерской диссертации и её актуальность: В настоящее время многие правительства предпринимают шаги для внедрения электронного правительства, которое позволяет повысить предоставления государственных услуг и обязательств граждан с правительством. Инициативы «Электронного правительства» во многих развивающихся странах, включая Узбекистан, сталкиваются со многими значительные препятствия, независимо от того, имеют ли страна передовые или более скромные ресурсы в плане инфраструктуры ИКТ, которые могут вмешаться в прогресс и достижения надлежащего осуществления «Электронного правительства». «Электронное правительство» в Узбекистане все еще находится на начальном этапе переходного периода к электронным услугам. Так, в этой диссертации представлены основные барьеры, влияющих на развитие электронного правительства в Узбекистане, которые негативно

сказывается на решение людей, чтобы использовать эту технологию и не компетентных лиц, принимающих решения для осуществления или принятия инициатив «Электронного правительства». Данная диссертация состоит из - во-первых, теоретической основы, которые состоит из определения «Электронного правительства» с разных точек зрения, важность внедрения «Электронного правительства», определение и виды барьеров «Электронного правительства», во-вторых, текущая ситуация развития «Электронного правительства» в Узбекистане и наконец, основные препятствия, влияющие на развитие электронного правительства в Узбекистане и наглядный опыт Республики Корея.

Объект и предмет исследования: Целью разработки диссертации является содействие в разработке политики в области ИКТ, в развитии электронного правительства в поддержку реформы управления, и в создании благоприятной среды для развития ИКТ в Узбекистане политических консультаций, экспериментальных проектов и укрепления государственно-частное партнерство в области ИКТ Узбекистана. Таким образом, цель данной работы является изучение хода развития «Электронного правительства» и выявить препятствия для внедрения и совершенствования «Электронного правительства» в Республики Узбекистане.

Цели и задачи исследования: (1) анализ лучшего опыта в области внедрения «Электронного правительства» в развитых странах; (2) анализ проблем, связанных с «Электронного правительства» реализацию в деятельности, осуществляемой органами государственной власти за предыдущие годы; (3) анализ законодательной базы для внедрения электронного правительства и разработка рекомендаций по внесению изменений к закону, регламентирующие реализацию «Электронного правительства»; (4) на основе анализа, проведенного определения основного направления и этапы внедрения «Электронного правительства» в деятельности, проводимой органами государственной власти.

Научная новизна: Принципиальная разница между подходами исследований является личный опыт, что отстаивает автор, заключается в использовании практических навыков. Впервые представленная в научном исследовании проблемы развития в ООН рейтинга по электронному правительству готовности. Объем посвящена малоизвестным проблеме, которая уже довольно актуальной.

Основные задача и гипотеза исследования: Для повышения эффективности и прозрачности государственных услуг, государственные органы могут увеличить частоту взаимодействия между гражданами и правительством, а также повышение качества государственных услуг и доверия. Электронное правительство в определении является поставка государственных услуг для населения, предприятий и государственных организаций на основе использования Интернет, веб-приложений, и информационно-коммуникационные технологии является решение построить более надежную и эффективную связь с гражданами. Как и развивающихся странах и странах развитых, Узбекистан также перерабатывает различные аспекты ИКТ, ИТ и электронного правительства. Хотя, в целях реализации и совершенствования электронного правительства; Узбекистан столкнулся с некоторыми препятствиями.

Обзор литературы по теме исследования. По вопросу международного опыта в сфере электронного правительства, механизм реализации мероприятий, эффективность использования инструментов были изучены опыты иностранных исследователей которые имеют огромный опыт работы в сфере электронного правительства., такие как профессор Cr. Codagnone, J. Millard (Danish Technological Institute), D. Ossimo (Европейская Комиссия JRC IPTS), E. McKinnon, H. Duivenboden, M. Thomas, Z. Jorg, A. Danilina, I. Ostashkova, S. Nidel'ko и другие. Кроме того, были использованы отечественные работы по опыту экономических исследований, эффективности внедрения интерактивные услуги авторами которых являются

научные деятели и руководители государственных предприятий имеющих огромный стаж работы в сфере информационных технологий и электронного правительства. Профессора Раджабов Т., Иминов Т., Арипов А., Мухитдинов Х., Махмудов М., Олимджанов О..

Характеристика методик, применяемых в исследовании: Прогресс в сфере оказания онлайн услуг продолжается в большинстве странах по всему миру. В соответствии с Обзором Организации Объединенных Наций, многие из них правительств ведут действия инициатив развития системы «Электронного правительства» и ИКТ приложений для граждан, а также для дальнейшего повышения эффективности государственного сектора и оптимизации систем управления для поддержки устойчивого развития. Среди лидеров по рейтингу «Электронного правительства», инновационные технологические решения получили особое признание как средство активизации экономических и социальных секторов. Цель этой методики является снижение субъективности человеческого действия, направленного на извлечение наиболее важную информацию из исходного источника и представить их в сжатом и практичном виде; чтобы улучшить качество предоставляемой услуги; поможет сэкономить время и стоимость интеллектуальной подготовки.

Теоритическое и практическое значения результатов исследования: В условиях глобализации государства сталкивается с необходимостью пересмотреть свои отношения с бизнесом и гражданами. Требования к эффективности G2B и G2C взаимодействия являются одними из наиболее приоритетных.

ИКТ является наиболее передовой и как доказано международным опытом, мощный инструмент для повышения эффективности правительства. Основные проблемы в процессе формирования электронного правительства в Узбекистане в настоящее время являются следующие:

1.Отсутствие информационной открытости органов государственного управления для общества, отсутствие юридических оснований, обеспечивающих масштабную информационную взаимодействия между государством, бизнесом и гражданами.

2.Неразвитость технической и телекоммуникационной инфраструктуры для развития ИКТ и внедрения электронного правительства.

3.Несовершенная механизм финансирования внедрения ИКТ в исполнении государственного управления.

4.Неполный процесс разработки законодательно-нормативную основу развития ИКТ в стране.

Характеристика и структура работы. Дипломная работа состоит из введения, 3 глав, заключение, список литературы и приложений. Работа содержит 103 страницы.

Научный руководитель

(подпись)

Магистр

(подпись)

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THE ANNOTATION OF MASTERS DISSERTATION

The actuality of theme: Nowadays, many governments are taking steps for e-government implementation, which allows enhancing the delivery of public services and citizens' engagements with government. E-government initiatives in many developing countries, including Uzbekistan, face many significant barriers regardless of how advanced or modest a country in terms of ICT infrastructure and deployment that can interfere with the progress towards realizing a proper implementation of e-government. E-government of Uzbekistan is still at the initial stage in transition to electronic services. So, this paper presents the main barriers affecting e-government development in Uzbekistan which negatively affected people's decisions to use the technology and inhibited decision makers from implementing or adopting e-government initiatives. This paper provides - firstly, a theoretical background which consist of e-government definition from different perspectives, the importance of e-government implementation, definition and types of e-government barriers, secondly, the current situation of e-government development in Uzbekistan and

finally, the main barriers affecting the development of e-government in Uzbekistan.

The aim of the work and tasks: (1) analysis of best practices in the area of e-government implementation in developed countries; (2) analysis of problems related to e-government implementation in activity carried out by public administration bodies for the previous years; (3) analysis of legislative basis for e-government implementation and development of recommendations on introducing law amendments regulating e-government implementation; (4) based on analysis conducted definition of the main direction and stages of e-government implementation in activity carried out by public administration bodies.

The object and predmet of the research: The development objective of thesis is assist in formulating ICT Policy, in the development of e-Government in support of governance reform, and in creation of enabling environment for ICT development in Uzbekistan by policy advice, pilot interventions and strengthening the public-private partnership in the ICT field of Uzbekistan. Therefore, the purpose of this thesis is to study progress of e-Government and identify obstacles of implementing and improving e-Government in Uzbekistan.

The styles and methods of the research: Progress in online service delivery continues in most countries around the world. The United Nations E-Government Survey finds that many have put in place e-government initiatives and information and communication technologies applications for the people to further enhance public sector efficiencies and streamline governance systems to support sustainable development. Among the e-government leaders, innovative technology solutions have gained special recognition as the means to revitalize lagging economic and social sectors.

Literature review: First, we examined the definition of E-Government with the extensive literature. Second, we analyzed UN E-Government surveys using its three indicator group i.e. online services, telecommunication infrastructure and human capital. Third, we discussed the history of E-Government in Uzbekistan and E-

Government scenario in Central Asia region.

Description of applied research methods: To bring to the research is used of situation abstract-logical, monography, based on comparable, graphical, analysis, economy-mathematic and system analysis. The purpose of this technique is to reduce the subjectivity of human action which seeks to extract the most important information from the original document and present them in a compressed form; to improve the quality of secondary documents prepared; reducing the time and cost of their intellectual training.

Theoretical and practical importance of research results: To improving efficiency and transparency of government services, government authorities may increase the frequency of interaction between citizens and government as well as improving the quality of the government services and trust. E-Government in definition is the delivery of government services to citizens, businesses, and government organizations through the use of internet, web based applications, and Information and Communication Technologies is the solution to build more reliable and efficient contact with citizens. Like the developing and developed countries, Uzbekistan also has been processing the various aspects of ICT, IT, and e-Government. Though, in order to implement and improve e-Government; Uzbekistan has faced with some obstacles.

Scientific novelty of research: The principal difference between the approaches of studies is a personal experience that upholds the author, is to use practical skills. First introduced to the scientific study of the problem of development in the UN ranking for E-Government readiness. Volume is devoted to little-known problem which is already a pretty urgent.

Content of the thesis: Under conditions of globalization the government faces necessity to revise its relations with business and citizens. Requirements to efficiency of G2B and G2C interaction are among the most priority driven ones.

ICT is the most advanced and, as proved by the international experience, powerful

instrument for raising efficiency of the government. The main problems within the process of forming e-government in Uzbekistan are currently the following:

Lack of informational openness of public administration bodies for society, lack of legislative grounds ensuring large-scale informational interaction among the government, business and citizens.

Underdeveloped technical and telecommunication infrastructure for ICT development and E-Government implementation.

Imperfect mechanism of financing ICT introduction into public administration performance.

Incomplete process of elaborating legislative-normative ground for ICT development in the country.

Scientific director

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Master's student

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INTRODUCTION

Relevance of a subject of research. Intensive development of the sphere of interactive services became the key characteristic of the 21st century that is objectively connected with evolution of development of economy. It is necessary to notice that development of economy is not end in itself as she is indissolubly internally connected with the purposes of activity of individuals and it is directed to satisfaction of their interests, requirements, preferences and tastes.

Now the most important regularity of development of world economy is expansion of the market of interactive state services. It is connected with production process complication, saturation of the market various goods of individual demand and services, and rapid growth of scientific and technical progress which leads to changes not only in economy, but also in life of society. Innovations in modern life are impossible without existence of information, consulting, financial, insurance, marketing and other types of non-material services.

Thus, increase of a role and influence of the sphere of the state interactive services on economy, and the existing contradictions in developments of a services sector demand the detailed analysis of institutional and economic structure of the market interactive state service and tendencies of his development.

The most developed countries of the world actively introduce today national systems of "The electronic government" that allows not only to operate government institutions, to effectively develop business processes, interacting between the state and businessmen, and also to provide the state services to the citizens in the most available interactive form through the Internet.

In our country after development and deployment of the Concept and the comprehensive program of formation of the Electronic Government, system there is a question of economic essence of introduction of the state interactive services based on ICT. As the volume of banking, financial, legal services, which development in the developed countries is the testimony of civilization of the market increases? The range of services, connected with management and the

maintenance of public authorities increases. In addition, there is a development of export and import of services that allows the country to be integrated into world economic space. Besides, the volume of market services that in a total amount of services occupy a considerable share (about 70%) increases.

Today on this subject, it is possible to analyse in scientific works of such scientists as Zh. Furastye, D. Bell, F. Brodel, P. Druker, G. Kan, M. Kastels, Y. Masoud, F. Makhlop, T. Sakaya, T. Stounyer, N. D. Gauzner, and B. Milner R. Which claim, that interactive state services are already available and their quantity, certainly, will quickly grow.

Nevertheless, processes of formation and specifics of functioning of the market of interactive state services are still insufficiently studied. In theoretical researches not enough attention is paid characteristics of the market of interactive state services as special set of institutes of formal and informal character, features of development of the market of interactive state services in modern national economy, and also an assessment of the happening changes in the market in the conditions of the growing internationalization and globalization of economic life.

The insufficient readiness of theoretical problems of development of the sphere of interactive state services in the conditions of post-industrial economy demands rational justification of methodological approaches to the analysis of the mechanism of functioning of the market of non-material services that has in turn caused the choice of a subject, statement of the purposes and research problems.

The purpose of dissertation work is research of ways, economic essence, and the analysis of processes and improvement of the state interactive services based on ICT in Uzbekistan. The specified purpose has defined need of the solution of the following problems of work:

- Increase of level of **informatization**, efficiency of the made administrative decisions and coordination of work of various state departments;
- Improvement of information-communication infrastructure for providing modern state interactive services;

- an exit to new market segments, a possibility of connection of small and remote regions to social and business activities;
- Improvement of quality of the state interactive services and satisfaction of information needs and communication;
- Growth of qualification and productivity of a labor, increase of the general education level;
- Acceleration of information exchange, distribution of electronic services and emergence of new forms of communication;
- Expansion of sales markets, reduction of operational and investment expenses and as a result increase in the cumulative offer and decrease in a rate of inflation;
- Improvement and development of a state policy of informatization, legislative and regulatory legal base of ensuring activity of subjects of the information relations;

Object of research is the market interactive state services its institutional structure.

Subject of research are the economic relations in a services sector on advance on the market and to development of interactive state services.

Information base of writing of work was made by works of the President of the Republic of Uzbekistan, works of domestic and foreign scientists, standard and legal and acts of the Republic of Uzbekistan, documents and materials of the foreign and domestic organizations which are engaged in advance of IK-technologies and formation of information society, data of the state, regional statistics and special researches, scientific publications and materials of publications in mass media and the Internet, results of the carried-out monitoring of processes of rendering the state interactive services.

Scientific novelty of dissertation research consists in the following provisions:

- It is defined that interactive state services are an institutional object of service economy which is understood as the activity as the sequence of processes of interaction of system of the producer and consumer connected with resolution of conflicts as a result of collision of diverse systems of values and stereotypes of

behavior and directed to satisfaction of non-material requirements, requirements in self-improvement and self-realization and quality providing life;

- It is proved that the institutional structure of the market of interactive state services includes institutional subjects, i.e. interrelation between the producer and the consumer, institutes of formal and informal character (norm, the rule, value, activity stereotypes), and also forms of interaction and the relation which institutional subjects for realization of the interests enter;

- Features of development of the market of the state interactive services are revealed. Positive lines of the market of interactive state services are: intensive development of a services sector and growth of employment, increase of influence of external demand and export orientation of branches of services, growth of investments, and preservation of a great consumer demand the provided services.

The theoretical importance of dissertation work consists in development of the analysis of improvement of the state interactive services based on ICT, and her directions as the institutional theory, the theory of globalization, the theory of the markets, service economy.

The practical importance of dissertation work consists in definition of the fact that it represents a necessary basis for the further analysis of essence, structure, forms of manifestation of interactive state services. Based on this research, it is possible to define the true place and a role of interactive state interactive services in economic system of society, and, considering the factors influencing development of interactive services with the subsequent use to social and economic development of the country.

CHAPTER 1. ECONOMIC ESSENCE OF INTRODUCTION OF THE STATE INTERACTIVE SERVICES ON THE BASIS OF ICT

1.1. Economic essence of the organization of the state interactive services on the basis of ICT

On the basis of ICT their following properties are the cornerstone of efficiency of economic essence of introduction of the state interactive services:

- A communication scope, not limited neither in time, nor in space;
- Accurately certain channels of access;
- Full transparency of the market - conditions of competitors can be found out in only a few seconds;
- The active users ready to incur certain expenses;
- Obvious efficiency for the client;
- A possibility of breakdown of clients on groups;
- Possibility of the statistical analysis of behavior of users;
- A possibility of operational transfer of the staticized information;
- Possibility of expansion of functions of system.

The managers of the Uzbek enterprises using info-communication technologies have to be able to define economic effect of costs of creation of info-communication networks, databases, communication lines, etc. Various indicators can present efficiency of use of information technologies in various spheres of economic activity trade, business, advertising, publishing, etc.

Forming newly made means for increase in productivity of work, the state thereby organizes healthy business climate and advantage over the foreign companies gives the chance to the local organizations. Firms everywhere will apply electronic commerce in transactions among themselves to reduce expenses and to improve management of the physical resources.

The interrelation with **government authorities** on the Internet even more increases competitiveness of the private organizations and gives them an opportunity to simplify different official procedures, to reduce quantity of office red tape. It will become easier for organizations to observe laws, and they will be able promptly to

start the activity. All this is learned thanks to submission of documents in electronic form, and thanks to probability to pay taxes or to give statistical account on the Internet.

The builder-contractor, for example, instead of going to **local authorities** and to fill various papers, will be able to be addressed behind permission to building and to coordinate terms of inspections, having used e-mail.

Public institutions can promote further creation of a healthy situation for business, having supplied the corresponding infrastructure that it was simpler to firms to go on-line. The organizations functioning in those districts where it is possible to get high-speed access to the Network at the reasonable price will find advantage over those companies which have no such access. In addition, at 19 corresponding extents of consultations and financial assistance, the local organizations will be able to change information on the Internet, using the high-speed inclusion for formation of the latest opportunities in the field of business.

Providing the integrated services, access to which can be got via one channel, gives the chance to the private companies and **government authorities** to interact among themselves.

Public services have the right to transform to the best low idea of the population of quality of the services expressed by them and again to receive assistance and trust of citizens, having made them a point of attention of any initiatives of work improvement. Transformation of nature of communications with clients urges to give services in a new way, without long delay and difficult procedures. The companies oriented on consumers achieve more significant progress, both in realization of personal functions and in work with the population. The similar companies have an opportunity to give to citizens easier access to services, to increase the volume of the expressed services and to lower a waste of time of employees on the activity not joint with clients.

The possibility of success increases when government bodies can define cooperation with the private companies, which have strong strengthened on the Internet. It will help to come into on-line contacts with people and the companies,

forming at the same time the most various levels of difficult networks for providing the integrated state-private services.

Efficiency of use of networks, servers, information technologies in electronic trading (E_{trade}), for example, for a realization case on the web server of virtual shop is defined as a ratio between the visitors who have passed to active actions for purchase of goods (S_{pgoods}) and total of visitors of the server (S):

$$E_{trade} = \frac{S_{pgoods}}{S} 100\% \quad (1)$$

Efficiency of use of the web server can be estimated by several indicators:

1. Efficiency of various entrances on the server (E_{souri}) - characterizes the frequency of use of various sources for involvement of visitors on the server. Is defined as the relation of the visitors who have used this source (S_{souri}), to total of visits of the server.

$$E_{souri} = \frac{S_{souri}}{S_o} 100\% \quad (2)$$

Where i - the name of this source

2. The assessment of efficiency of attendance of web pages of the server (E_{pagi}) - characterizes popularity of pages of the server. Is defined for each page as the relation of visits of the page (S_{pagi}) to total of visits of the server (S_0):

$$E_{pagi} = \frac{S_{pagi}}{S_o} \quad (3)$$

Where i - name of the corresponding page.

3. The number of repeated visits (N_v) — characterizes performance of the second main function of web marketing after initial involvement of visitors on the server, namely achievement of the maximum number of repeated visits of the server. This

indicator is defined as the size equal to the attitude of total of visits of the server (S0) towards number of his visitors (Soi):

$$\boxed{Nv = \frac{S_o}{S}}, (4)$$

4. Efficiency of banner advertising (E_{bi}) depends on number of visitors who thanks to advertising have used a banner reference and have passed to the web server of firm. The size of an indicator E_{bi} -is defined as the relation of number of visitors of the page on which the banner (S_{bi}), to number (S_{oi}) which have "clicked" on him is placed

$$\boxed{E_{bi} = \frac{S_{bi}}{S_{oi}} 100\%}, (5)$$

Where i - name of the reference.

The considered indicators characterizing efficiency of use of information technologies do not belong to economic. As for an indicator of economic efficiency of use of ICT, it is known that it can be defined as the relation of the result received from their application to the expenses necessary for achievement of this result.

Thus, economic efficiency (E) can be calculated as follows:

$$\boxed{E = \frac{S}{Ex}}, (6)$$

Where S - Savings on costs of productions and services received for the account of use of info-communication technologies in business, trade, advertising, etc;
 Ex - Expenses taking place when using it is information communication technologies.

Certainly, on use in production of information technologies not to do without capital investments any firm which would like information advantage before competitors to turn into economic.

Efficiency of expenses in the conditions of market economy can be defined from the equation

$$\boxed{\sum_{i=1}^N (B_i - C_i - K_i) \frac{1}{(1+r)^{i-i_p}} = 0}, \quad (7)$$

Where B_i - Cost assessment of results using info-communication technologies in production;

C_i - Additional operational expenses (expenses at introduction of info-communication technologies of the i -m period;

K_i - One-time capital expenditure in the i -m period - (year);

N - Settlement periods (years);

I_p - Number of the period (year) of receiving results from application of info-communication technologies;

r - Settlement interest rate, a discount rate for the period (year).

Having defined or having set the sizes B_i , C_i , K_i , N , it is possible to calculate an assessment of efficiency of application of info-communication technologies which will be defined by r size.

Similar modifying will lead to radical reconsideration of a role and structure of **government authorities**. Citizens will come to be "at a wheel", services and information for the population will be given when people want. Citizens will be able to personalize an exit to portals of public services, and to use not only services of the state, but also services of personal favourite commercial websites and collective portals. Contrary to ease of cooperation with public services and access to public information, official documents and protocols of **administrative authorities**, people will be better informed also they enough more willingly to take part in process of public administration. This will lead to emergence of information communities and to formation of such models of board where citizens are more widely involved in decision-making process.

1.2. Rendering the state interactive services on the basis of ICT of the leading countries of the world

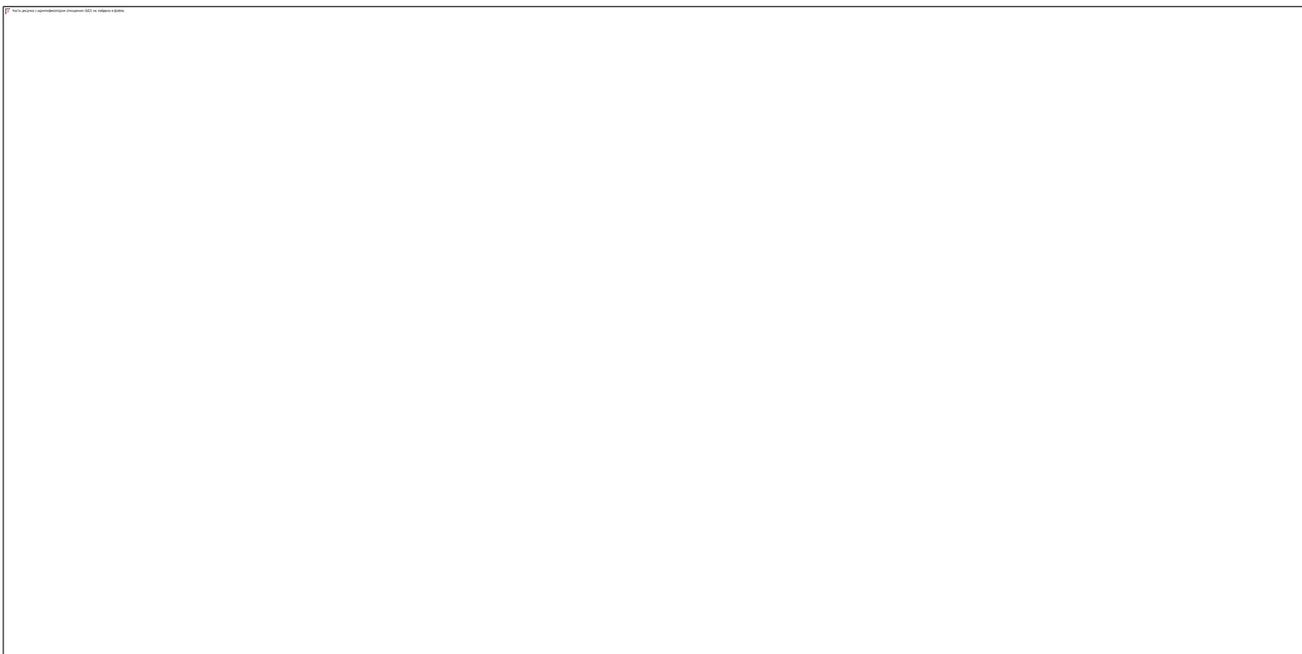
Transition to providing the state interactive services in electronic form is an important component of programs of creation of "the electronic government". However, it is necessary to emphasize that problems of formation of "the electronic government" are not reduced only to realization of electronic services, and have the important components connected with need of creation of system of interdepartmental and inter-level interaction, and also ensuring legitimacy of administrative processes for the electronic environment and reliable identification of participants of information exchange including citizens.

Questions of improvement of system of rendering interactive state services to the population, their standardization and regulation take the important place in policy of many modern states, which is directed to achievement of more effective work of executive power and local governments. Special programs of development of public service which major purpose — increase of standards of the state services, improvement of their organization and distribution are adopted. Modernizations of management systems are carried out. The course of modern strategy is, as a rule, directed to improvement of work of executive bodies of the government, local governments for strengthening of communication with the population.

It should be noted that the different countries, which have joined in an initiative of establishment of the quality standards of public services, demonstrate various national approaches. Therefore, if in Great Britain the quality standards are perceived 'as the purposes which have to be executed and are even surpassed', in Italy the quality standards are associated with legal obligations. In official government publications, it is seldom possible to meet expressions like "standards which we seek to reach" or "growth of standards". On the contrary, recently adopted Italian law regulating actions of associations of consumers directly tells about recognition as the fundamental rights of consumers and users providing public services to them according to standards of efficiency and quality.

The bibliometric analysis based on data on dynamics and thematic distribution of the scientific articles received from the Web of Science system is

given below. We see the steady growth, which the subject shows “the electronic state” (**Picture №1.1**)



Picture 1.1 - E-Government 2000-2012 y.

In world practice, there are very many systems of monitoring and the assessment of a level of development of information society and the electronic government directed to the analysis of both quantitative and qualitative characteristics of this phenomenon.

The assessment of level of readiness of the countries of the world for use of the electronic government is carried out within activity of Department of the economic and social development of the UN which is regularly publishing reports (E-Government Readiness Report) representing potential and possibilities of development of these technologies in 191 countries of the world.

In this rating, there is a separate indicator estimating development of on-line services of authorities, at the same time the assessment is made based on web monitoring of the websites of federal authorities.

The index of electronic services has 4 directions of an assessment (according to 4 stages of development of the electronic government) and contains the questions concerning:

- Initial information presence at a network (emerging online presence);

- Expanded information presence at a network and rendering electronic services (enhanced presence);
- Rendering services on the basis of electronic interaction (transactional presence);
- The electronic services uniting both government structures among themselves, and providing involvement of citizens in activity of government authorities (connected presence) (**Table - 1.1**).

Table - 1.1

Parameters of an assessment of a podyndeks of electronic services in a rating of development of the electronic government (UN e-Government Survey 2010 — 2014 y)

<p>Stage 1. Initial information services</p>	<p>The government websites contain information on a state policy, laws, necessary documents and forms of the state services. They are connected with the websites of the ministries, departments and other branches of the power. Citizens have an opportunity to easily obtain new information on activity of authorities, and to have access to archival data.</p>
<p>Stage 2. Expanded information services</p>	<p>The websites of authorities give opportunities to expanded unilateral communication or the elementary bilateral communication between authorities and citizens, such as a possibility of downloading of blank forms of the documents necessary for receiving the state services. The website has functions of audio-video, has versions in various languages. On a limited set of services, there is a possibility of providing inquiries of not electronic forms or personal information, which can be delivered to them by mail.</p>

<p>Stage 3. Services on the basis of electronic interaction</p>	<p>The websites of authorities are involved in bilateral communication with citizens, including inquiries and receiving access to materials of a state policy, to programs, resolutions, etc. For some types of an exchange, the form of electronic identification is provided. The websites of authorities allow carrying out noncommercial transactions, for example, electronic vote, loading of forms and forms, filling of tax declarations, a possibility of the application of certificates, licenses, permissions. They also process commercial operations.</p>
<p>Stage 4. Joint electronic services.</p>	<p>The websites of authorities change a way of communication with citizens. They request information and opinions from citizens, using the Web 2.0 technologies and other interactive tools. Electronic services and electronic decisions provide indissoluble exchange of information between the ministries and departments. Information, data and knowledge extend the government through the integrated applications. When rendering services accents move from orientation to needs of the state, to needs of the citizen when electronic, services are rendered to citizens throughout all life. At the same time, services are provided taking into account specific requirements of certain groups of the population. The governments create conditions under which citizens can be more involved in activity of government bodies to have a real opportunity to influence decision-making.</p>

At the present stage, focus of researches of development of technologies of the electronic government and its efficiency is displaced towards expert estimates, which can reflect most fully current state of problems and construct expected models of development on his basis.

The analysis of foreign experience of providing the state interactive services in such countries as Great Britain, the USA, Australia, Canada, Germany, Malaysia, Hungary, Poland, China, South Korea, Holland, Brazil and some other the states, has allowed to reveal the main approaches and the principles used in world practice of system of providing the state interactive services.

These processes are carried out within carrying out administrative reforms which main directions is the following:

- Providing the state interactive services is carried out based on the state and municipal standards;
- Carrying out reforms with broad application of the advanced information and communication technologies;
- Improvement of providing the state interactive services with use in practice of the principle of "feedback" with the consumer of services during the long period.

Definition of the principles is one of key elements in the course of creation of effective system of providing the state interactive services. The principles have to answer the purposes and problems of strategy of reforming of the state and municipal sectors. Therefore, for example, in Great Britain carrying out reforms in the sphere of providing the state services has begun with development of strategy of modernization of public administration. The ideology of this strategy consists in ensuring bigger openness of public sector for consumers and pursues the aim of improvement of quality and availability of the state services and information on them. Proceeding from goals the following principles have been the basis for strategy:

- Development and deployment of national standards;
- Transfer of big powers to executive authorities of that level at which rendering of services is directly carried out;

- Big flexibility in rendering of services taking into account specific features and needs of consumers;
- A possibility of the choice for the consumer of the place of receiving and the supplier of service that leads to improvement of quality of services.

Reform state interactive has led managements in Great Britain to creation of system of the agreements on the state interactive services entered in 1997 — 1998 which are concluded between ministers and treasury. Each agreement is based on three-year allocation of means and defines political results and the purposes which department, and criteria by which his work will be estimated seeks to reach.

Specification of relationship on the "state/supplier of service — the citizen/recipient of service" line happens on concrete services sectors. So, in an education system of Great Britain two main systems of an assessment of productivity of activity of schools are approved:

- the reports of Office of Standards in Education (OFSTED) (Bureau of standards in education) prepared since 1992 on the basis of visit of schools and their assessment; total collections of indicators of productivity among which there is a percent of the pupils who have successfully passed these or those qualification tests, quantity of truancies, etc. In health sector in Great Britain, quality of activity is estimated on five groups of indicators:

A — national priorities and strategic objectives (National Priorities and Strategic Objectives);

B — expenses and financial efficiency (Cost and Efficiency);

C — efficiency of providing service and its results (Effectiveness of Service Delivery and Outcomes);

D — quality of services (Quality of Services for Users and Careers);

E — equal access (Fair Access).

If the group "A" allocates nation-wide priorities, then the group of indicators "B" estimates expenses and their compliance to result in the concrete directions, regions, spheres of health care. The group "C" is directed to efficiency indicators. The "D" group includes such indicators as a share of the people who have told that

they have quickly received the help, and existence of single chambers. In-group "E" the people who have declared discrimination in rendering of services on an ethnic or religious sign are considered. Indicators do not remain invariable and reflect various groups (age, social) recipients of services. Because of an assessment of activity of health system the cumulative database of results of activity of healthcare institutions for the country in general, the region, the district is formed.

Development of system of public services is carried out not only on national, but also at the all-European level. In the European Union countries (EU) the List of basic public services is accepted to obligatory execution (see the table).red.

In EU countries, the USA, Canada when providing public services contractual forms, the principles and mechanisms of the contract relations are widely applied. Especially actively this practice takes root in industrially developed countries from the middle 1970-hgg. In Germany and France, the legislation regulates as a special form of the contract relations on rendering of services a services agreement. Financing of the organizations, which are directly providing public services, remains mainly budgetary. The incorporated enterprises for rendering services act on the contract basis with the profile ministries and departments, quite often have rights to accumulate in the funds the considerable funds received from payment of the provided services, which intend for compensation of the subsidies, which are earlier provided by the state and the budgetary dependence.

Practical development and use of the quality standards of the services provided by public sector has begun in 1991 in Great Britain in connection with acceptance at the initiative of the prime minister John Major Hartiya of citizens {Citizen's Charter) of that time. This document has defined the ten-year program aimed at improvement of quality of the services provided by public sector of the country.

His main idea consisted in establishment of the quality standards for state services measurement of the actual level of functioning of public institutions in comparison with these standards constantly to improve standards on the basis of pressure put upon service providers by their end users. The possibility of rendering such pressure was based in this program ensuring openness of activity of public

institutions, first — providing information to citizens as about the established standards, and the actual quality of services.

By 1996 in Great Britain on various branches of public sector 42 charters of the national level and nearly 10 000 — local level have been developed and published.

In Italy the similar program — Carta dei servizi — has been initiated in 1993 by the Ministry of public services (Ministry of Public Service) proceeding from the analysis of experience of realization of a similar initiative in Great Britain.

Table – 1.2

List of basic public services

Services for citizens	Services for business
<ol style="list-style-type: none"> 1. Income tax: submission of the declaration, notice of results of verification of declarations. 2. The services in job search provided by departments of work. 3. Payment from social insurance fund: <ul style="list-style-type: none"> • Doles; • Family privileges; • Payment of medical services (compensation of expenses or direct payment); • Student's grants. 4. Issue of documents (passports and driving license). 5. Registration of cars (new, being in the use or imported). 6. Filing of applications about the construction license. 7. Applications to the police. 8. Public libraries (availability of catalogs, instruments of search). 9. Acts of civil status (birth, marriage, death); 	<ol style="list-style-type: none"> 1. Payments in social insurance funds of employees. 2. Taxation of legal entities: submission of declarations, notice of results of verification of declarations. 3. VAT: declaring, notice of results of verification of declarations. 4. Registration of the new company. 5. Providing information in bodies of statistics. 6. Submission of customs declarations. 7. The permissions connected with environmental protection including the reporting. 8. Delivery of goods and services for social needs

<p>inquiry and receiving.</p> <p>10. Filing of application on entering a higher education institution.</p> <p>11. Registration at the place of residence.</p> <p>Services of health care (for example, interactive informing on rendering of services in various hospitals; the direction in hospital)</p>	
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In 1992 in France the document La Charte des Services Publics which defined the basic principles of providing public services, such as transparency and responsibility (which was understood ensuring work of the organizations at the good level, as providing necessary information to citizens, elimination of contradictions between the used procedures, carrying out preliminary consultations, obligatory estimation of productivity and introduction of rules of the appeal), simplicity and availability (i.e. restriction of number of the required documents, reduction of number of necessary steps and formalities, ensuring availability of services to country people, an assessment of satisfaction of citizens with process of receiving service), involvement of the population and adaptation to needs of citizens has been published (that assumed ensuring cooperation between the organizations providing services, education at their employees of a sense of responsibility before citizens, etc.) trust and reliability (which were understood as legal validity, an assessment of the existing and entered regulations, recognition of an inaccuracy of decisions and their fast correction in case of detection).

Similar programs and documents were at the beginning — the middle 1990-th yy. are accepted in Belgium, Norway, Denmark, Sweden, Finland, Spain, Ireland, and also in the USA, Australia and New Zealand.

In the legal relation establishment of standards is characterized on EU countries by rather big variety. In Great Britain they were entered is decentralized, decisions of the separate ministries and the independent regulating agencies — at the national level, by territorial divisions of government departments — at the local level, and

also separate public institutions directly for the clients. The moment of introduction of this or that standard was defined by the organization independently, proceeding both from her readiness for it, and from pressure level from public opinion. In Italy temporary parameters of process of development and introduction of the quality standards of service in public institutions, on the contrary, have been established originally by such statutory act as the directive of the prime minister accepted in January, 1994 y., obligatory for execution by any public institution.

This directive established extremely short term of introduction of standards — 3 months, however assumed that all of them are entered only at the level of the organizations — direct producers of services, i.e. each hospital, school, court, municipality, the organization of public service, etc. Standards of the national level were not provided in the mentioned directive. The actual mass non-execution of this directive (only 40 of nearly 40 Ltd companies of the mentioned establishments have entered at themselves the service quality standards, and not within 3 months, and by the end of 1994) has led to adoption by parliament in 1995 of the special law (No. 273/95) which was actually repeatedly entering Carta dei servizi-the New legal means forcing public institutions to enter and execute the quality standards, again assumed the same rigid terms of their establishment, however supplemented them with definition of an order of introduction on branches of public sector: first of all, to the organizations of health care, then — educations, etc. The developed coverage of establishments of various sectors the accepted standards as a result was very in coincident.

Italy significantly differs in it from Great Britain where, despite the lack of rigid legislative base, success of introduction of the quality standards was much higher. At last, the quality standards influence improvement of quality of the made public services and directly as often have a special-purpose character, fixing not only need not of decrease in the reached level, but also his increase during planning period.

In the USA, responsibility for development of concrete recommendations about improvement of quality of the state services has been conferred on the

Interdepartmental commission on revision of activity of public institutions created on March 3, 1993 by the President B. Clinton and headed by the vice-president A. Gore.

In Poland, questions of reforming of public administration are coordinated by the Government representative for reform of the state system at office of the prime minister. As this body, development of the strategic directions of reforms in the sphere of public administration and control of their execution, and carrying out privatization and coordination of international aid enters.

In Malaysia on improvement of quality of the state services the Department of administrative modernization and administrative planning (DAMAP) formed in 1977 as division of office of the prime minister is engaged in reforms. The main task of DAMAP is carrying out administrative reforms in public sector for improvement of quality of the state services and efficiency of activity of public service.

Thus, foreign experience testifies to that importance which the countries gave to reform of public sector, and about need of coordination of this process at the highest level.

When carrying out reform in the sphere of the state services for achievement of steady results it is necessary to develop at the same time the corresponding elements of infrastructure in support of system of providing the state services. The similar infrastructure means creation of a network of the organizations and establishments facilitating process of providing the state services through carrying out researches, formation of information databases, providing consultations and training both government employees, and consumers of services.

Abroad the similar organizations carry out the activity based on the following principles:

- Maximum nearness and orientation to needs of the consumer;
- Professionalism in management of activity and rendering of services;
- Stability of results;

- Practical advantage of their activity. For example, in Canada the provided telephone connection centers "1-800 Canada" which provide necessary information to the population about where and when it is possible to receive a certain service work. In addition "The centers of access" which render services in consultation of the beginning businessmen work. These centers are located in buildings of public institutions across all Canada. Their feature consists that besides providing consultations to businessmen they render a significant amount of the state services and work by the principle of "one window".

In Poland in 2002 y, the Information center of public service has been created. The purpose of his creation is expansion of access for ordinary citizens and government employees to information on types of the state services, fields of activity of separate government authorities and establishments etc.

In Greece within reform of a management system "The program of quality" which provides creation of advice centers on the state services, united in a uniform information network is developed.

In Hungary in one of regions, the pilot project within which with the assistance of all public institutions the information center has been created has been carried out. This center has opened for citizens' access to information on interaction with various public services. Further, this experience will be widespread on all country.

The ministry of public servants and the state reforms of the French Republic has offered a new technique of increase of efficiency of rendering the state servants to citizens under very beautiful name Marianna's Charter "For the best reception of the population". Mission of the Charter — in simplification of access for citizens to the public services rendering services to the population, sensitive and polite reception of the population, the clear answer to questions of citizens.

The charter addressed to all organizations of public sector has been taken out on the statement of the Commission "concerning improvement of quality of public service" on July 9, 2003. She is created first for the organizations of public sector, both central, and regional which activity is directed to rendering services to the population, and for jurisdictional bodies. The beginning of implementation of the

program of the Charter of Marianna is considered on January 3, 2005. Application of a charter is carried out according to the four-stage scheme:

- Introduction and the control exercised by various ministries at the national level;
- Distribution on all organizations of public sector and the further control of application exercised directly by the ministries;
- The coordination and control, which are carried out by representatives of the ministries at the level of departments;
- Introduction and control at the level of government authorities.

From countries of the Commonwealth of Independent States of the greatest success I have reached Kazakhstan in which the Law from 11/27/2000 № 107-I "About administrative procedures" with the changes made on March 12, 2004 also works. In 2004, the similar law has been adopted in Kyrgyzstan. In Belarus, the Decree of the President of Republic of Belarus of March 16, 2006 has approved the list of the administrative procedures, which are carried out by government bodies and other state organizations for requests of citizens for issue of references or other documents.

In 1990-es yy. In a number of the European Union countries special acts in which the general requirements and the quality standards of rendering public services are established have been adopted: Citizen's Charter — in Great Britain, Carte Del Servizi — in Italy, La Charte des Services Publics — in France.

In 1991 in Great Britain the Charter of the Citizen (Citizen's Charter) which includes a set of indicators and indicators of quality of performance of the functions by local authorities on customer service, i.e. citizens has been published. The charter has established the principles, which have to be the cornerstone of activity of the public institutions and organizations providing services to the population and obligations of the government in the field. Are referred to number of such principles: accurate standards of services; openness and completeness of information; providing consultations to the population and possibility of the choice of services; their usefulness and efficiency, etc.

The charter, in fact, is the top link in hierarchy of the acts regulating rendering of services in various spheres of social life (education, health care, employment, the taxation, social problems etc.). About 40 similar acts are already adopted. The British Charter of the citizen of 1991 not so much describes features of the relations "the citizen — the state" how many the supplier — the client" reveals sense of the relations " .

Though the state system of Great Britain shows in general stability and efficiency, the government of the country makes constant efforts for improvement of her separate elements.

Since 1999 in Great Britain, modernization of system of public administration is carried out. One of the main directions of reforming of public administration — providing an integrated approach to development of a state policy with orientation to national interests and strategic tasks. A main goal of reforming of local management — improvement of quality of the public services provided to the population. Improvement of work of local authorities is carried out with use of various models of quality management.

The government of the prime minister of Great Britain Tony Blair has defined the main objectives of reform: providing an integrated approach to development of a state policy with orientation to strategic objectives; increase of usefulness of services and their compliance to vital needs of the population; quality achievement of the state services provided to citizens and creation of the effective mechanism of their distribution.

From five priority directions of reforming of work of state bodies which realization is urged to increase its efficiency and quality three have a direct bearing most on rendering services to the population. Treat them:

- 1) Strengthening of focus and responsibility for distribution of the state services due to closer attention to interests of various social groups;
- 2) Improvement of quality and increase of efficiency of the state services, introduction of innovative approaches, progressive practical experience;

3) Use in public administration of information technologies for fuller satisfaction of needs of citizens and distribution of services through electronic networks.

In 1998, the government has published a number of the documents on modernization of local management aimed at the development of democracy and increase of overall performance. At the same time it has approved the concept "Best values" (Best value) which includes the new principles which are been the basis for activity of the local authorities responsible for ensuring high-quality services for the population.

Efforts on improvement of local management are made on many channels, but the main attention is paid to the following questions:

- To introduction of various models of quality management in work of the local organizations;
- To development of a national information network in quality which 25 local networks consisting of representatives of all groups of public sector enter.

Among models of improvement of quality of activity of local authorities (schemes of quality — quality schemes) have gained the greatest distribution:

- The Superiority in Work model (Excellence Model) based on interrelation of opportunities of the organization and results of her activity at continuous orientation to strategic values that allows increasing overall performance;
- "The Charter sign" (Charter Mark) — system of rewarding of establishments of public sector for stimulation of improvement of quality of their services on the basis of a self-assessment and independent audit;
- "Investments into personnel" (Investors in People) — the national standards and techniques directed to increase of efficiency of investment of capital in training and development of personnel;
- the ISO-9000 model — the methods allowing to provide efficiency of working processes and document flow on the basis of quality management.

The national award «Charter Sign» approved by the cabinet in 1992 and awarded on a competitive basis represents the original model of encouragement for high

quality of work of the organizations of public sector connected with rendering services to the population including local authorities.

To get this prestigious award, the organizations need to pass three stages of selection. At the first stage there is an assessment of the rendered services in 10 criteria: accurately developed standards; openness and completeness of information; consultations and feedback with the population; possibility of the choice and availability of services; usefulness of services and respect of the rights of citizens; a possibility of the appeal at insufficiently high quality of services; effective use of resources; introduction of innovations; collaboration with providers of services; degree of satisfaction of consumers.

At the second stage, experts carry out an inspection of correctness of the presented materials on places. The third stage includes their recommendations about improvement of services and making decision on rewarding of the best establishments.

The mechanism of selection and rewarding with the award "Charter Sign" allows participants of a competition to compare the services provided by them to standards of work of the best organizations; to obtain information of experts on the level of the work; to achieve national recognition and to approve reputation; to increase morals and motivation of personnel; to improve work indicators (as have shown researches, 97% of the organizations — winners of competitions and 79% of their participants who haven't got awards take practical measures for improvement of the activity subsequently).

The ISO-9000 model helps to improve processes in local authorities based on their standardization and improvement of document flow. She represents the international quality standards of administrative system, which use more than 270 thousand organizations in 143 countries, including about 60 thousand organizations in Great Britain, and allows comparing their actions to the international standards, to develop handbooks and methods of work improvement of quality.

At the first stage, work on standardization of procedures is carried out that is reflected in official documents, independent estimates on certification of processes are given then and comparison with standards is carried out them. In Great Britain Service carries out such assessment on accreditation which works at the ministry of trade and the industry. Accreditation is voluntary, and those who have passed it can use the Sign of national accreditation. It has to show to citizens that the organization provides the high-quality services conforming to the international standards that is confirmed with independent body. Then annual audit inspections are carried out.

Summarizing foreign experience in the field, it is possible to tell that efficiency of the considered institutes is defined by professionalism in management of their activity, availability of the offered services and broader coverage of potential consumers of the state services.

Use of new information and communication technologies will allow expanding access for consumers to the state services and information on them.

In Australia in 1997, the law "About Rendering of Services Agencies in the Commonwealth" has been adopted. According to this law, the public institution of "Centrelink" has been the same year created. It provides the state services from a name and in partnership with 25 federal ministries and the state agencies by means of the Internet, the provided telephone connection centers for customer service and at usual offices. Information on the website is provided in 56 languages. "Centrelink" provides services of the Ministry of Labor, the Ministry of Transport, the Ministries of affairs of veterans, health care, science and education, agriculture, foreign affairs and trade, the ministry of communications, information technologies and arts and many others. At the same time the payment for services can be made by wire transfers, checks etc. In 2002. this body has served 700 000 disabled people, 500 000 young people, including students, 1,1 million unemployed, 2 million pensioners, 1,8 million families. In this, body 24 000 employees work.

Other example in the sphere of rendering of services on the basis of use of information and communication technologies in Australia is the Canberra-Connect

project by means of which services of all public institutions are provided to the population of the capital. In May 2003, "Canberra-Connect" provided 132 types of service at usual offices, 77 — on the Internet and 62 — through the provided telephone connection centers. By means of the website ([http://www. Canberra connect. act. gov. au](http://www.Canberraconnect.act.gov.au)) such services as registration of the enterprise, registration of the car, payment for utilities, job search, services of health care, etc. are online provided to this organization. By results of activity of the Canberra-Connect project for 2001, the sum of the income has made 161 million, for 2002 — 205 million and for 2003 — about 310 million Australian dollars.

In Germany the program of the electronic government "by BundOnline — 2005" is developed.

Rendering of services by administrative bodies of the state will be improved by use of information technologies. In the federal government, already 170 types of service appear with use the Internet. The special attention at the same time is paid to simplification of procedures of registration of the enterprises of small and medium business.

In Hungary in 2001, the Electronic Government program has been begun. This program is aimed at integration of strategy and projects on development of information technologies of various sectors and public institutions for providing citizens with quality services. At present, the Office of the authorized minister coordinates 36 programs, which are carried out in 17 public institutions. Effective and transparent management and high quality rendering of services have to become results of this program.

In Malaysia Department of administrative modernization and administrative planning (DAMAP) carry out reforms on introduction of system of electronic state services (e-public services) as a part of office of the prime minister. The purposes of these reforms are ensuring effective interdepartmental and interdepartmental coordination and providing the simplified access for businessmen and citizens to the state services. At present, several pilot projects on rendering of services on the Internet are initiated: registration of cars, issue of the driving license; payment for

utilities; providing information of the Ministry of Health; implementation of government procurement; electronic labor exchange.

Process of improvement of providing the state services be closely connected with use in practice of the principle of "feedback" with the consumer of services.

In the USA within the national program "The First Priority — Clients" monitoring estimates of quality of the provided services and studying of expectations of consumers are carried out. Along with it regular surveys among public servants who directly contact to the population in the course of rendering of services, for the purpose of identification of shortcomings and collecting offers for achievement of level of the quality standards of the services provided by the private sector are conducted.

In Australia on the website of the Canberra-Connect project forms, which persons interested to offer ways of improvement of granting each separately taken type of service can fill, are also exposed.

Use in practice of the principle of "feedback" with the consumer is the checked and effective method of studying of a current state in the field of rendering of services and formation of strategy of further improvement of the state services taking into account requirements and expectations of consumers.

Characteristic feature of reforming of system of providing the state services in the considered countries is duration of this process.

For example, the Charters of Services system initiated in Great Britain in 1991 has been calculated on 10 years, but improvement of separate components of this system continues and until now.

The First Priority — Clients program adopted in the USA in 1993 also proceeds still.

Foreign experience of standardization of the state interactive services shows that these questions take the important place in policy of many modern states, which is directed to achievement of more effective work of executive bodies of the government and local governments. Special programs of development of public

service which major purpose — increase of standards of the state services, improvement of their organization and distribution are adopted.

Summarizing foreign experience in the field, according to the author, it is necessary:

- To create standard and legal base of standardization of rendering the state interactive services regardless of the place of their granting and the budgetary opportunities of territorial subjects of the Russian Federation and local governments;
- To form the national authority of rendering the state interactive services guaranteeing identical constitutional opportunities of their granting in all territory of the Russian Federation;
- To create infrastructure (a network of the organizations and establishments) facilitating process of providing the state interactive services through carrying out researches, formation of information databases, providing consultations and training of both the public and municipal servants, and consumers of services;
- To carry out providing the state interactive services only on the basis of the state and municipal standards with broad application of the advanced information and communication technologies;
- To improve quality and to increase efficiency of rendering the state interactive services by introduction of innovative approaches and progressive practical experience;
- To establish the state and public control over process of standardization and rendering the state interactive services.

1.3 Standard and legal bases of introduction of the state interactive services on the basis of ICT

At us in the country for a long time and purposefully information and communication, technologies for providing interactive state services to the population and legal entities through websites of state agencies and the Government portal of the Republic of Uzbekistan take root. In 2007, the Register

of the basic interactive state services (BISS) in number of 49 units has been approved. In 2009, he was expanded to 94 units, and now it includes more than 195 types.

"Services in a new format" the slogan of the Uniform portal so sounds that means providing interactive state services through a uniform point of access in real time. The uniform portal is created according to the State program "Year of wellbeing and prosperity" approved by the resolution of the President of the Republic of Uzbekistan from February 14, 2013 №. RP-1920 and for execution of the tasks assigned by the resolution of the Cabinet of Ministers of the Republic of Uzbekistan from December 30, 2012 №. 378 "About measures for further improvement of activity of the Government portal of the Republic of Uzbekistan on the Internet taking into account providing interactive state services".

The uniform portal of interactive state services (Uniform portal) is a uniform point of access to the interactive state services provided by government authorities including on a paid basis.

Providing interactive state services through the Uniform portal is carried out for the applicants who have undergone procedure of registration and authorization according to the Provision on the Uniform portal of interactive state services of the Republic of Uzbekistan, approved by the Resolution of the Cabinet of Ministers of the Republic of Uzbekistan from December 30, 2012 №. 378 "About measures for further improvement of activity of the Government portal of the Republic of Uzbekistan on the Internet taking into account providing interactive state services».

Purposes and problems of the Uniform portal:

The uniform portal is created for providing access for users to interactive state services, including on a paid basis.

The main objectives of the Uniform portal are:

- Granting opportunity to users for direct submission of appeals to government bodies;
- Integration of users into other projects in the sphere of information and communication technologies;

- Increase of efficiency of interaction of users with government bodies;
- Reduction and elimination of bureaucratic barriers and barriers to users at the appeal to government bodies;
- Assistance in further development of "the electronic government" and introduction of modern information technologies in public administration.

The uniform portal is intended for development of conditions and expansion of opportunities of the user in receiving interactive state services on the basis of use of modern information technologies.

Conditions and order of providing access to the Uniform portal

Access to the Uniform portal is provided through a personal office of the user.

Access to a personal office for physical (on the basis of the statement and the passport) and legal entities (on the basis of the statement and the certificate on registration) is provided:

- The “Uzinfocom” center and the Center of a computerization at a hokimiyata of the city of Tashkent within one working day;
- the centers of a computerization at Council of Ministers of the Republic of Karakalpakstan, the hokimiyats of areas and Tashkent within two working days.

The “Uzinfocom” center or the Center of a computerization at Council of ministers of the Republic of Karakalpakstan, the hokimiyats of areas and Tashkent has the right to block or close access to the Uniform portal at the initiative of the user.

Use of interactive state services through the Uniform portal

Through the Uniform, portal interactive state services of a unilateral and bilateral look and transaction services rendered by government bodies are provided to the user.

The summary register of interactive state services (further — the Summary register) is approved by Coordination council on development of a computerization and information and communication technologies.

The interactive state services included in the Summary register without fail have to be provided through the Uniform portal.

Support of the Uniform portal

Information and technical maintenance of the Uniform portal is carried out by the Center of development and introduction of computer and information technologies "Uzinfocom" of the Ministry of development of information technologies and communications of the Republic of Uzbekistan.

The instruction for use of the Office of government body on the Uniform portal of the interactive state services www.my.gov.uz (Word).

Regulatory base:

The resolution of the Cabinet of the Republic of Uzbekistan №378 of December 30, 2012 *"About measures for further improvement of activity of the Government portal of the Republic of Uzbekistan on the Internet taking into account providing interactive state services"*

The resolution of the Cabinet of Ministers of the Republic of Uzbekistan № 259 of December 17, 2007 *"About measures for further development of the Government portal of the Republic of Uzbekistan on the Internet"*

The resolution of the Cabinet of the Republic of Uzbekistan № 181 of August 23, 2007 *"About measures for further improvement of interaction of bodies of the public and economic board, the government on places with legal entities and individuals with use of information and communication technologies"*.

Conclusion according to the first chapter

Due to the active development of ICT which become the most important factor of development of the world community today there was a need for detailed classification and a regulation of process of providing the state services. The wide circulation of information technologies makes revolutionary impact on one and all spheres of life of society. There was obvious a prevalence of information component of activity of people over all other her forms and components. Promptly the specific weight of the branches relating to creation, use and information transfer grows. Introduction of modern information technologies in the industry and sector of services has around the world led to change of structure of formation of cost of goods and services, strengthening of a role of intangible

assets, reduction of a distance between producers and end users, to increase of attention of suppliers to needs of consumers.

The essence is that powers on certain areas of jurisdiction have to be executed at the level of the power, as close as possible to the population, where relative isolation of a cycle of rendering services can be reached. Therefore local government, being the power of local community, can realize this idea owing to knowledge of local conditions, interests of cohabitation and managing, and also a submission to control of his authorities to the population.

Research within which the current state in the sphere of providing the state services is analysed and recommendations about improvement of system of providing the state services are defined has shown that:

- existence of available sources of information on regulations and conditions of providing the state services is one of the important elements influencing their quality.

The analysis of foreign experience has allowed to reveal the main approaches and the principles used in world practice for carrying out reform, including system of providing the state services. It is possible to carry to those:

- carrying out reforms is carried out according to accurately established principles;
- the management of reforms is assigned to government body of high level;
- carrying out reforms is followed by creation of an extensive network of the research, consulting, training and other supporting structures; carrying out reforms is followed by broad application of the advanced information and communication technologies;
- process of improvement of providing the state services is closely connected with use in practice of the principle of "feedback" with the consumer of services;
- process of improvement of providing the state services takes the long period of time.

In my opinion, definition of the principles is one of key elements in the course of creation of effective system of providing interactive state services.

CHAPTER 2. THE ANALYSIS OF PROCESSES OF RENDERING THE STATE INTERACTIVE SERVICES ON THE BASIS OF ICT IN UZBEKISTAN

2.1 Role and participation of “Uzbektelekom” JSC in development and improvement of the state interactive services

Now “Uzbektelekom” JSC - the advanced operator in branch of development of information technologies and telecommunications of the Republic of Uzbekistan providing high-quality telecommunication services of a wide range in all territory of the republic.

The “Uzbektelekom” Joint Stock Company is created in the form of open joint stock company according to the Decree of the President of the Republic of Uzbekistan of June 28, 2000 № DP - 2647 "About measures for improvement of management of the sphere of telecommunications" and the resolution of the Cabinet of the Republic of Uzbekistan of June 30, 2000 № 253 "About questions of the organization of activity of “Uzbektelekom” Joint Stock Company.

In structure of the company 22 branches function:

- 14 regional branches rendering services of a local, long distance and international telecommunication, all types of a voice communication and data transmission;
- 8 specialized branches.

Telecommunication services are provided by the Branches of the company participating in uniform technological process and providing support of working capacity and development of a telecommunication network.

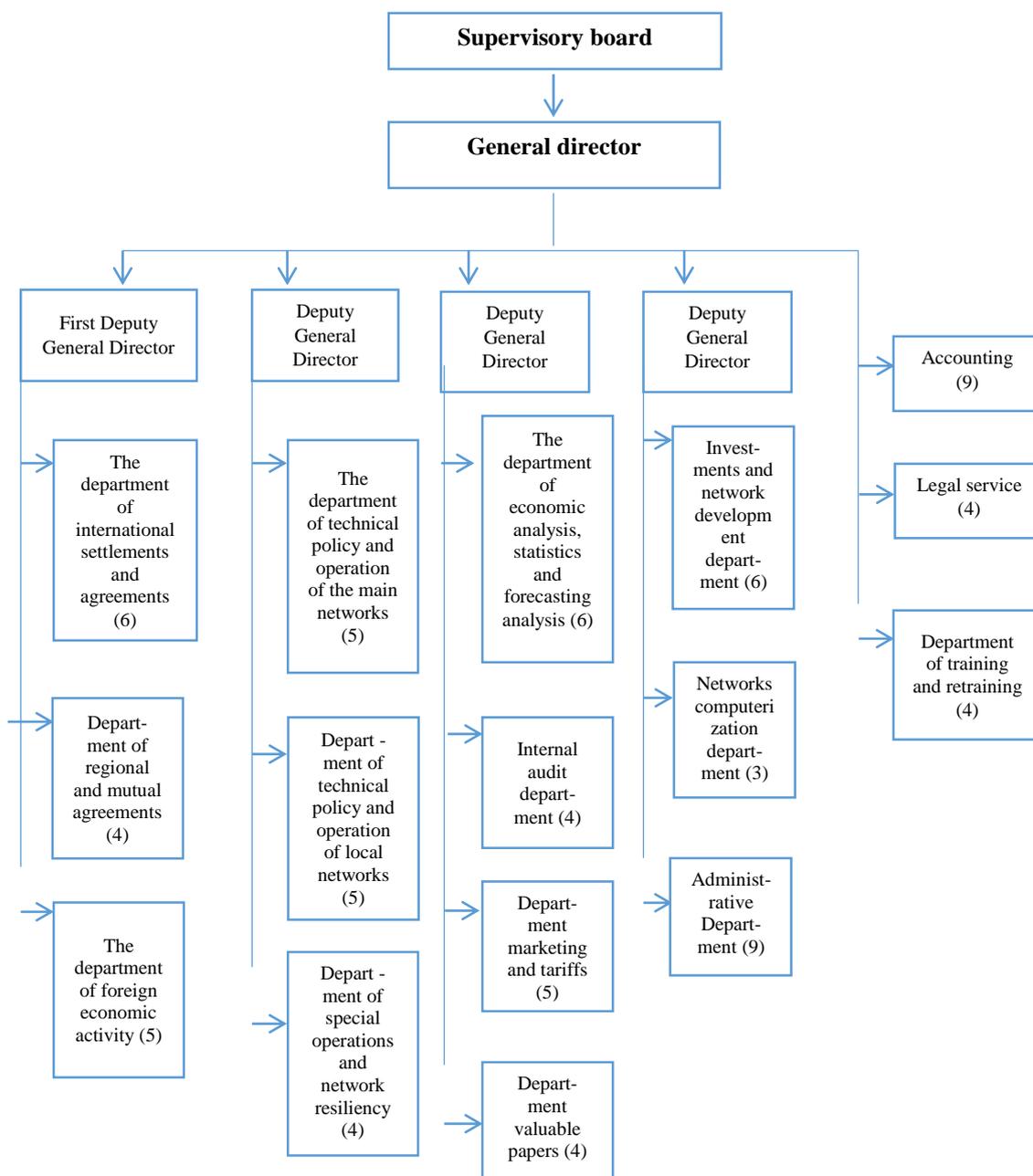
Further the operating organizational structure of executive office of JSC Uzbektelekom (picture. 2) is given. The Supervisory board is at the head of this structure, further it is followed by the CEO. Deputies who direct the relevant departments submit to the CEO

The authorized capital of “Uzbektelekom” JSC divided into 32 694 633 actions is created in the sum of 37 729 606 482 bags and according to the relevant resolutions of the government of the Republic of Uzbekistan, the available actions are distributed as follows:

45% - a share of the state (14 712 585 pieces of actions);

49% - the share intended to sale to foreign investors (now belongs to the state) (16 020 370 pieces of actions);

6% - shares of legal entities and individuals - residents of the Republic of Uzbekistan (1 691 678 pieces of actions) (from them 0,41% not sold part belongs to the state now).



Picture 2.2 - The current organizational structure of the executive office of JSC "Uzbektelekom".

The state assets in an authorized capital of the company are made by 94,41%.

Stocks with the par value of 1154 pieces for the sum of 37 729 606 482 bags in a non-cash form, including are issued 31 579 649 pieces of simple and 1 114 984 pieces of preference nominal shares which are in free circulation.

Hi-Tech communication services become more and more significant for successful development of economy and the social sphere of modern society today.

Creation of the highly effective telecommunication environment is one of the main national tasks of the Republic of Uzbekistan. Without solution of this task creation of information society and introduction of the latest information technologies to spheres of production, business, science, education, medicine, culture is impossible.

Also accepted the Resolution of the President of the Republic of Uzbekistan of June 27, 2013 № RP – 1989 "About measures for further development of National information and communication system of the Republic of Uzbekistan" and "The plan of measures on implementation of the program of development of information and telecommunication networks for 2013-2020 yy", and also the Resolution of the President of the Republic of Uzbekistan of March 6, 2015 № RP – 2313 "About the program of development and modernization of engineering and communication and road and transport infrastructure for 2015-2019yy", where realization of a number of the strategic projects aimed at the further complex development and modernization of infrastructure of "Uzbektelekom" JSC is provided.

In 2014, a number of the strategic projects aimed at the further development of a national network of telecommunications on the basis of the modern info-communication technologies providing deep integration of a national network in world system of telecommunications and comprehensive satisfaction of requirement of economy and the population of the country in info-communication services have been realized.

Milestone event in 2014 for "Uzbektelekom" JSC became the organization of activity of national mobile operator of the GSM standard according to the Resolution of the President of the Republic of Uzbekistan of February 12, 2014. №

RP-2126 that also further development of networks of mobile cellular communication of the country has allowed to create necessary conditions for broad participation of the Company in the market of cellular communication.

In 2014 the major priority projects on modernization, technical and technological rearmament and providing a sustainable development of the Company have been realized.

The network of clock network synchronization, by introduction of system of the uniform coordinated time according to the international standards and requirements of the market is modernized that has allowed to ensure synchronous functioning of all digital telecommunication network of the Company, and also the attached networks, to reduce the number of failures and mistakes in network functioning because of synchronization times.

Modernization and expansion of the international centers of switching for technology of networks of new generation (NGN) - construction of a basic network on the basis of IMS/NGN, for the purpose of providing high-quality service to subscribers, implementation of routing and switching of multimedia of a traffic at the modern level is carried out, to have an opportunity to connect the third-party organizations (operators) to a network and to provide them a wide range of services. To develop and increase subscriber base due to use of new technologies.

Together with the Chinese company Huawei work on modernization of IP/MPLS of a network of TShTT branch is carried out, having lifted speed at the main level to 100 Gbit / with, on the basis of the new transport DWDM network. The new network has connected all districts of Tashkent on high-speed optical channels.

Also, together with the Japanese corporation NEC and Toyota Tsusho trading house, have put into operation the new DWDM line with a speed of one lambda of 100 Gbit / sec. The new line has connected the capital of the Republic – Tashkent to one of historical monuments of Uzbekistan - the city of Bukhara.

For providing new services of broadband access fiber-optical communication lines for implementation of the solution of a high-speed network of access of "the last mile" are laid and the solution of introduction of a special class of operator devices

- a multiservice platform of access, or MSAN (Multi Service Access Node) providing support of a set of services from traditional telephony to IPTV, within a uniform hardware platform has been applied.

Implementation of the project on expansion of a cover zone of mobile broadband communication 3G with use of the EVDO technology of the CDMA-450 standard is continued, and also the plans of measures in the field of the organization of activity of national mobile operator are involved in the GSM/UMTS/LTE standard. At the same time, in “Uzbektelekom” JSC actively develops services of digital interactive IP of television of a high definition and provides to the subscribers connected on the Optics to the House technology. This year growth of subscribers on these services has made 159 percent.

Development of wireless info-communication technologies is one of the strategic directions of modernization of economy of the Republic of Uzbekistan. Growth of investments into development of modern telecommunication infrastructure promote increase of their efficiency and strengthening of competitiveness in the market of telecommunications in the long term.

Following the results of 2014, the level of penetration of mobile communication in the republic has reached 74 percent; increase in number of subscribers of mobile communication has made 126 percent.

In 2015, “Uzbektelekom” JSC has drawn up long-term plans on further expansion and development of networks of telecommunications, which will be reflected by projects:

"Development of the mobile CDMA-450 network with introduction of the EVDO technology in regions of the Republic of Uzbekistan". It is provided to establish in addition the 250th unit of new, to modernize 114 units existing a base station on the EVDO technology that will allow increasing a coverage zone in settlements of the republic to 85 percent;

Resolute measures on involvement of mobile communication of the GSM standard will be taken;

"Expansion and reservation of high-level networks to the regional centers of the Republic of Uzbekistan". It will allow to increase reliability and survivability of a telecommunication network, increase in its capacity up to 100 Gbit / with, the project plans to install the equipment of systems of transfer on the basis of the DWDM/SDH/IP/MPLS, OTN technology for ensuring full reservation of the operating transport network, and also will allow to increase the capacity of a telecommunication network of the company several times;

"Development of optical networks of broadband access in the FTTx technology". Increase in optical access to high-speed services of broadband access to 110 000 ports for the FTTx technology is provided that will allow to resolve an issue to "the last mile" and to come to the following level of rendering of services to consumers. The international cooperation of JSC Uzbektelekom is carried out in the following directions:

- Cooperation with the foreign organizations of communication;
- Participation in the international telecommunication projects;
- Bilateral and multilateral cooperation with the foreign telecom operators and the companies providing communication services and also the companies and firms making the telecommunication equipment.

"Uzbektelekom" JSC actively cooperates with the International Union of Telecommunication (IUT), the Regional commonwealth in the field of communication (RCC), the organization of satellite communication "Intelsat" and others.

Attaching great value to improvement and development of the sphere of communication, satisfaction of consumers in telecommunication services, to introduction of the latest technologies, association of intellectual and production resources, exchange of experience and information, "Uzbektelekom" JSC conducts active bilateral cooperation with the leading telecom operators and the companies of foreign countries on a contractual basis.

For implementation of the admission of the international telephone traffic 4 International Center of Switching (ICS) function and there are direct contracts

more than with 30 foreign operators through which communication with all countries of the world is provided.

Table – 2.1

Main indicators of development of a network of telecommunications

Name of indicators	2012 г.	2013 г.	2014 г.
Mounted capacity of Automatic Telephone Exchange(ATE), numbers	1 966 454	1 994 452	2 024 834
Digitalization level, %	98,8	100,0	100,0
Growth of mounted number capacity of a local network, numbers	11 514	27 998	30 382
Growth of mounted capacity of BBA ports, port	110 138	148 868	46 508
Extent of intercity, international, intra-zone communication channels, mln. channel/km:	276,2	381,3	448,9
from them formed on fiber-optical communication lines, mln.channel/km:	263,5	368,2	435,9
Extent of the main cable communication lines, km	5 449,7	5 829,0	6171,699
Including FOCL, km	5 435,8	5 821,1	6171,699
Extent of the channels organized on the main communication line, thousands.channel/km	259 258,8	366 837,4	431 908,2
Including FOCL, thousands.channel/km	246 949,2	354 239,7	419 310,5
Number of the switching centers of a mobile communication network, units	5	6	6
Growth of the general capacity of the	140 000	304 000	620 000

switching centers of a mobile communication network, numbers			
Coverage zone of settlements of the republic, %	71,4	71,4	74

"Uzbektelekom" JSC provides the service "Free International Call", services in pre-paid cards, Direct Home Services.

Increase in volumes of the entering traffic demonstrates the continuing active participation of "Uzbektelekom" JSC in the market of the international operators. Active operation with foreign operators on optimization of the scheme of creation of an international telecommunication, transition to new technologies and increases in number of the international channels have caused increase in volumes of the entering and proceeding international traffic.

The achieved positive results on rendering of services on the organization of transit channels on the territory of the Republic of Uzbekistan have allowed achieving positive dynamics of growth of the income from foreign operators following the results of financial year.

For performance of the tasks set for the company and creations of conditions for further development of Internet services in the republic, are taken measures for increase in speed of the international Internet channels with simultaneous reduction of cost of services of access to the Internet for the operators and providers included in the International Center of Package Switching (ICPS).

During 2014 the speed of the Internet channels included in ICPS is increased by 6 200 Mbps and by the end of the year the general speed of the international Internet channel has made 16 460 Mbps.

2.2. Studying of the technical and economic analysis of introduction of ICT in "Uzbektelekom" JSC

The company is the main supplier of telecommunication services for government institutions and departments of Uzbekistan. Telecommunications are new branch of the economy, which has begun to develop actively in the last decades. However, despite it, now this branch exerts positive impact on modern economy and society. The obvious tendencies of development of world economy connected with development of information and telecommunication (IT) of technologies, formation of a global computer network allow economists and other representatives of social sciences to say that in society and economy information civilization which basis is made by production and consumption of various information values is formed.

"Uzbektelekom" JSC has the huge potential and infrastructure resources for further dynamic development. In recent years, the Company has seriously strengthened and has expanded the technological potential of the network, having modernized the most part of telephone exchanges and the main communication channels. At the same time, modernization and expansion of potential of the international knots of voice and package switching have been carried out. All this, undoubtedly, has allowed the Company to keep and strengthen the status of the most powerful infrastructure telecom operator in the Republic so far.

"Uzbektelekom" JSC is a leader in rendering services of a fixed telephony. For the beginning of 2016 the number of users has made – 1 577 thousand subscribers, a share of the market of the Company on this service about 90%.

The company also takes the leading positions in the market of the fixed Broadband access to the Internet and data transmission. For the beginning of 2016, the number of users services BBA has made more than 367 thousand on the service IPTV – more than 34 thousand subscribers. The share of the market of the fixed BBA makes about 80%.

I have made the number of subscribers of mobile communication for the beginning of 2016 according to the CDMA standard – 306 thousand according to the GSM standard – 182 thousand subscribers which makes 2,4% of the general the number of subscribers of mobile communication of the Republics Uzbekistan.

Today on territorial coverage by a network and efficiency, the Company has strong technological capabilities in particular all cities, the regional and a wire and wireless network of telecommunications captures regional centers of the republic.

On coverage by networks of telecommunications of rural settlements, it is possible to note that in the Republic for the beginning of 2016, are available over the 11th thousand rural settlements from them, are captured from the Company by mobile networks of access of 74%, and wire networks of access of 35%. This segment of the market demands additional investments and by that having allowed the company to increase range of services.

Covering level a digital telecommunication network of areas, regional centers and the cities of the republic has made 100 percent, covering level a telecommunication network of rural settlements - 74, 4 percent.

Capacity of local telephone networks on the company makes

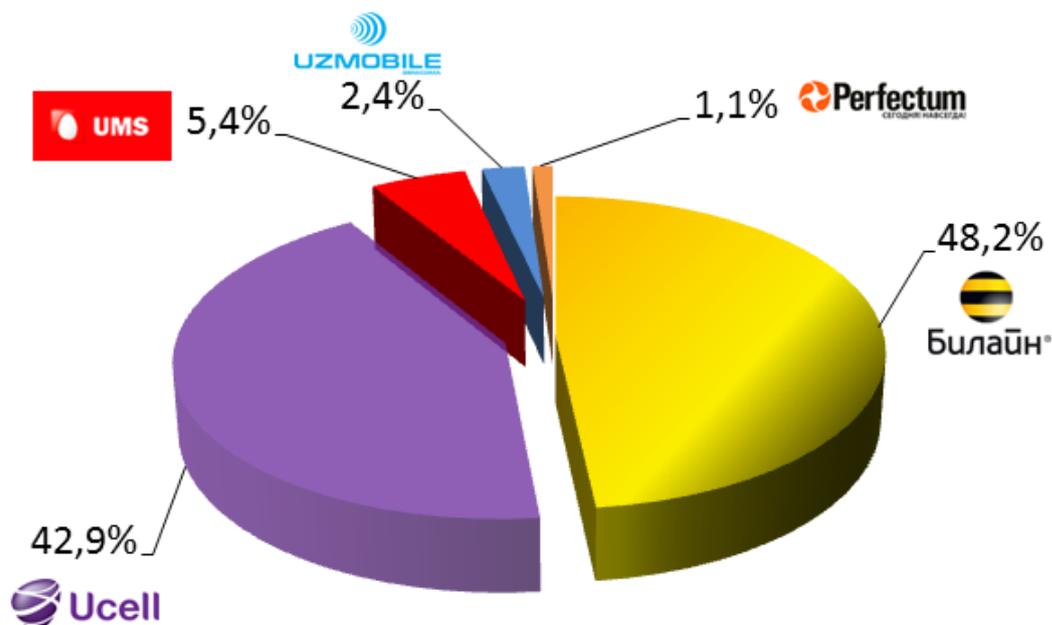
1 843 318 numbers, from them on a city telephone network - 1 693 568 numbers, on a rural telephone network - 149 750 numbers.

Specific weight of digital automatic telephone exchanges in relation to the general mounted capacity in general on the company makes 100%.

In the market of Uzbekistan, services of mobile communication are provided (Picture – 2.1).

Five operators such as:

- ИП Ltd “Unitel” (TM BEELINE)
- ИП ООО “Coscom” (TM UCELL)
- ИП ООО “UMS” (TM UMS)
- Branch “UzMobile” “Uzbektelekom” JSC (TM UZMOBILE)
- ИП ООО "Rubicon Wireless Communication" (TM Perfectum)



Picture – 2.3 Five operators of mobile communication in Uzbekistan.

On a local network of the company digital stations as foreign companies such as, "NEC" (NEAX61), "DAEWOO" is operated.

(DTS-3100 and DTS-1100), "Siemens" (EWSD), "Iskratel" (SI-2000 and SI3000), "Huawei" (C&C08), "ZTE" (ZXJ10), and domestic producers of "Telmax Elektroniks" (KoinotEl-SGM) and many others equipment.

Capacity of the international communication channels on average makes more than 20 Gbit/sec., long-distance 100 Gbit/sec., in local networks from 155 Mbps to 40 Gbit/sec., in Tashkent from 1 Gbit/sec. to 100 Gbit/sec.

The transport network consists of equipments built based on DWDM technology, SWDM and SDH technology, and RRL redundant channels. Built on the equipment «NEC» companies, «Nokia Siemens», «Cisco», «Juniper», «Hewlett-Packard», «ZyXEL», «Huawei», «ZTE» .and others.

The program of development and modernization of engineering and communication and road infrastructure in the city 2015-2019 y, is working on the following projects:

1. "Creation of a network of national mobile operator on the basis of branch "UzMobile" of "Uzbektelekom" JSC;
2. "Expansion of networks of the fixed and wireless broadband access";

3. "Expansion of the main and multiservice data transmission network";
4. "Construction of fiber-optical communication lines";
5. "Expansion of the switching equipment on the NGN technology";
6. "Modernization of the centers of switching on the IMS technology (IP Multimedia Subsystem)";
7. "Creation of the centers of storage and data processing" ("Data-center").

In the list of the rendered services used, the telecommunication network built based on modern technologies, the Company provides the following services:

- Rent of channels to operators and providers of the fixed and mobile communication;
- International and domestic long distance communication;
- Renders all types of service of a voice communication and data transmission;
- Internet access;
- Video conferencing;
- A mobile and fixed communication in the CDMA-450 standard;
- Will organize channels for transfer of programs television and broadcastings;
- The fixed telephony;
- Cable communication;
- Wire and wireless broadband access;
- Rent of channels;
- Mobile communication in the GSM standard;
- Interactive television (IPTV);
- Virtual private networks (VPN);
- Video telephony, IP-telephony;
- Call-center;
- Video conferencing (VC);
- Satellite monitoring of UzGPS;
- Data center, etc.

In addition, the Company is the largest supplier of telecommunication services for government institutions and departments.

"Uzbektelekom" JSC constantly interacts with the international organizations of communication, participates in the international telecommunication projects, and carries out bilateral cooperation with foreign operators and the companies - producers of the telecommunication equipment.

The local telecommunication network of the company contains over 2 thousand automatic telephone exchanges with a capacity more than 2,0 million numbers. Digitalization of a local telecommunication network has allowed increasing significantly quality of functioning of networks of telecommunication, has provided granting new types of service to subscribers of a network, and has allowed organizing high-speed dialup access to the Internet to a wide range of users.

The transport network of the Company is organized based on fiber-optical and radio relay communication lines with use of the modern network SDH technologies providing multilevel management of a network. For quality ensuring granting new types of service and extension of their nomenclature gradual transition to high-speed systems of a STM-1/4/16/64, DWDM and IP/MPLS broadcast is carried out.

The company provides access to the global Internet through the International Center of Package Switching (ICPS) to all providers of the Republic.

Internet access and to data transmission networks of "Uzbektelekom" JSC is carried out by branches of the Company on dedicated lines with use of the technology xDSL, FTTx, ETTx and to dialup access.

The list of the services of a data transmission network rendered to "Uzbektelekom" JSC includes Internet access, VPN, a video conferencing, development and creation of corporate networks, etc. Through the international voice lock of communication of VoIP of the "Uzbektelekom" Company, his branches provide services of the international telecommunication in pre-paid cards. "Uzbektelekom" JSC provides the international telecommunication through two international centers of switching, maintaining partnership more than with 20

international operators in the field of traditional communication. A general brand of JSC Uzbektelekom since 2011 is the UZTELECOM™ trademark.

Company services in the market are rendered under three trademarks - UZTELECOM™, UZMOBILE™, UZONLINE™ TELECOM TV™ and UzGPS™.

Under the General UZTELECOM™ brand and the slogan "National Operator" the complex of traditional services for retail sector, and all range of services for operators in the internal and international markets is rendered.

UZTELECOM™ also includes a complex of telecommunication services for corporate sector: the fixed telephony, wire and wireless BBA (broadband access), DT (data transmission), VPN (virtual private networks), IP-telephony, IPTV, virtual office automatic telephone exchanges (ATE), VC (video conferencing), and also for retail sector and small business: services IP-telephony, universal cards of payment IP-telephony, etc.

Under the TELECOM TV™ and UzGPS™ trademarks, the service IPTV and service of satellite monitoring are provided.

Under the UZONLINE™ trademark telecommunication services of new generation for retail sector and small business based on IP technologies - Internet access are rendered.

Under the UZMOBILE™ trademark modern services of a mobile and fixed communication on the basis of the CDMA-450 and GSM standards are rendered.

22 branches, from them — 14 regional and 8 specialized are a part of the Company. Personnel structure of employees of the company for the end of 2015 made 14 500 employees.

"Uzbektelekom" JSC has shares in eleven joint ventures rendering services the telecommunications making telecommunication the equipment and developing software.

In 2010 "Uzbektelekom" JSC, has handed the certificate of conformity of UZ.AMT.05.MAI.001-2010, which certifies that the company carries out design, construction, operation and rendering services of telecommunications with use of

QUALITY MANAGEMENT SYSTEM according to requirements of the international O'z DSt ISO 9001:2009 standard (ISO 9001:2008).

Table – 2.2

Main financial performance

Key indicators	2011 y	2012 y	2013 y	2014 y	2015 y
Revenue (mln.sum)	409 511	617 894	686 227	806 875	797 272
OIBDA (mln.sum)	115 838	204 314	156 105	157 121	190 251
EBITDA (mln.sum)	75 970	95 430	167 812	173 111	167 535
Net profit (mln.sum)	9 814	13 553	15 855	39 692	33 003
Active (mln.sum)	992 925	841 764	812 921	1 080 352	1 350 704
Capital and reserves (mln.sum)	227 880	218 108	250 318	312 153	342 126
Growth of revenue (%)	119	151	111	118	99
Growth of pure profit (%)	183	138	117	250	83

Income from the rendered services of telecommunications of “Uzbektelekom” JSC following the results of 2015 has made 884,7 bln.sum, having increased on 101 percent in comparison with last year (**Table 2.3**).

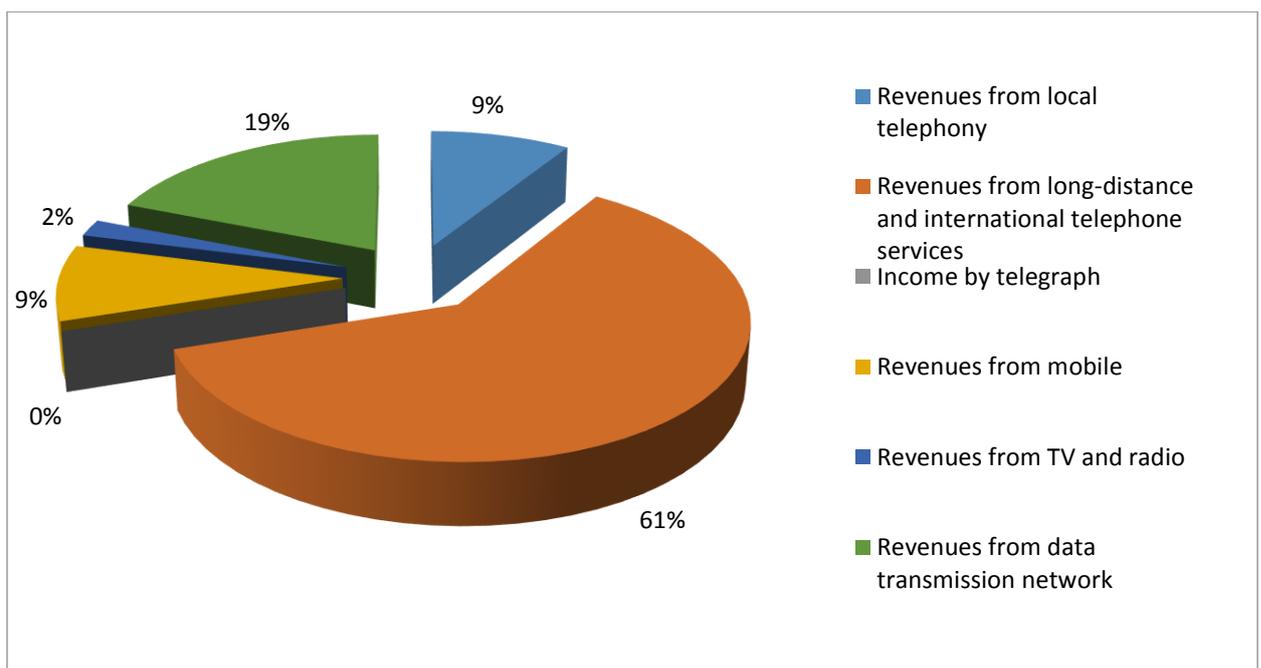
Table – 2.3

**ADDED INCOME INCLUDING VAT ON “UZBEKTELEKOM” JSC
FOR 2011-2015 Y. (mln.sum.)**

Name of articles of the income	2011y.	2012y.	2013y.	2014y.	2015y.
Added income, all	450 834	667 596	745 061	883 334	884 659
from them:					
Income from local telecommunication	66 356	71 934	72 321	77 605	81 269

Income from intercity and international telecommunication	343 084	521 931	545 165	607 379	539 609
Income on telegraph	778	732	780	972	1 055
Income from cellular communication	9 163	18 512	35 741	52 470	76 828
Income on TV and RV	1 998	2 183	2 505	2 496	3 466
Income from a data transmission network	27 677	34 126	59 137	102 244	163 371
Income from other communication services	1 778	18 177	29 412	40 168	19 062

The most part of the income the income from an international telecommunication - 40% forms, the income from local communication of-9%, intercity telecommunication - 21%, a data transmission network-19%, cellular communication-9% and the income from other communication services - 2%. The income from services of local telecommunication in 2015 has made 81,3 bln.sum (growth rate of 105% by 2014) (Picture 2.4).



Picture 2.4. The share of income in the total income in 2015

Income from services of intercity telecommunication in 2015 has made 182,2 bln.sum (growth rate of 100% by 2014). Growth of the income is caused by increase in volumes of intercity traffic (Table 2.4).

The largest potential for maintenance of growth rates of the income of the company has in granting and development of the perspective services based on data transmission and services of mobile communication. Growth rate of the income from services the Internet and mobile communication in 2015 has made 163,4 bln.sum (growth rate of 160% by 2014) and 76,8 bln.sum (growth rate of 146% by 2014) respectively.

Other income from non-core services has made 75, 3 bln.sum.

Income on financial activity has made 14,0 bln.sum.

Table – 2.4

**ADDED INCOME INCLUDING VAT ON “UZBEKTELEKOM” JSC FOR
2011-2015 Y. (mln.sum.)**

Name of articles of the income	2011y.	2012y.	2013y.	2014y.	2015y.
Added income, all	450 834	667 596	745 061	883 334	884 659
from them:					
Income from local telecommunication	66 356	71 934	72 321	77 605	81 269
Income from intercity and international telecommunication	343 084	521 931	545 165	607 379	539 609
Income on telegraph	778	732	780	972	1 055
Income from cellular communication	9 163	18 512	35 741	52 470	76 828
Income on TV and RV	1 998	2 183	2 505	2 496	3 466
Income from a data transmission network	27 677	34 126	59 137	102 244	163 371

Income from other communication services	1 778	18 177	29 412	40 168	19 062
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Table – 2.5

Accounting reports (mln.sums)

Name of indicators	2014y.	2015y.
Active		
Residual (balance) cost of fixed assets	449 533,3	543 452,4
Residual (balance) cost of intangible assets	1 631,0	1 075, 3
Long-term investments	372 203, 9	569 513, 8
TM3	85 441, 9	97 161, 3
Money resource	44 260, 3	4 911,2
Debtors	121 692, 6	127 740,2
In total on an active	1 080 353,0	1 350 704,2
Passive		
Sources of own means	474 179, 4	530 650, 3
Long-term obligations	374 173, 1	662 993, 4
Current obligations	232 000,5	157 060,5
In total on a passive	1 080 353,0	1 350 704,2

In the conditions of market economy, economic entities meet a number of different indeterminacy and threats as well in the market of telecommunication services there are dangers and threats, and their prevention, and as far as possible reduction of their influence on activity of the enterprise is considered a priority.

The political situation, economic situation, legislation bases, welfare level of the people, scientific and technical level of networks, natural, economic condition and specific structure of the market, which is conjecture, exerts impact on activity of

the communication enterprises. During activity of the Company, the following types of economic risks exert direct impact:

- Production (weather, technical, technological distribution, risk of unexpected death, management and others);
- Intermediary (risk of a real loss of profit, risk of indirect loss of money and risk of a property loss, risk of emergence of a civil liability and others);
- Commercial (risk of short delivery of a product, risk not of feasibility of a product, risk of loss and others);
- Financial (credit, property, safety, currency, deposit, economic, illiquid, the risk connected with cost and others);
- Innovative (the social risk connected with introduction of results of scientific and technical progress).

For prevention of all threats of "Uzbektelekom" JSC, work on two directions is conducted:

1. For prevention of the existing threats in activity of risk and as a result of his probable losses the insurance mechanism is used (buildings and constructions, means of automoto-transport, insurance of personnel and others).
2. Concerning the threats, which are not demanding insurance implementation of the following works, is planned:
 - It is correct to define and keep the relation of the indicators of financial activities for threats concerning commercial activity to find ways of increase of profitability of investments;
 - Proceeding from the volume of the telecommunication services rendered at distribution of resources precisely to determine the priority directions by risks of inappropriate distribution of resources;
 - To regularly analyze works on economic instability and variability of requirements and proceeding from market condition to make changes to the approved plans;
 - To skillfully spend means on financial threats, passive means to put in useful projects and in deposits of banks.

For increase in the list and improvement of quality of the provided services of telecommunications in the republic 37 service centers of customer service function. For social support and improvement of financial position, socially unprotected and needy categories of the population and assistance of activity in education, science, culture, art, enlightenment, and also to spiritual development of the personality on a constant basis sponsor's help was given to different republican non-state, noncommercial, charity foundations and their territorial divisions.

In 2014, "Uzbektelekom" JSC for these purposes has allocated funds of 24, 5-bln sums, including:

- 4, 2 bln sums are allocated for financing of construction, reconstruction, capital repairs of objects of children's sport and their equipment in Fund of development of children's sport;
- The organization and holding sporting events of various rank in the republic and on a covering of the expenses connected with participation of talented sports youth at the international competitions of 1,8 bln sums;
- Strengthening of material and technical resources, carrying out repair and re-equipment of educational laboratories and audiences, and also social protection of pupils of the Tashkent university of information technologies and branch professional colleges, lyceums of 1,7 bln sums;
- Support of various social funds for charity and other 16, 8 bln sums.

All these facts demonstrate that the company not only conducts vigorous public work, but also consciously bears the notable social loading directed on forward and comprehensively - harmonious development of the country.

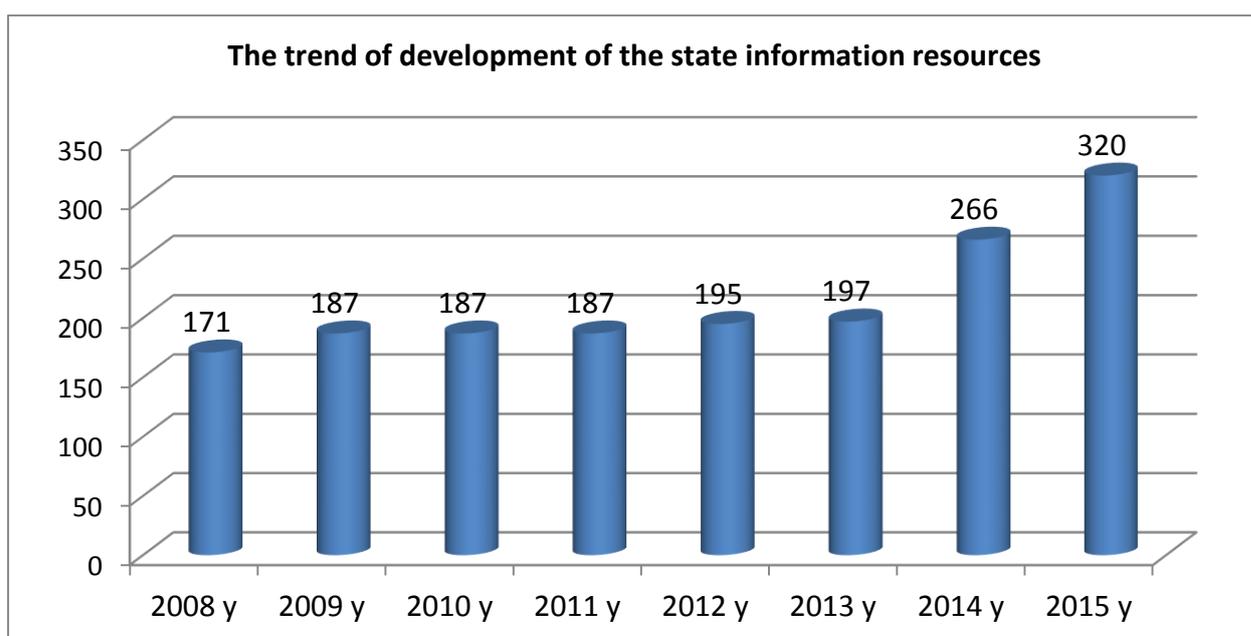
2.3 The analysis of organizational actions for rendering the state interactive services on the basis of ICT in "Uzbektelekom" JSC.

Introduction of information and communication technologies in public administration is one of the mechanisms providing optimum performance and

realization of the majority of functions of public administration and is directed to achievement of the following main objectives:

- Increase of overall performance of administrative personnel;
- Assistance to economic development;
- Increase of a standard of living of citizens.

Information systems and resources, which differ from all-technical applications, act as a basic element of informatization and become a subject of daily need. Informatization is an organizational and technical, technological, social and economic process of creation of conditions for satisfaction of information requirements with use of information resources, technologies and systems. The present Concept is developed according to the Decree of the President of the Republic of Uzbekistan of May 30, 2002 № DP-3080 "About further development of a computerization and introduction of information and communication technologies" and the resolution of the Cabinet of Ministers of the Republic of Uzbekistan from June 6, 2002 № 200 "About measures for further development of a computerization and introduction of information and communication technologies". (Picture 2.5)



Picture – 2.5. The trend of development of the state information resources.

1. Purpose and tasks of the Concept

The purpose of the present Concept is definition of the directions of development and ways of increase of efficiency of the processes of informatization providing conditions for creation of information society in the Republic of Uzbekistan.

Main objectives of the Concept:

- Improvement of a state policy in the field of informatization and definition of the main directions of creation of a national information resource, developments of standard and legal base and the market of services ICT;
- Definition of the main directions of development of ways, methods and means of ensuring of information security in information systems; the accelerated development of technical infrastructure – networks and systems of telecommunications, ensuring access to the international information networks;
- Widespread introduction of ICT in branches of real sector of economy, in the sphere of management, business, science and creation of conditions for broad access of various segments of the population to modern information systems and resources, a consecutive phased transition to electronic document flow;
- Informatization of all education system, including introduction to educational process at schools, professional colleges, the academic lyceums and higher educational institutions of the progressive systems of training, including distance learning based on active use of modern computer and information technologies;
- The organization of preparation of highly skilled personnel potential for work in the sphere of information and communication technologies;
- Creation of the effective mechanism on stimulation of development of a domestic production of software products, the computer equipment and their export.

Influence of the Concept on development of national economy, realization mechanisms, and sources of financing will be defined by the programs directed to realization of the separate directions of development of informatization of the country.

2. Current state of development of informatization.

The current state of development of informatization is characterized as follows:

1. The legislative base in the field of informatization is created, in particular new edition of the Law "About Informatization" is accepted, the normative legal acts directed to implementation of Laws in the sphere of ICT are developed and take root;
2. Has increased quantity of information networks, the level of a computerization of the country has increased and continuously the number of users of networks of telecommunications, data transmission and the Internet increases;
3. High rates develops infrastructure of telecommunications, the digital high-level network of telecommunications with bringing digital channels to the regional centers and a number of the regional centers is created, installation of telephones to the country is successfully carried out and promptly the market of means of mobile communication, and also data transmission grows.

Along with it, the state and rates of informatization in the country demand acceptance of the following additional measures for the accelerated informatization development:

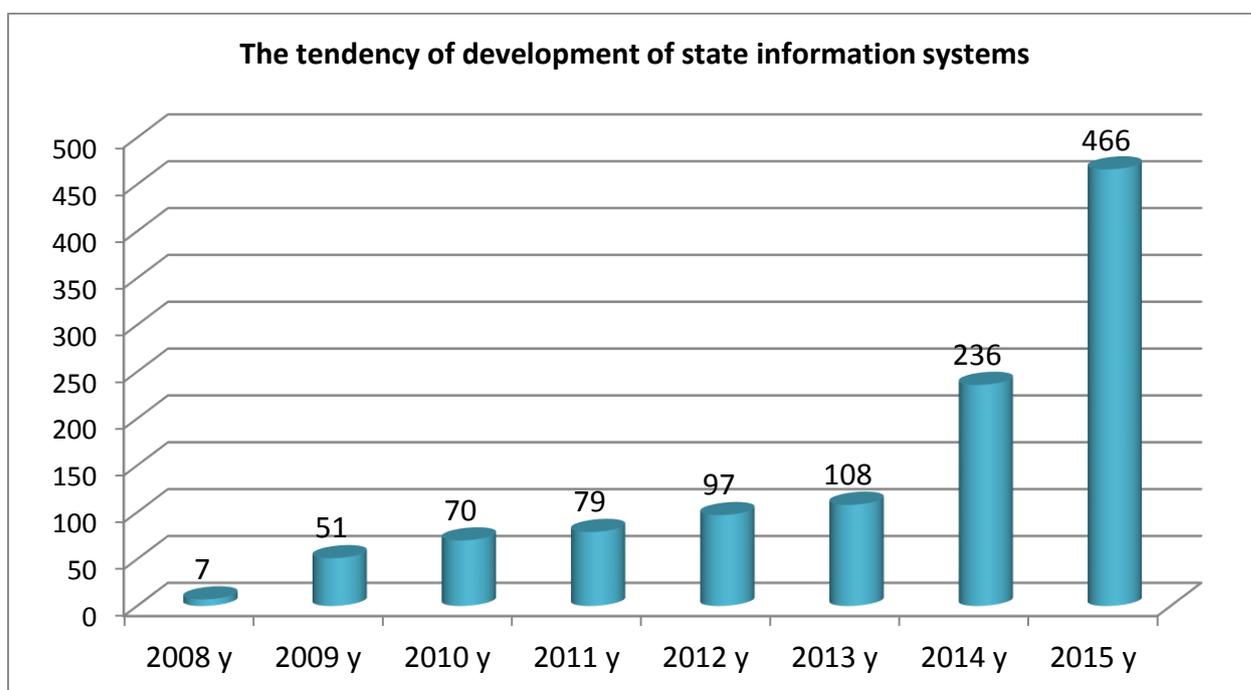
1. Development and realization of mechanisms of creation and development of the state information systems and resources, acceleration in this direction of rates of works, the carried-out government bodies of management and the power;
2. Acceptance of radical measures for creation of conditions for effective support and stimulation of development in the country of the market of information services and the industry of software products and information technologies;
3. Further improvement of the legislation in the sphere of ICT;
4. Training of highly qualified specialists in the field of ICT;
5. Reduction of a gap between the capital and regions of the country, especially rural, on the level of distribution and penetration of information technologies;
6. Increase of level of equipment the computer equipment and ensuring access to the Internet in average special and general education educational institutions, in particular in regions of the country;
7. Development and realization of mechanisms of ensuring information security.

3. Main directions of implementation of the Concept

According to the Law of the Republic of Uzbekistan "About informatization", the state policy in the field of informatization is directed to creation of national information system taking into account current world trends of development and improvement of information resources, information technologies and information systems (Picture 2.6).

The main directions of implementation of the Concept are:

- Creation of a common information space on the basis of formation and development of the state information resources and services, providing effective information exchange of the state, business, citizens, their access to domestic and world information resources;



Picture-2.6. The tendency of development of state information systems.

- Use in economy of the new technological ways which are based on mass use of ICT and leading to emergence of new forms of social and economic activity (electronic document flow, electronic commerce, remote education, a telemedicine, etc.);
- Development of national information and communication infrastructure and its basis – networks, systems of telecommunications;

- Creation and development of the market of information and knowledge, formation of the domestic industry of production of competitive program production;
- Improvement of legislative, standard, and legal base of ensuring realization of processes of informatization;
- Increase of level of professional development due to improvement of an education system and expansion of opportunities of systems of information exchange at various levels, professional development and professionalism as most important characteristics of services of work;
- Ensuring information security.

3.1. Creation of a common information space and use in economy of new technological ways

Proceeding from the level of electronic readiness and national peculiarities, the ICT following application is submitted key for development of informatization of the country:

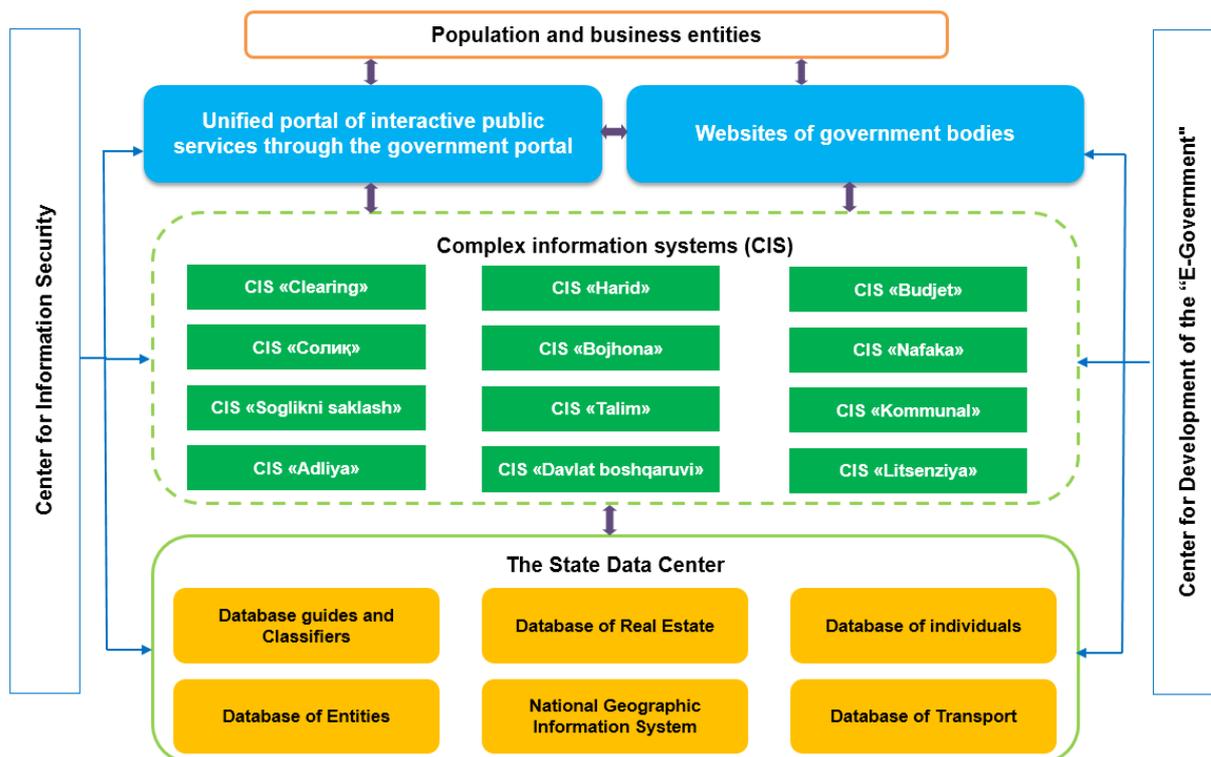
3.1.1. Electronic government.

Formation and use of information resources - one of key problems of creation of a common information space of the country.

In our country it is developed also adoption of law "About the electronic government", and it is created "The electronic government" which obligates the approval of standards and regulations on interdepartmental interaction and data exchange, formation of databases on various directions, creation new and integration of the existing complexes of information systems in the sphere of government procurement, the taxation, customs registration, health care, education and many others is (Picture 2.7).

For realization of this direction the main objectives are:

- The improvement of standard and legal base and realization of mechanisms of creation and development of the state information systems and resources including:
 - Standards, norms and rules of documenting of information, formation of information resources and creation of information systems;



Picture -2.7 Architecture system of the “Electronic Government”

- Property right to information resources and information systems;
- Categories of information resources on the level of access to them;
- Order of protection of information resources and information systems;
- Order of gateway connections of information systems;
- Creation of modern, reliable and safe national information databases, with ensuring different levels of accesses to her various categories of users;
- Creation of departmental and interdepartmental databases, and departmental and interdepartmental electronic document management systems;
- Development and realization of mechanisms of interaction of owners of information resources with users and creation of necessary conditions for satisfaction of needs for information resources of state authorities and state power.

Realization of these tasks will promote:

- To increase of efficiency of activity of government bodies due to wide use of ICT;

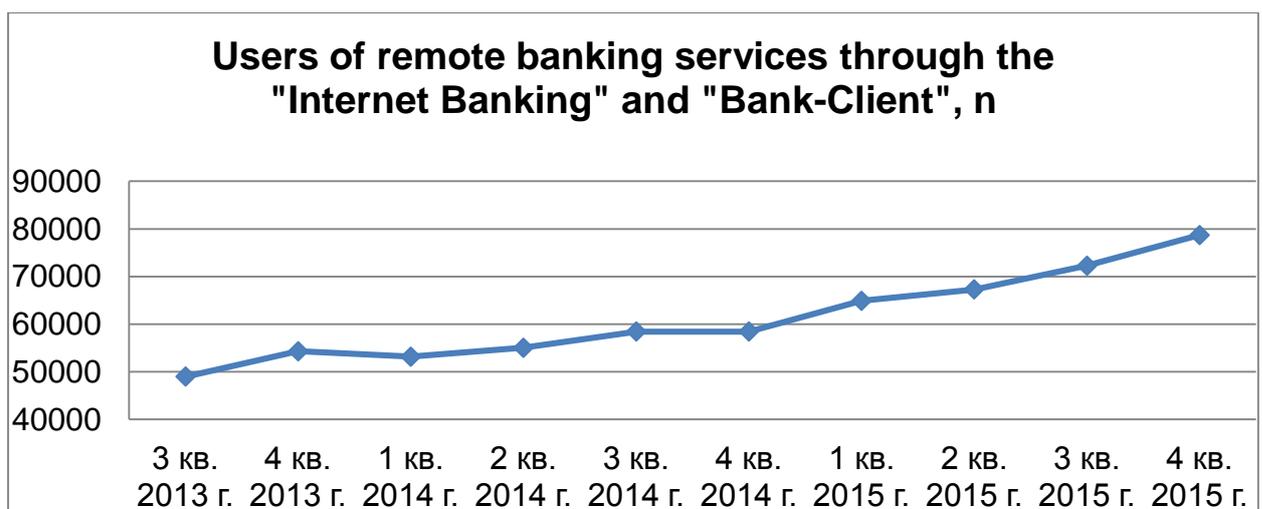
- To creation of effective system of information exchange between the state organizations, and also between the state organizations, citizens and economic entities;
- Realization right of citizens for access to information resources;
- To ensuring transparency of activity of government authorities and democratic processes.

3.1.2. Electronic commerce

The main objectives of this direction are:

- Improvement of standard and legal base on regulation of legal relations in the field of electronic commerce;
- Stimulation and ensuring the state support to development of electronic commerce in the country;
- Creation of infrastructure of use of a digital signature, and development of electronic document flow;
- Ensuring broad promoting of advantages of electronic commerce;
- Assistance of an application creation of electronic commerce.

Realization of these tasks will promote increase of efficiency of commercial activity, industrial and agricultural production, creation of conditions for development and growth of information sector of national economy.



Picture – 2.8 Users remote bank service through "Internet banking" and "Bank client".



Picture – 2.9 The number of the cash cards released online, piece

3.1.3. Electronic education

The main objectives of this direction are:

- Introduction and use of the computer equipment and information technologies in educational processes;
- Ensuring access of educational institutions to the Internet;
- Formation of educational information resources, including electronic libraries, electronic methodical grants and textbooks;
- Introduction of system of distance learning.

Realization of these tasks will promote improvement of quality of process of education in general education, average professional and higher educational institutions.

3.1.4. Electronic health care

The main objectives of this direction are:

- Creation of information systems in the field of health care and assistance to continuous vocational training and researches in the field of medicine by means of ICT;
- Assistance to creation of medical information resources and to ensuring broad access to local and world medical information resources;
- Formation of information systems on prevention, monitoring and control of distribution of infectious diseases;

- Encouragement of application of ICT for improvement of quality of service of the population in public health establishments, in particular in regional medical institutions;

- Introduction of system of a telemedicine.

Realization of these tasks will promote increase of overall performance of healthcare institutions, formation of medical information resources and services, to development of medical information systems.

3.2. Development of national information and communication infrastructure

The main objectives of this direction are:

- Modernization and reconstruction of data transmission networks;

- Further construction of fiber-optical and radio relay communication lines, use of means of a radio access and other modern technologies;

- Introduction of modern ICT, in particular, automated control systems for the international and long-distance networks of telecommunications;

- Expansion of Internet access in regions of the republic.

Realization of these tasks will promote formation of hi-tech technical infrastructure for development of processes of informatization.

3.3. Creation and development of the market of information and knowledge, formation of the domestic industry of production of competitive program production

Important condition of development of the market of information services and the industries of production of software products and information technologies is formation of a most favored nation treatment nationally.

The main objectives of this direction are:

- Granting the state privileges and preferences;

- Creation of a condition for attraction of investments;

- Creation of a favorable legal regime for development of information services and production of software products, information technologies, including by creation of free scientific and technical zones (science and technology parks);

- Rendering assistance to export of software and information products;

- Formation of a national information resource on the Internet;
- Informatization of public establishments, such as libraries, archives, museums, meetings of cultural values, assistance to preservation of documentary records;
- Ensuring protection of the rights for intellectual property;
- Creation of points of public access through information networks to scientific knowledge and publications, information relating to public property.

Realization of these tasks will promote development of the market of information resources and services, ensuring access of citizens to information and knowledge, active participation of the population when forming national information system.

3.4. Improvement of legislative and standard and legal base

For legal support of relationship between subjects of process of informatization it is necessary to improve legislative and standard and legal base constantly.

The main objectives of this direction are:

- Protection of the rights of citizens during creation and use of personal information;
- Ensuring transparency of procedures of licensing and certification, elimination of unjustified obstacles to development of business in the sphere of ICT;
- Providing equal conditions of the competition and elimination of monopolism in the market of information and telecommunication services, products and technologies, creations favorable a condition for attraction of investments;
- Protection of intellectual property in the sphere of ICT;
- Development of the branch and state standards harmonized with requirements of the international and interstate standards;
- Creation of the regulatory base regulating characteristics and methods of check of functional parameters and technical and information compatibility of means of information technologies;
- Development of metrological ensuring certification of technical means of information technologies;
- Sharing of networks and transmission media of data in common interests for an exception of duplication and dispersion of resources;

- Ensuring information security and fight against computer crimes.

Realization of these tasks will promote improvement of legal support of development of informatization, compatibility of the state information systems, and integration into national information system.

3.5. Preparation and increase of professional level of shots in the field of ICT

Developments of informatization existence of necessary amount of highly skilled ICT of experts, and sufficient level of computer literacy of the population is decisive factor.

The main objectives of this direction are:

- Improvement and development of system of preparation and professional development of teachers and experts, carrying out scientific researches in the field of ICT; introduction of the international standards of training of qualified specialists; improvement of system of continuous self-education and training with use of ICT;

- Increase of level of computer literacy of the population;

- Development of the national capacity in the field of scientific, technical, and developmental works in the sphere of ICT.

Realization of these tasks will promote transition of processes of informatization to qualitatively new level and formation of the civilized markets both information resources and services, and labor market.

3.6. Ensuring information security

With development of ICT threat of a possibility of commission of illegal actions with use of the information technologies involving causing damage, harm or violation of the rights and legitimate interests of the state and the population grows.

In this connection, the solution of the following tasks is necessary:

- Improvement of standard and legal base in the field of information security;

- Creation of system of ensuring information security of the Republic of Uzbekistan in the sphere of information and computer technologies and an assessment of efficiency of the introduced means of protection in data transmission

networks, carrying out examination of projects on compliance to requirements of ensuring information security and development of recommendations about information security;

- Development of domestic means of cryptographic information security and introduction of systems means of information protection on data transmission networks and Internet access;
- Formation and introduction of culture of cyber safety;
- Ensuring protection and personal privacy.

Realization of these tasks will promote ensuring integrity of information resources, prevention of unauthorized actions for destruction, modification, distortion, copying, blocking of information and other forms of illegal intervention in information systems and networks.

4. A role of the state in informatization development

Successful development of informatization is provided with creation of effective and effective mechanisms of management and regulation by informatization development.

The main objectives of the state in this direction are:

- Implementation of national programs of development of informatization;
- Creation of legal conditions for informatization development, improvement of forms and methods of state regulation;
- Restriction of monopolism, creation of conditions for development of the competition and attraction of investments;
- Providing a guarantee of freedom of speech irrespective of the technological environment of distribution of information;
- Ensuring rights for access to information and information resources, and protection of personal information;
- Improvement and development of system of preparation and professional development of shots, scientific researches in the field of ICT;
- Rendering assistance to formation of the market of information services;

- Stimulation of development of production of software products and information technologies.

One of instruments of implementation of the concept of electronic public administration is the electronic document management system.

The electronic document management system represents the integrated system of the automated account and control of the movement of documents by means of information technologies, beginning from formation, processing, obtaining documents before their transfer to archive and destructions.

Introduction of an electronic document management system will allow to reduce time of processing of documents (search, copying, delivery, etc.), to increase reliability and convenience of storage, to optimize streams of distribution of information.

The present Concept defines the main directions of interaction of government bodies of the power and management on the basis of creation of electronic document management systems, the necessary organizational, economic and rule-making actions aimed at the development of an electronic document management system in public administration.

During creation of the electronic document management system (EDMS) in public administration, the following objectives are achieved:

- Increase of efficiency and efficiency of adoption of administrative decisions;
- Strengthening of control over processing, execution and storage of documents;
- Optimization of flows of information on paper and electronic media;
- Exception of cases of loss of documents;
- Creation of a common information space for input, processing, the analysis and storage of documents;
- Providing to officials of multipurpose access to the database of system of document flow.

The main objectives of creation of EDMS in public administration are:

- Coverage of all cycle of document flow of the organization – from a problem definition on creation of the document before his transfer to archive and ensuring storage of documents in any formats;
- Association of a separate flow of documents of territorially remote structures in uniform system;
- Flexible management of documents by means of rigid or free routing of documents;
- Differentiation of access for users to various documents depending on their competence, a post and powers.

Transition to information society gradually covers the countries with different political and legal traditions. Characteristic of application of EDMS in the developed countries of the world is rather high level of automation of processes of office-work and document flow caused by aspiration to transition to "paperless technology".

Application of EDMS in public administration, as a rule, worldwide is regulated by special regulations.

As a rule, such regulations are the laws "About Electronic Document Flow" and "About a Digital Signature".

With development of computer technologies, these laws change (for example, the amendments obliging government bodies are made to provide information in an electronic form) or new laws of the second generation are adopted. The last significantly expand the content of the right for information.

The laws "About Electronic Document Flow" and "About Electronic Documents and Electronic Document Flow" of Republic of Belarus and Ukraine respectively in which the main conditions of introduction of electronic document flow are reflected in government bodies are adopted.

Distinctive features of the western technology of office-work are:

- Mainly horizontal vector of the movement of documents in the organization (documents can get to the direct performer at once, passing the management);
- Absence in the organizations of the centralized control of work with documents;

- Document registration is made directly by performers; some types of documents are not registered at all;
- The specialized services, which are engaged in office-work, are not created.

From the technological point of view, the electronic document management system represents the integration system covering office-work and preparation of documents and, connecting them with external environment, an electronic exchange.

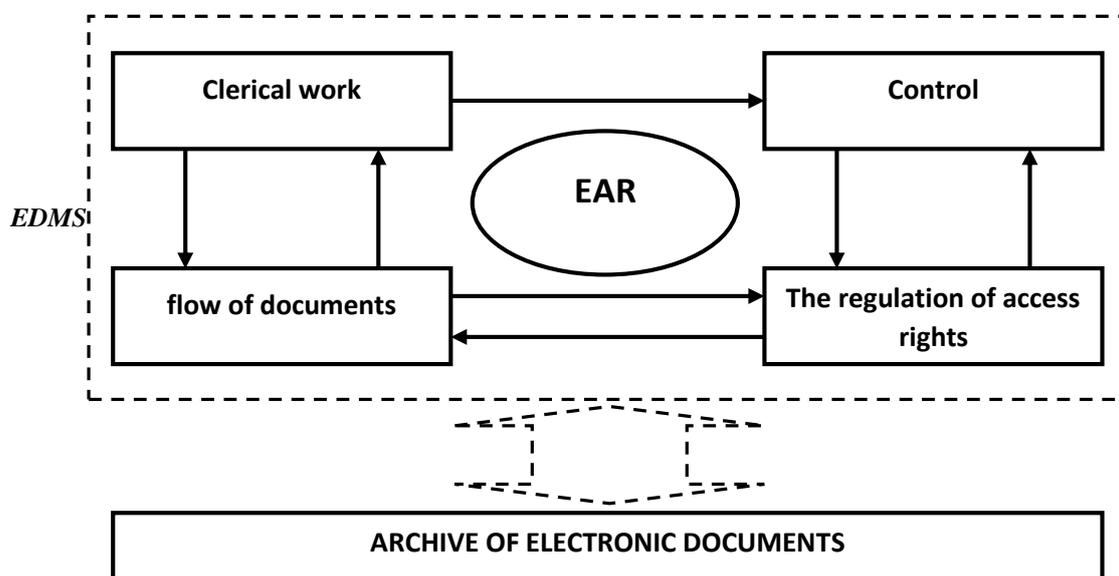
The architecture of EDMS includes subsystems: office-work, document flow, management of documents, and regulation of access rights and archive of electronic documents. As the central link of all these subsystems serve, the electronic administrative regulations (EAR) (Picture 2.10).

The subsystem of office-work provides conducting registration, the account, routing and control of execution of electronic documents according to the accepted rules and standards.

The subsystem of electronic document flow is intended for automation on the basis of ICT of processes of an exchange of electronic documents in and out of the organization.

The subsystem of management of documents ensures functioning with electronic documents (creation, change of contents or status, etc.) of one or group of users.

The subsystem of a regulation of access rights provides realization of mechanisms of differentiation of powers and control of access to documents.



Picture – 2.10. Architecture of EDMS

EAR defines rules and an operating procedure with electronic documents in EDMS of public administration (formats of the used electronic documents, mailing routes, an order of the account, storage, etc.).

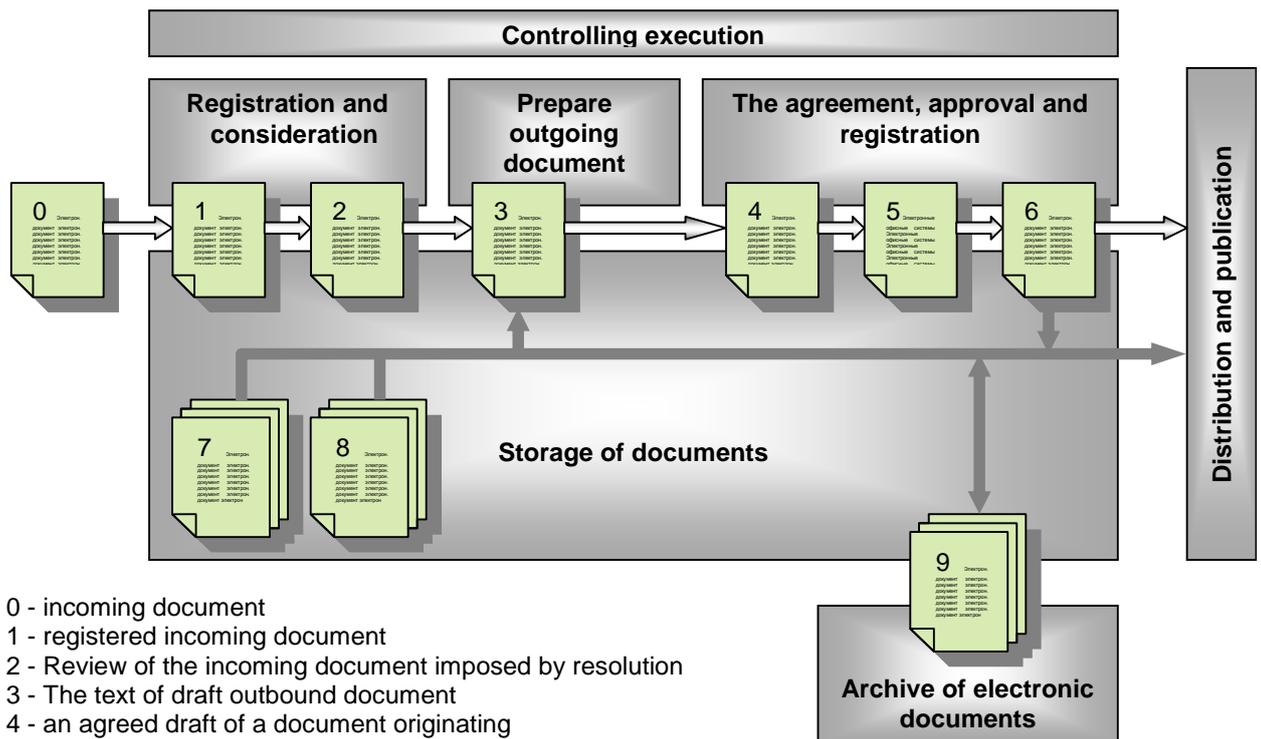
The archive of electronic documents provides storage of copies of electronic documents according to the accepted rules and standards of office-work.

In Picture 2.11 the scheme of work of EDMS on the example of the most extended operation cycle of documents in government bodies of the power and management is submitted. The most extended cycle is meant as a case when the incoming document generates preparation of the outgoing document including the analysis of archival documents and internal working materials (Picture 2.11).

According to Picture 2.11 the technology of electronic document flow is supported by the following functionality of subsystems of EDMS:

- Registration in the automated mode transmitted by e-mail or through the Internet portal of the incoming documents including supplied with the electronic digital signature (EDS) and crypto protection;
- An attachment to the registration card (RC) of an electronic image of the document in the form of the file (files) of any format;
- Differentiation of access rights to the attached files of an electronic image of the document;
- Granting to each official – to the participant of office work process – the private virtual office, than is reached access for the official only to the documents which are within his competence;
- Mailing of electronic documents and instructions on them on a network (on offices of officials);
- Ensuring process of coordination (vising) of draft documents;
- Full text and attributive search of electronic documents, including remote full text search;

- Sending by e-mail or the publication on information portal of authority of the electronic outgoing documents protected by the EDS and enciphering by means of the certified means of information protection;
- Formation and registration of affairs, i.e. group of the executed documents in affairs according to the nomenclature of affairs and systematization of documents in business;
- Archival storage of electronic documents, affairs.



- 0 - incoming document
- 1 - registered incoming document
- 2 - Review of the incoming document imposed by resolution
- 3 - The text of draft outbound document
- 4 - an agreed draft of a document originating
- 5 - approved project outbound document
- 6 - recorded outgoing documents
- 7 - working materials and templates
- 8 - regulatory and reference information and guidance
- 9 - archive authority documents

Picture – 2.11. Controlling execution

Realization of functionality of subsystems of EDMS in public administration demands existence:

- The software of EDMS and computer aids, adequate on productivity, - absolute equipment personal computers of all employees working with documents is obligatory;
- Local and inside - (between) departmental computer networks of adequate capacity;

- Technical capabilities of the translation of paper documentation in an electronic form of representation.

Treat the means and technologies providing realization of functionality of subsystems of EDMS:

- Means and technologies of translation of paper documentation in an electronic form of representation (scanners and the corresponding software application);
- Electronic analog of the autographic signature (EDS);
- Transmission media of data;
- Means of storage of electronic information;
- Means of information protection.

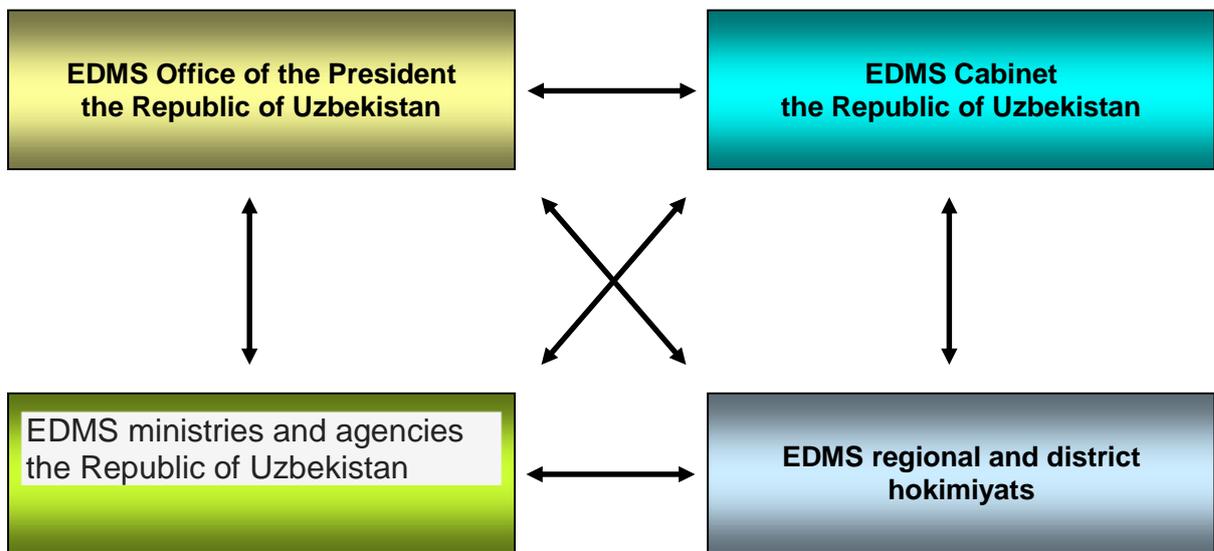
EDMS in public administration is multilevel system. Therefore, all system has to be under construction on the principles allowing carrying out information exchange both between information systems of the central bodies, and with information systems of regions (Picture 2.12).

Local, corporate computer networks and the integrated network of information systems of government authorities have to be a kernel of network infrastructure of interaction of EDMS of state authorities.

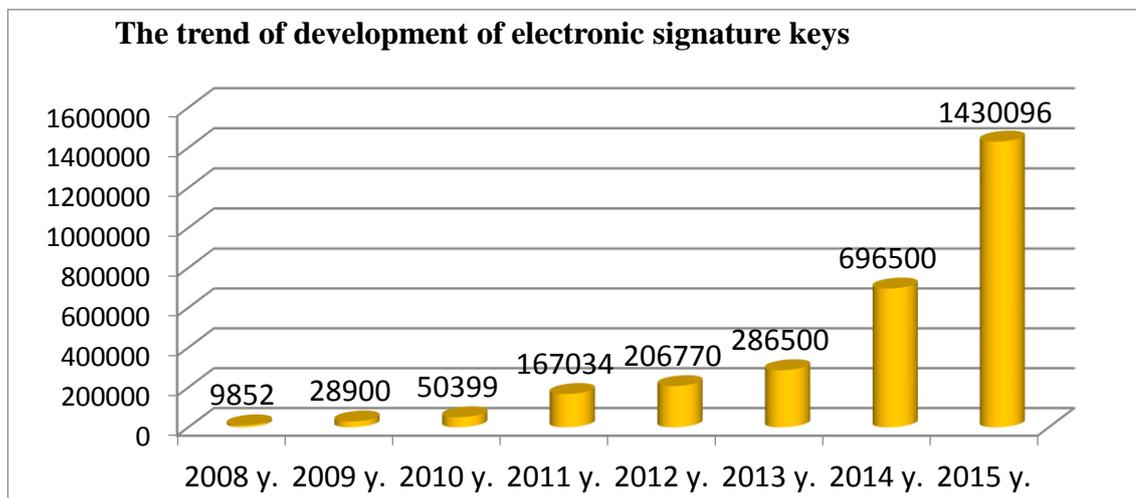
Ensuring confidentiality of exchange of information between EDMS of various state authorities has to be carried out by application of digital signatures that demands broad development of infrastructure of the Centers of registration of keys of electronic digital signatures (EDS) (Picture 2.13).

All organizational and technological decisions on creation and development of EDMS have to be based on the general architectural, technological principles and standards:

- Scalability - system can be originally put into operation on several workplaces, and further is extended to unlimited number of places;
- Flexibility - the system should not demand radical readjustment by structural reorganization of a state institution and change of processes of work with documents;



Picture - 2.12. EDMS in public administration



Picture – 2.13. The trend of development of electronic signature keys

- Openness - a possibility of rather simple addition to EDMS of new applications, allows to add new functions to EDMS or to improve already available, and to organize data exchange with other systems;
- Security - providing to users multilevel access to databases, application of means of crypto protection and the electronic and digital signature, ensuring integrity of data at information transfer through computer networks;
- Systemacity - system has to be focused on performance of all problems of electronic document flow: from preparation of documents, their registration and control of execution before issue of reports search of documents and their storage;

- Availability remote – as is aimed by EDMS in public administration at providing the movement of a flow of documents between various information systems (departmental and territorial electronic document management systems), she has to provide a possibility of remote access to documentary information through systems of telecommunications, and on the Internet;
- Unity of system - the created EDMS has to integrate, whenever possible, everything the systems of electronic office-work and document flow operating in public administration, i.e. it is necessary to unite separate technological sites of passing of documents to uniform system.

According to UNDP ICTP for March 2006, the ICT level of development in activity of state bodies is characterized by the following numerical values:

- Equipment of state bodies and the government on places the computer equipment – 60,3%;
- Creation of local computer networks in central offices of state bodies and the government on places – 81,1%;
- Creation of departmental computer networks in public administration – 29,5%;
- Share of paperless document flow on average:
 - a) Inside departments – 35,7%;
 - b) Interdepartmental turn – 16%.

Proceeding from these figures it is possible to draw a conclusion that despite rather high level of use of ICT in public administration in general, the level of introduction of information technologies in departmental systems of office-work and document flow remains low. At the same time, the systems introduced in public administration remain the prerogative of technological personnel of offices, secretariats connected with production, the account, movement, control and search of documents. Certainly, these services are important users, but they make only 5-10% of public servants. The majority of government bodies of management and public authorities on places have own local computer networks. Practically each department develops and supports own information systems.

Document flow streams with the following vectors are involved in public administration of Uzbekistan:

- Vertical (decrees, resolutions, orders, protocols, instructions, etc.);
- Horizontal (service records, reports, etc.);
- External (the entering and outgoing mail).

It is possible to distinguish from features of domestic document flow:

- An accurate vertical of promotion of documents in the organization (from higher instance - to local links, from heads - to performers);
- Strict tracking of all procedures during the work with documents in registers or in registration and control cards;
- Regulation of the main processes of office-work and document flow;
- Existence of specialized services of office-work.

Besides, the steady tendency of growth of volumes of information necessary for adoption of administrative decisions leads to the fact that it is necessary to receive process and store documents in bigger quantity, than earlier. Traditional methods of work with documents become at the same time ineffective.

The organization of collective work with the paper document requires his repeated copying or manual input, delivery in different structural divisions, carrying out special meetings, coordination that takes away considerable amount of time. For any organization, in particular to state bodies, optimization of document flow on the basis of creation and development of EDMS has key value.

According to the researches of the ITsR PROON Program conducted in 2004 the following modifications of EDMS are presented at the market of the Republic of Uzbekistan: DocFlow (NCI Project), Euphrates (BSF of "Pro-Technika"), NauDoc (Deter Technologies), LanDocs (Lanit), Documentum 5.0 (Documentum), Germes (BAIK Technologies) and others.

The majority of these systems provide functions:

- Processing, registration and storages of documents;
- Managements of streams of works (a document transfer between performers);
- Control of performing discipline;

- Search of documents in attributes and full text search;
- Works with the interconnected documents;
- Regulations of access rights;
- Write-offs of the documents "in business";
- Integration with external systems of e-mail and some other.

The EDMS separate elements are already applied in government institutions - in December 2005 to Gulistan the Syrdarya region implementation of the pilot project on introduction of "the electronic government" in the hokimiyat of the Syrdarya region has been begun. Main objectives of the project are increase of efficiency of functioning of mechanisms of interaction between society, business and the state, and strengthening of interdepartmental communications and technical equipment of divisions of government.

For increase of efficiency of realization of customs policy, the uniform automated information system (UAIS) of the State Customs Committee (SCC) of the Republic of Uzbekistan and the Ministry of external economic relations, investments and trade of the Republic of Uzbekistan is entered.

All this testifies to the beginning of practical application of electronic document management systems in segments of public administration.

Creation and development of EDMS in public administration include realization of actions in the following main interconnected directions:

- Updating and retrofitting by the modern computer equipment of state authorities and the government on places;
- Creation of local computer networks of state authorities and the government on places in divisions of regional and regional submission;
- Creation of corporate computer networks of state bodies and the government on places;
- Creation of the integrated network of information systems of state bodies and the government on places;

- Introduction of electronic document flow in state bodies and the government on places taking into account use of a digital signature and requirements of information security;
- Development of the industry of development domestic EDMS;
- Increase of computer literacy and qualification of public servants.

Use during creation and development of EDMS of the principles of scalability, a modularity and flexibility allows to recommend a phased transition for paperless document flow in public administration of Uzbekistan.

In this regard, the present Concept provides the following stages of creation and development of EDMS:

The I stage (2007) - development of uniform technology of electronic office-work and a form of document flow, development of structure of an electronic document management system in public administration, improvement of regulatory base on office-work and documentary providing in public administration.

The main objectives of this stage are:

- Creation of legal base of use of electronic documents in public administration, ensuring compatibility of standards of document flow, use of a digital signature in public administration;
- Definition of sequence of transition to electronic document flow in state bodies;
- Development and implementation of departmental programs of informatization, technical solutions on the organization of electronic document flow in public authorities.

The II stage (2008-2009) - expansion of departmental and interdepartmental information resources, ensuring integration of information systems of the ministries and departments and territorial divisions of government bodies.

The main actions of this stage are:

- Formation inside - and interdepartmental information resources and databases,
- Creation of local and corporate computer networks of state authorities of public state information resources;
- Creation of the integrated network of information systems of state authorities.

The III stage (2010) – complex introduction of an electronic document management system in public administration:

- Development of systems of departmental electronic document flow;
- Development and implementation of projects on ensuring interdepartmental electronic document flow.

In the Republic of Uzbekistan, it is headed for development of information and communication technologies and system of the electronic government. In recent years, the standard and legal base is actively improved, just for 2013-2015 more than 20 resolutions and decrees of the President of the Republic of Uzbekistan, more than 40 government decisions are accepted, and for the last year more than 15 normative legal acts regulating the sphere of information and communication technologies are adopted.

Uzbekistan became the first country among the CIS countries, the adopted separate Law "About the Electronic Government", and in other countries there are no special Laws on the electronic government, however single questions of rendering electronic state services are regulated by other laws, for example, in the Russian Federation the federal law "About the organization of providing the state and municipal services" (2010), and in the Republic of Kazakhstan – the Law "About the State Services" (2013) is adopted.

It should be noted that, separate laws on the electronic government in the world exist only at several countries, such as South Korea, USA, Germany, Austria, Finland and Bulgaria.

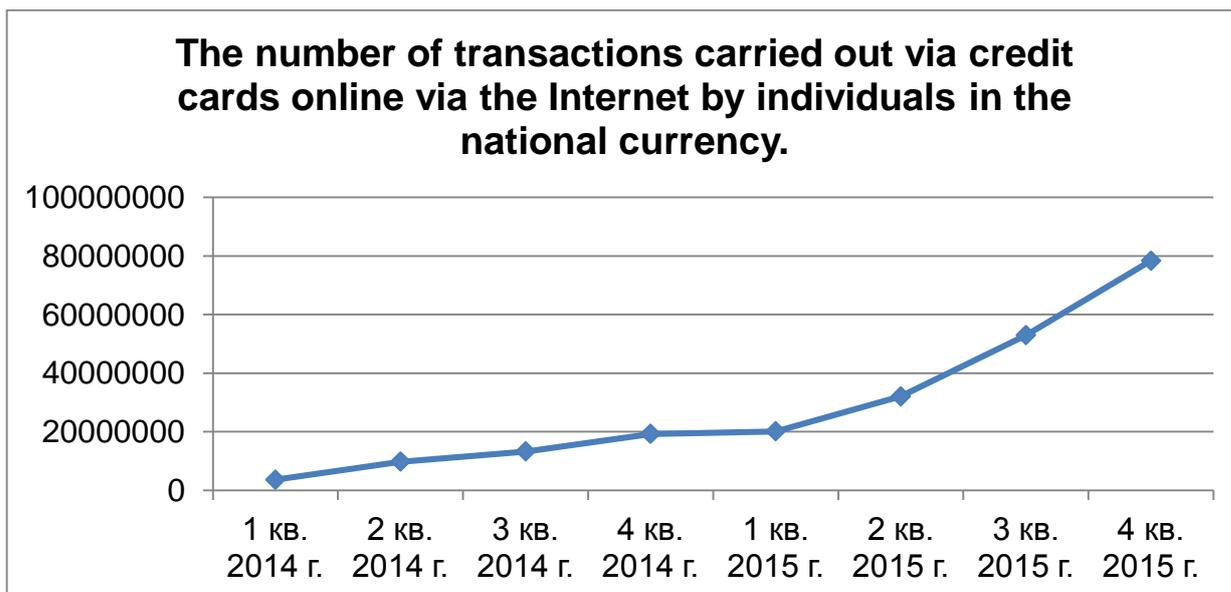
Within implementation of the Comprehensive program of development of National information and communication, system of the Republic of Uzbekistan adopted in 2013 for 2013-2020 in the field of the electronic government the following results are achieved (Picture 2.14):

- the complex of information systems “Solik” the transition to delivery of the tax reporting in electronic form, to create opportunities in granting more than 50 modern interactive services for taxpayers which has allowed to provide completely

is created (online payment of taxes, electronic tax declarations, delivery to the accounting of taxpayers and another);

- the complex of information “Bojkhona” systems for providing interactive services in customs registration of freights due to which full transition to electronic declaration of goods and registration of export-import contracts is provided that has allowed to accelerate customs registration of goods and rendering other accompanying services is put into operation;

- the created platform for implementation of the government electronic procurement of the “Harid” system following the results of 2015 has allowed to save more than 137,3 billion bags on electronic biddings, and the number of the suppliers of goods (works, services) registered in system has exceeded 38,5 thousand pieces.



Picture – 2.14. The number of transactions carried out via credit cards online via the Internet by individuals in the national currency

- The started clearing system of calculations of payment of retail payments in real time has provided systematic development of opportunities of online payment of taxes, obligatory and utility payments in the country, in particular the number of online transactions on the Internet in 2015 has increased by 2,3 times and has made

78,3 million, and the number of users twice, and has made more than 1,0 million people;

- Since January 1, 2014 all budgetary organizations of the Republic of Uzbekistan carry out the accounting and the reporting in a uniform complex of information systems “Budget” which has allowed to increase efficiency of target execution profitable and items of expenditure of budgets;

- The automated information system “Nafaka” by means of which automation of processes of appointment, calculation, recalculation, and also monthly charge of pensions and social benefits of more than 2,7 million to pensioners and 237 thousand is provided- the share of the subjects of business which are handing over the tax and statistical reporting, and also making out customs declarations in electronic form is brought to 100%;

- following the results of 2015 more than 69 thousand (height of 131,8%) trade names are reserved in an electronic look

It is started and successfully the Uniform portal of interactive state services (my.gov.uz) on which more than 260 modern services for the population and subjects of business are introduced, in particular functions:

- for business: electronic delivery of the tax and statistical reporting, registration of the foreign trade contracts, state registration of subjects of business, submission of applications for obtaining licenses and allowing documents and another;

- for the population: consideration of electronic addresses, issue of archival references, submission of applications for receiving social benefits, on reception of children in preschool educational institutions and another.

At the expense of what the total of the rendered interactive services in 2015 has increased by 4 times and has made more than 400 thousand, and the main part of users of services of the Uniform portal is made by subjects of business (57%).

One of key instruments of ensuring transparency of activity of government bodies, strengthening of a role of institutes of civil society in democratic updating and modernization of the country are started in 2015:

- electronic system of an assessment of influence of acts of the legislation by means of which there have passed active public discussion more than 340 drafts of normative legal acts;

Portal of open data of the Republic of Uzbekistan which more than 200 thousand times being the important information resource reflecting results of the social and economic and social and political reforms which are carried out in the country have already used.

The effective system of bodies of judicial authority in many respects is defined by a condition of introduction of modern ICT, the information system of electronic legal proceedings which was so started in 2013 has allowed to reduce significantly quantity of steps on processing of the documents coming to courts more, than twice with 56 to 25, and the number of the statements of claim and petitions submitted in electronic form from businessmen in economic courts in 2015 has exceeded 55 thousand documents.

Within implementation of the program for development of information and communication technologies in real sector of economy implementation of 53 priority projects on introduction of information systems and software products in joint stock companies, associations and the large industrial enterprises of the country for the total amount more than 28,0 billion sum is so far complete.

Systematically possibilities of online payment of taxes, obligatory and utility payments develop, in particular the number of users remote bank service through Internet banking and mobile - banking in 2015 has increased twice. The monthly volume of online transactions averages 1,8 trillion sum.

The quantity of active domain names in the zone ".UZ" has made more than 25,2 thousand pieces. The monthly audience of users of domestic websites on the Internet averages 32,2 million people, from them more than 44% are users via mobile devices.

More than 109 thousand educational information resources are developed for users of the ZiyONET network, including from pupils, teachers and scientists more than 21,2 thousand personal educational websites are created.

In government authorities paperless document flow systematically develops, more than 140 thousand documents are directed through system of the interdepartmental protected document flow of E-XAT for 2015. The share of electronic document flow in the total amount of the outgoing mail has made 87,1% (growth twice).

The quantity of the state information resources has reached 320 units, and information systems of government bodies of 466 pieces.

Implementation of the Concept of development of informatization in the Republic of Uzbekistan will allow:

- As much as possible to use the intellectual and personnel potential of the country;
- To provide harmonious integration into world information community;
- To develop bases of civil society and democratic tendencies;
- To overcome a digital (information) inequality;
- To provide the economic growth and improvement of quality of life of the population.

EDMS is an effective infrastructure for expeditious adoption of administrative decisions and control of their execution. Creation of EDMS allows:

- To formalize technological processes of formation, coordination and processing of documents, relevance and reliability of schemes of their mailing;
- To reach high degree of independence of work on documents of personal qualities of personnel due to automatic execution of the majority of formal actions;
- To improve control devices over the course of performance of processes of formation and processing of documents, regulation and management of document flow of system;
- To raise degree of security of the data involved in document flow, ensuring their confidentiality due to use of the certified systems of a digital signature and enciphering;
- To receive the statistical and analytical reports characterizing various aspects of activity of performers and results of performance of work on processing of documents;

- To reduce probability of loss of the document or access to him for the persons who do not have the right to it.

Introduction of EDMS in public administration will make impact on all spheres of economy and public life. At the same time, both tactical, and strategic benefits are expected.

Tactical benefits are expressed in reduction of expenses for the account:

- Releases of the physical place for storage of documents;
- Reduction of costs of copying and delivery of documents in paper form;
- Decrease in expenses on personnel and equipment, etc.

Strategic benefits are connected with increase of efficiency of works of public institutions for the account:

- Creations of opportunities for collective work on documents (that is impossible at paper office-work);
- Accelerations of procedure of search and selection of documents (on various attributes);
- Increases of safety of information;
- Increases of safety of documents and convenience of their storage.

Thus, introduction of electronic technologies in office-work of public administration will promote optimization of functioning of public administration and increase of efficiency of his work due to reduction of term of decision-making, increase of their quality at the expense of the complex analysis of data and modeling of situations, to reduction of number of papers, improvement of the monitoring system of execution.

Conclusion according to the second chapter

Forming newly made means for increase in productivity of work, the state thereby organizes healthy business climate and advantage over the foreign companies gives the chance to the local organizations. Firms everywhere will apply electronic commerce in transactions among themselves to reduce expenses and to improve management of the physical resources.

In conclusion, of the second to the head allow to stop on the perspective directions of development of branch of ICT in the following blocks:

1. In the field of development of the market of software products:

- Stimulation of development of production of the domestic software.
- Creation of modern information systems for automation of production and administrative processes, especially for small business.

2. In the field of development of telecommunication infrastructure:

- Expansion of a network of broadband access.
- Creation of modern data-centers for processing of "big data".
- Development of a network of mobile communication in technology 4G LTE.

3. In the field of the electronic government:

- Development of solutions of informatization of government bodies.
- Improvement of activity of the created centers "one window".
- Creation of conditions for effective use of open data.

4. In the field of national content:

- Saturation of information space of a national segment of the Internet the information resources based on knowledge of rich history of Uzbekistan, national traditions and cultural wealth of the people.
- Creation of the modern domestic web resources providing satisfaction of information and intellectual requirements of the population.

The interrelation with government bodies on the Internet even more increases competitiveness of the private organizations and gives them an opportunity to simplify different official procedures, to reduce quantity of office red tape. It will

become easier for organizations to observe laws, and they will be able promptly to succeed in the activity. All this is learned thanks to submission of documents in electronic form, and thanks to probability to pay taxes or to give statistical account on the Internet.

3. WAYS OF IMPROVEMENT OF RENDERING THE STATE INTERACTIVE SERVICES ON THE BASIS OF ICT

3.1. Introductions of systems of interactive services – as a factor of development of the state services

Information and communication technologies within the last decades act as one of key drivers of social and economic progress. Their development and a wide circulation promote transformation of shape of many sectors of economy; to improvement of quality of life; efficiency of business and public administration; to emergence of new forms of education, communication and socialization of people; to ensuring access to different types of information. In turn, the ICT loudspeaker itself essentially depends on the global challenges and trends of wider character defining long-term priorities of science and technologies.

Priorities for various segments were determined by such criteria as compliance to global trends, existence of competitive advantages and scientific and technological reserves, potential of an entry into the developed markets and creations of new market niches that, in turn, has allowed estimating prospects of scientific and technological development of domestic sector of ICT.

Results of the forecast have passed validation within a series of expert discussions of high level with participation of representatives of leading companies, scientific centers, universities and international organizations. On their basis offers on "packages of technologies" as answers to the revealed calls and problems have been developed; the road maps visualizing interrelations of the most important aspects of long-term development of sector of ICT, his key directions, and also the factors interfering increase of competitiveness of national producers are created.

The perspective image of the sphere of ICT will define, first, transition to the economy based on knowledge. This process has begun with penetration of the considered technologies into production of goods and today gains steam in process of saturation of a services sector by them (finance, insurance, trade, transport infrastructure, etc.), however its effects in full force will be shown only in the future. ICT make a serious contribution and to the solution of global problems, such as:

- Exhaustion of cheap natural resources;
- Aging of the population;
- Deterioration in a state of environment;
- Loss of effective control over technological chains;

- Replacement of national producers from domestic markets;
- Mobility of shots;
- Migration of the financial capitals;
- Instability of global economic and political system;
- The growing imbalance between safety requirements and a personal liberty of the person;
- Growth of cybercrime, increase in scale of its effects, etc.

Development of the markets of ICT combines an evolutionary trajectory (improvement of the existing products (services), extensive growth of the developed segments due to sharp reduction of price of the last) with the exponential model of penetration of innovations promoting distribution of the latest versions ICT and emergence on this base of the new markets. All this increases investment appeal of branch, but presence in the world market of ICT of a large number of the "destroying" innovations causes volatility of financial results of the companies this and adjacent sectors. Therefore, in 2012 more than 40% of ICT firms entering FT-500 rating have worsened the positions. Become serious drivers of innovations small and medium business. Rapid development of the companies beginners making breakthrough products will be stimulated more actively with "network - centricity" and a growing demand for the built-in digital devices of different function.

According to the international forecasts, further increase of a contribution of sector of ICT to economic growth is expected: by 2020, his share in world GDP will reach 8.7%.

The most dynamic and large-scale segment is formed by telecommunications and the activity connected with use of computer devices and information technologies (development of the software, consultation, information processing, creation and use of databases and information resources, including the Internet, service of computer facilities, etc.). Respectively 1.7 and 0.6% of GDP are the share of them, and rates of a gain of a gross value added here (respectively 61 and 97% in real terms during 2012-2015) considerably advance average dynamics and branches (52%), and GDP in general (28%).

The sector of ICT is closely connected with production of content and mass communications, which are not only active consumers of his production, but also drivers of improvement of technical means and technologies. According to analytical center "GigaOm Pro", the world market of digital content by 2017 will grow to 46 bln. dollars against 32.7 bln. dollars in 2015.

The role of ICT can change depending on ability of new technological decisions to support growth of productivity of computer facilities. Convergence of ICT with other technologies, including nano, bio and cognitive, will promote operation preservation of "Moore's law" and growth of "network effects" ("Metcalfe's law").

Innovative technologies of social network interaction, in particular "The Internet of things" (Internet of Things) and "The Internet of all" (Internet of Everything) will continue to develop that will lead to reduction of life cycles of standards and the ICT technological platforms of systems and networks.

At the same time in new conditions, there is a number of the threats connected with problems of overcoming of "a digital inequality", equal entry into global information space, fast and large-scale development of new technologies in the social sphere and public administration, ensuring national security.

Within the conducted researches the main global trends have been identified,

The accelerating progress of technologies stimulates demand for "clever" production in the majority of branches of production of goods, and the market of devices, automation equipment and control systems in the long term will become "setetsentrichny" and integrated into branch.

Development of a cloud computing (high throughput computing, HTC), new architecture and the principles of the organization of high-performance calculations (high performance computing, HPC) transforms the software (S) and infrastructures of branch ICT of decisions, will make innovative changes in business strategy of the enterprises, having created in fact a new technosphere of economy.

Thanks to introduction of interactive state services on the basis of ICT there are innovative forms of socialization. In many segments of the world, market of work need for "binding" of employees to a concrete workplace disappears. In total with global deficiency of qualified personnel and aspiration to decrease in costs of maintenance of infrastructure of the enterprises the similar trend will lead to distribution of schemes of distant work and formation of new models of employment.

At all universality, ICT will render the maximum effect of a services sector, and the appearing possibility of accumulation and storage of quality services with their subsequent transfer and in an every spot on the globe will significantly change at any time shape of this direction.

Today the theoretical foundation of creation of metamodels with high computing efficiency and the required accuracy is laid. Metamodels "are trained" on a set of prototypes of the entrance and output data, and therefore are closely connected

with tools of extraction of information (data mining) — detection of the hidden regularities or interrelations between variables in big arrays of the raw data.

Use in creation of metamodels a lot of disciplinary optimization will allow to accelerate significantly further calculations, having reduced the number of expensive natural or computing experiments.

Development of services of interactive services on the basis of ICT - predictive modeling of the social and economic phenomena. The predictive analytics (predictive analysis, PA) represents set of technologies, methods and algorithms for drawing up the expected models allowing to project in the future saved up (including historical) the data, properties which have proved in the past and tending to preservation in the future. Dynamics of her market relies on the known technologies of data collection — a clustering, trees of decisions, regression modeling, neural networks, the deep analysis of texts (text mining) and check of hypotheses. Due to the need of processing of huge arrays of unstructured information methods of the semantic analysis of texts and technology of work with "big data" are created, as a result predictive modeling actively extends.

In medium-term prospect, (2017-2020) emergence of actual economic-mathematical models for innovative business is expected. Leading companies (SAS, SPSS (IBM), KXEN, Oracle and TIBCO) operate with the perspective mathematical methods (for example, the statistical theory of training applied to large volumes of basic data) allowing to create steady expected models taking into account a set of variables. On this basis, develop ICT - the services of predictive modeling of the social and economic phenomena capable to increase efficiency of interactive services in state managements (in particular, services for structuring news streams on social networks and professional web communities).

In the next years efficiency of metamodels in production when calculating reliability of the equipment (an assessment of a time between failures) when logistics of deliveries of accessories, working conditions of suppliers and other external circumstances change will increase.

In more remote prospect (2020-2025) program complexes for the solution of problems of design, designing, modeling and engineering of difficult technological objects and systems, easy-to-work and not demanding high qualification of users will appear.

3.2 A method of determination of efficiency of rendering the state interactive services on the basis of ICT

The real technique of determination of efficiency of rendering the state interactive services on the basis of ICT is intended for determination of set of procedures for an assessment of a condition of introduction of information and communication technologies (further - ICT) in state bodies, the government on places (further - the organizations) for optimization of business processes, increase of transparency and openness of activity of the organizations.

The technique is directed to definition of a condition of introduction of ICT, and completeness of coverage of primary activity of the organization by actions for automation.

The assessment of a condition of introduction of ICT in the organizations is carried out in the expert way on the basis of information obtained in the course of studying according to the corresponding questionnaire to "A technique of determination of efficiency of rendering the state interactive services on the basis of ICT".

The organizations entering the list approved by the Republican commission on coordination of implementation of the Comprehensive program of development of National information and communication system of the Republic of Uzbekistan for 2013-2020 are subject to an assessment of a condition of introduction of ICT.

The assessment of determination of efficiency of rendering the state interactive services on the basis of ICT is carried out by the following methods:

- The expert assessment - is formed on the basis of the questionnaires (not less than three experts) completed with experts by results of expert monitoring of the official sites, information systems, and also information security of the organization;
- The assessment on the basis of the submitted data - is formed on the basis of the data obtained in the automated way and this provided by the organizations in appropriate sections of the questionnaire.

The method of an expert assessment represents studying of implementation of plans of introduction of ICT in the organizations for part of maintenance of the websites in the Internet network online for identification of existence or lack of the chosen characteristics, existence and a condition of information systems, databases and the state information resources, a condition of the organization of measures for part of information security. Efficiency of an expert method according to the section "Official Website and Providing Interactive State Services" is caused by the maximum nearness to ways of search of the set categories of information ordinary users of the official sites of government authorities.

The assessment of determination of efficiency of rendering the state interactive services on the basis of ICT is made by total results of the reporting period.

Indicators according to which the corresponding percent is exposed are determined by each section. Each of sections has the corresponding percent, which are specified in the table

Technique of carrying out assessment of the section

"Official Website and Providing Interactive State Services"

№	Sections	Specific weight.
1	Official website and providing interactive state services (ISS)	50
2	Information systems, information resources and electronic document flow	26
3	Information security	20
4	Organizational part	4
Total		

For an assessment of the section "Official Website and Providing Interactive State Services" the method of "An expert assessment" is used. The assessment according to all sections is formed on the basis of results of expert monitoring of the official sites, excepting below-mentioned indicators:

- "Existence and availability of the official website in the Internet";
- "Existence of function of an assessment of telephone communication with the representative of institution according to uniform telephone number and a telephone hotline with reflection of results of estimates on the official website";
- Existence of the section of statistical information on telephone addresses of citizens by a telephone hotline (the number of the accepted and executed addresses);
- "Quality of rendering the interactive services rendered through UPISS";
- Quantity introduced to the ISS on UPISS;
- "Quality of rendering the interactive service "Consideration of Addresses of Citizens".

The main objective of a method of an expert assessment is definition of quantitative and qualitative characteristics of the current level of availability of information on activity of the organization.

This section includes the following indicators:

№	Indicators	Specific weight of indicator, %
1.1	Existence and availability of the official website in the Internet, and also existence on the official website of actual statistical and analytical information in a field of activity of the organization	5
1.1.1	Existence and availability of the official website in the Internet	1
1.1.2	Existence on the official website of actual statistical and analytical information in a field of activity of the organization	4
1.2	Compliance of the official website to requirements of the legislation	15
1.3	Existence of uniform telephone number concerning activity of the organizations, a telephone hotline with a possibility of the accounting of telephone addresses of citizens	5
1.3.1	Existence on the official website of uniform telephone number concerning activity of the organization (office)	0,1
1.3.2	Existence on the official website of a telephone hotline	0,1
1.3.3	Existence of function of an assessment of telephone communication with the representative of institution according to uniform telephone number and a telephone hotline with reflection of results of estimates on the official website	4
1.3.4	Existence of the section of statistical information on telephone addresses of citizens by a telephone hotline (the number of the accepted and executed addresses)	0,8
1.4	Quality of rendering interactive state services and consideration of appeals of the natural and legal entities arriving through the Uniform Portal of Interactive State Services (UPISS)	25
1.4.1	Quality of rendering th interactive state services provided through UPISS	8
1.4.2	Share introduced to the ISS on UPISS	2
1.4.3	Quality of rendering interactive state services	10
1.4.4	Quality of rendering the interactive service "Consideration of Addresses of Citizens"	5
Total		50

According to the Appendix No. 3 to the resolution of the Cabinet of December 31, 2013 information on the official website has to be submitted to No. 355 in a state language, and also the official website can have versions in other languages. According to this point the assessment of the official website is made on the basis of information provided on the website in a state language.

Indicator assessment "Existence and availability of the official website in the Internet.

The assessment on availability of the official website on the Internet will be made by two methods:

1. It is automated, by sending a package of requests for the websites of the organizations daily and obtaining answers to them;
2. Manually, by daily visits by experts of official websites for verification and availability of the corresponding information maintenance on them.

Calculation of an indicator 1.1.1. "Existence and availability of the official website in the Internet" will be made on the basis of the provided data on a formula:

$$K_{\partial c} = (K_a(\%) + \frac{Dn}{D} \times 100\%) / 2 \times Y$$

Where:

$K_{\partial c}$ - coefficient of availability of the website;

(%) - the data received by system;

Dn - the number of days of inaccessibility of the website received by experts;

D - Total of days for the reporting period;

Y - Specific weight of an indicator.

4.1.2. An assessment of indicators "Existence on the official website of actual statistical and analytical information in a field of activity of the organization", "Compliance of the official website to requirements of the legislation" and "Quality of rendering the interactive state services approved by legislative and other normative documents"

The order of work of calculations for indicators 1.1.2, 1.2, 1.3.1.k1.3.2,1.4.3 is given in the section.

On an indicator 1.1.2 existence of data on the main indicators, including social and economic development characterizing a condition of the branch including the field

of activity of the organization, and dynamics of her development, and also analytical reports and reviews of information character on activity of the organization, quarterly and annual reports, and also analytical data on a condition of branch, statistical information of the organization is estimated.

Increase of objectivity of research at the initial stage requires determination of Coefficient of need of an indicator (F1). His need is explained by existence of possible distinctions in structure and competence of different authorities.

Specially authorized body in the field of informatization approves the full list of compliance of the organizations to coefficient of need (F1) for all indicators.

The coefficient of need of an indicator can have two values:

- if the indicator for a certain organization participates in an assessment of the official site - F1 = "Yes";
- if the indicator for a certain organization doesn't participate in an assessment of the official site - F1 = "No".

In connection with specifics of indicators, the criteria connected with a possibility of their assessment have been defined.

Some indicators can be estimated not by all criteria but only on one or several of them. A being of information or service who are determined by the corresponding indicator causes this circumstance.

4.1.2.1. Evaluation criteria

Indicators for an assessment of the websites of the organizations are the property of the website of the organization, which is subject to an assessment within a technique.

Indicators happen two types: substantial and technological.

The substantial indicator is understood as the property of the website revealed by experts characterizing him information filling.

The technological indicator is understood as the property of the website revealed by experts characterizing technological, program and linguistic means of ensuring of use of the websites.

Compliance of site content to the list of indicators characterizes information availability of this website. At the same time, each indicator receives the integrated assessment of information openness.

The following criteria experts estimate indicators:

- Existence;

- Completeness;
- Relevance;
- Navigation availability;
- HTML availability;
- file availability.

A certain combination of these criteria allows giving a strict mathematical assessment to each indicator.

Criteria depending on their being are shared into two types: quantitative (existence and completeness) and qualitative (relevance, navigation availability, HTML availability and file availability).

"Existence" - the quantitative criterion characterizing the placement fact on the website of information or service corresponding to an indicator. In the analysis of an indicator by criterion "Existence", experts estimate Coefficient of existence of criterion (F2) which can have two values:

- In case information or service corresponding to an indicator of an assessment is present at the website - $F2 = 1$;
- In case information or service corresponding to an indicator of an assessment is absent on the website - $F2 = 0$.

Note:

Considering importance of some indicators the Coefficient of existence of criterion (F2) has the following values:

$F2 = 2$ for indicators (according to the Appendix No. 1):

1.2.3.6. Information on services (The list of the state and branch services rendered by the organization and his subordinated organizations).

1.2.4.7. Drafts of the acts of the legislation developed by the organization (Texts of drafts of the state laws, programs and concepts developed by the organization).

1.2.8.3. Access for persons with limited opportunities.

1.2.9.2. Existence of useful interactive services (A possibility of filling of the interactive forms and/or forms necessary for receiving the state and branch services, an Opportunity to load (to download) blank forms, receipts, documents containing all necessary bank details of the organization).

1.2.9.3. A possibility of implementation of feedback with users by means of the official website, and through UPISS (Existence of a forum, Poll).

1.2.10. Additional functions specific to certain organizations.

F2 = 3 for indicators:

1.2.3.6. Information on services (Regulations of rendering state and отраслевых услуг).

1.2.9.2. Existence of useful interactive services (Filling of online forms by means of mobile phones).

F2 = 4 for indicators:

1.2.9.3. A possibility of implementation of feedback with users by means of the official website, and through UPISS (Consideration of the NPA projects in the discussion mode).

F2 = -1 for indicators:

1.2.11. The requirements and information contradicting the legislation.

"Completeness" - the quantitative criterion characterizing sufficiency of volume of information posted on the website for formation of complete representation on the corresponding indicator.

At determination of completeness of volume and relevance of information, it is necessary to proceed from literal understanding of an indicator, based on:

- Requirements of the regulations regulating activities of authority for creation and/or obtaining information and defining contents of such information;
- Logical determination of conceptual value of an indicator.

In the analysis of an indicator by criterion "Completeness" experts, estimate Coefficient of completeness of information (F3) which can accept one or the other values depending on degree of completeness of information:

- High degree of completeness (80-100%) - F3 = 1 (all necessary structure of data is presented and all information is actual and stated in full);
- Low degree of completeness (5-80%) - F3 = 0 (scrappy information is provided).

"Relevance" - the qualitative criterion characterizing degree of frequency of updating of information on the official site and preservations of value of information at the time of her analysis by experts. This parameter depends on dynamics of change of characteristics of information in time. In the analysis of an indicator by criterion "Relevance" experts, estimate Coefficient of relevance of information (F4) which can accept one or the other values depending on degree of relevance of information:

- High degree of relevance - $F4 = 1$ (information posted on the official site is the latest version of such information; all changes of information at the time of an assessment, frequency of updating of information at least once a week are considered; NPA accepted by the organization are placed no later than in 2 days after official publication of NPA);

- Low degree of relevance - $F4 = 0$ (outdated data are posted on the official site; the changes which have happened earlier aren't considered, updating of information and placement of information isn't conducted according to the legislation).

"Navigation availability" - the qualitative criterion characterizing convenience of search posted on the official site of information corresponding to an indicator. In the analysis of an indicator by criterion "Navigation availability" experts estimate Coefficient of navigation availability ($F5$) which can accept one or the other values depending on degree of navigation availability of information posted on the official site:

- Low degree of navigation availability - $F5 = 0$ (information is available by consecutive click-through, starting with the homepage of the official site. The number of such transitions - more than 5. Or information isn't available by consecutive click-through, starting with the homepage of the official site, or is posted in the section which isn't corresponding to her contents).

"HTML availability" - the qualitative criterion characterizing the placement fact on the official site of information corresponding to an indicator in HTML format, which provides convenience of her search for users. In the analysis of an indicator by criterion "HTML availability" experts estimate Coefficient of HTML of availability ($F6$) which can accept one or the other values depending on placement or not placement on the official site of information in HTML format:

- Information is posted on the official site in HTML format - $F6 = 1$;

- Information is not posted on the official site in HTML format - $F6 = 0$.

"File availability" - the qualitative criterion characterizing the placement fact on the official site of the document corresponding to an indicator in the format providing his preservation on technical means of the user and allowing a possibility of search and copying of a fragment of the text in the document which provides further use of information for users.

In the analysis of an indicator by criterion, "File availability" experts estimate Coefficient of file availability ($F7$) which can accept one or the other values depending on placement or not placement on the official site of the document in a file format for downloading:

- The document is posted on the official site in a file format for downloading - $F7 = 1$;
- The document is not posted on the official site in a file format for downloading - $F7 = 0$.

4.1.2.2. Order of work of calculations

During performance of a preparatory and applied stage of works, values of all results of research of unique coefficients, necessary for preparation, have to be defined. Thus, before the final stage of an assessment values have to be defined:

- Coefficients of need of criterion (F1) on each indicator.
- Coefficients of existence of an indicator (F2) on each indicator.
- Coefficients of completeness of information (F3) by each criterion of completeness of each indicator for each website.
- Coefficients of relevance of information (F4) by each criterion of relevance of each indicator for each website.
- Coefficients of navigation availability (F5) by each criterion of navigation availability of each indicator to each website.
- Coefficients of HTML of availability (F6) by each criterion of HTML of availability of each indicator to each website.
- Coefficients of file availability (F7) by each criterion of file availability of each indicator to each website.

After definition of necessary indicators, experts start the analysis of maintenance of the corresponding websites of the organizations according to the developed indicators and criteria.

Three experts independently from each other analyze each official site, in case of a divergence of the appropriated points joint discussion with the subsequent exposure of a final assessment based on consensus is carried out. The assessment of each expert has to be reasoned. In case of a divergence of voices, the opinion, which the head of the group of experts holds, is defining.

4.1.4. An indicator assessment "Quality of rendering interactive state services and consideration of appeals of the natural and legal entities arriving through UPISS"

Calculation of an indicator 1.4.1. "Quality of rendering the interactive state services provided through UPISS".

For an assessment of quality of rendering to the ISS, provided through UPISS the following criteria are used:

1. Information maintenance of service - completeness and reliability of filling of the passport of interactive state service.

2. Time of rendering service (consideration of the address) - time according to regulations of rendering service (consideration of the address) during which service (address) has to be provided or is received reasonable refusal.

3. Satisfaction in receiving service (the answer to the address) - an assessment by the recipient of service (the sender of the address) of quality and completeness of providing service (answer).

a) Distribution of weight by criteria of an indicator "Quality of rendering the interactive state services provided through UPISS" (excepting services of information character and offline - service):

№	Criterion	Specific weight, %
1	Information maintenance of service	10
2	Time of rendering service (consideration of the address)	40
3	Satisfaction in receiving service (the answer to the address)	50

Calculation of criterion is made on a formula:

$$K_{ucy} = \frac{\sum_{i=1}^{13} I_i}{M} \times 100\%$$

Where:

K_{ucy} - criterion coefficient "Information maintenance of service" in a section of one service;

i - Serial number of the indicator;

I - the weight appropriated to the indicator;

M - maximum sum of weight of all indicators.

The criterion assessment "Information maintenance of service" is based on the following indicators having the corresponding weight:

№	Indicator	Weight
1	Description of service	3
2	Sphere of rendering service	1
3	Category of recipients of service	1
4	Organization	1
5	Contacts	1
6	The documents necessary for receiving service (about the decree of number of copies)	3
7	Legal ground of rendering service	1
8	Cost and procedure for payment of service	2
9	Terms of rendering service	2
10	Ways of receiving result	2
11	Result of rendering service	2
12	Causes of failure	3
13	Appeal order	3

Calculation of an assessment of criterion "Time of rendering service" is based on the following indicators:

1. The regulated time of rendering service;
2. Actual time of rendering service;
3. Time of excess of the regulated terms;
4. A stage or a condition of service (new, considered, considered)

The technique of carrying out an assessment has undressed Information systems, information resources and electronic document flow.

№	Indicators	Specific weight of an indicator, %
2.1.	Existence and condition of the information systems used (which are subject to use) within interdepartmental interaction, including subject to integration within the Electronic Government system	18
2.1.1	Existence and condition of the information systems (IS)	10
2.1.2	Functioning of an internal electronic document management system (EDMS)	5
2.1.3	Use of interdepartmental EDMS	3
2.2.	Existence and condition of the databases including interacting with IS of other government bodies	4
2.3.	Existence of the information resources entering the List of the state information resources (SIR)	4

According to the Provision on an order of creation of information systems of government authorities,

- Technical documentation of information systems of the organization is submitted for examination to working authority. Creation of information systems is carried out only after obtaining the positive expert opinion.
- Information systems of the organizations can be in four states - formed, acting, modernized, and is taken out of service;
- Information systems of the organizations are subject to the obligatory account and registration.

At an assessment of this indicator, the following aspects are considered:

1. Existence of the expert opinion of information system (excepting IS which are at a formation stage);
2. Existence of registration number IS;
3. Compliance of IS of the above-stated classification.

The information systems taken out of service are not considered when carrying out an assessment.

In case of lack of the expert opinion of information system, the organization gets "penal" points of 1 point from the specific weight of an indicator.

Organizational assessment

№	Indicator	Specific weight of an indicator, %
4.1.	Existence of the plans of measures on introduction and development of ICT in activity of the organization for the next years confirmed with financing sources	1
4.2.	Existence of the program of measures for the stage-by-stage transfer of the state services to an interactive form with the indication of schedules and dates of the translation	1
4.3.	Presence of the responsible person for introduction and development of ICT from among the management	1
4.4.	Existence of the specialized structural division responsible for introduction and development of ICT, or contract for outsourcing of the corresponding services	1

At an indicator assessment "Existence of the plans of measures on introduction and development of ICT in activity of the organization for the next years confirmed with financing sources" is considered existence approved as the internal order and coordinated with the State committee of communication, informatization and telecommunication technologies of the plans of measures for introduction and development of ICT. In case of lack at least of one of the specified obligatory requirements, the organization receives 0%.

At an indicator assessment "Existence of the program of measures for the stage-by-stage transfer of the state services to an interactive form with the indication of schedules and dates of the translation" is estimated existence of the program of measures for the stage-by-stage transfer of the state services to an interactive form approved by the internal order with the obligatory indication of schedules and dates of the translation. In case of lack at least of one of the specified obligatory requirements, the organization receives 0%.

At an indicator assessment, "Presence of the responsible person for introduction and development of ICT from among the management" is considered appointment of the responsible person for the introduction and development of ICT from among

the management supported with the internal order. In case of lack of the confirming order, the organization receives 0%.

At an indicator assessment, "Existence of the specialized structural division responsible for introduction and development of ICT, or the contract for outsourcing of the corresponding services" is considered existence of the specialized structural division responsible for introduction and development of ICT, or the contract for outsourcing of the corresponding services. In case of lack at least of one of the specified conditions, the organization receives 0%.

Total estimates according to sections are formed by summation of all coefficients of the corresponding indicators.

The total assessment of a condition of introduction of ICT in the organizations is formed by summation of total coefficients of four sections.

Management of economy and finance of the enterprise is impossible without well working marketing services. It is necessary to have the finger on the pulse of the market always.

Besides external information, it is necessary to have also data on a situation in the enterprise. It is for this purpose offered to raise the following questions, which will be a basis for management of expenses and prime cost:

1. How money for a production and operating cycle is spent?
2. What of divisions is most profitable?
3. At what type of production the greatest profitability, the smallest term of turnover?
4. How to construct a control system and payments by results?

These and many other issues are resolved by economical or financial divisions.

It is possible to offer the following sequence of steps when carrying out segmentation and positioning of services in Drawing.

The transition period to the market relations has long-term character. Therefore, the purposes of the organization of management of marketing of the enterprises have to have long-term character and be defined with expansion and deepening of the market relations. In this regard, it would be desirable to define some tasks for marketing strategy (fig.) and to define results, which will bring this strategy.

Fig. No. of the Purpose and function on the example of department of marketing

Отдел маркетинга

Цели:

Разработка стратегии производства и сбыта

Подготовка информации для руководства

Координация действия основных структур предприятия

Продвижение

Функции:

- Анализ информации и разработка прогноза рынка и продаж
- Определение ключевых потребителей, стратегии и сбытовой политики

- Анализ исторических данных о рынке
- Проведение исследований рынка
- Выработка рекомендаций на основе анализа
- Анализ работы дилеров (посредников)

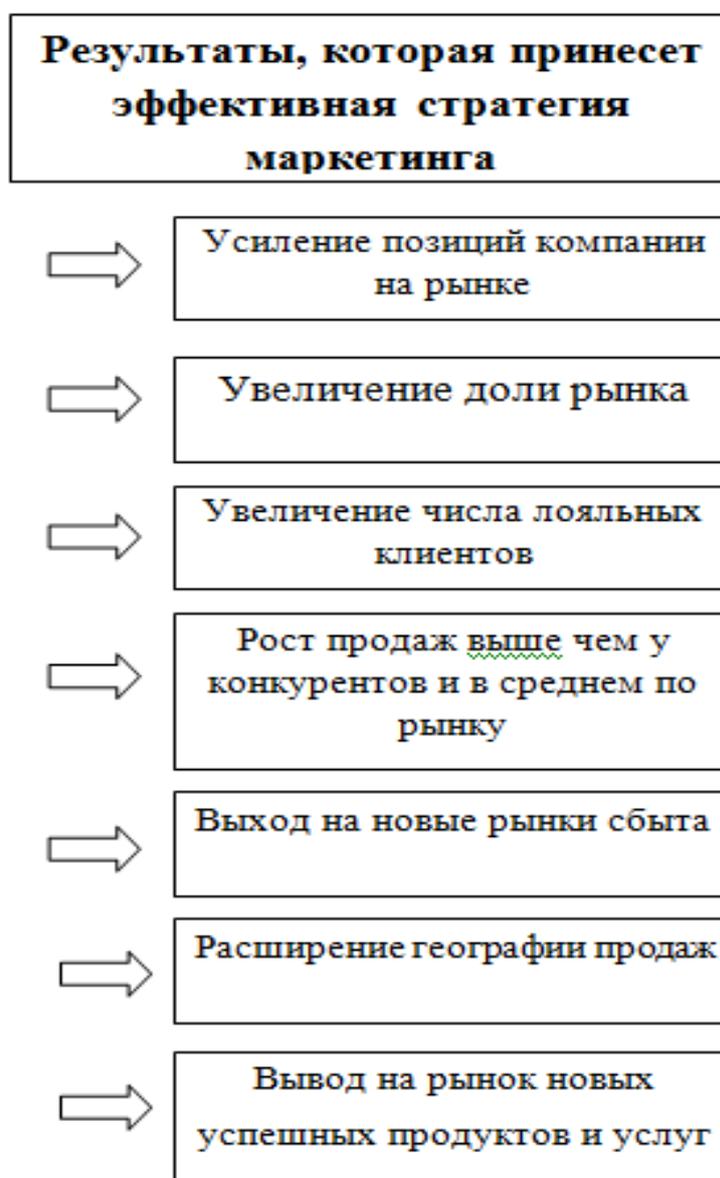
- Руководство внедрением рекомендаций по улучшению продукции и каналов сбыта
- Постоянное отслеживание процесса внедрения рекомендаций; корректировка связи с изменением рынка
- Расширение системы каналов сбыта (новые дилеры, или посредники)

- Регулярно обеспечивает рекомендации по продвижению товара на рынок
- Создает и ведет список потребителей
- Организует и участвует в выставках
- Организует рекламную деятельность
- Разрабатывает системы стимулирования покупателей



Transition to the aforesaid system as one of ways of increase of economic efficiency of introduction, predetermines need of creation of organizational structure of management on the basis of her effective activity. Has to one of the most important activities of service elaboration of the production strategy and tactics meeting requirements of the existing and perspective market of communication services and providing profitability and profitability of the enterprise is.

Results, on increase of efficiency of marketing strategy



Further the main development stages of marketing strategy of the company are presented



. Further we will consider a technique of increase of economic efficiency of introduction on an example of electronic document flow.

The data provided below and the analysis of return from investments into technologies of electronic control are provided by documents, generally in the context of introduction of technologies of electronic control by documents and can be applicable to the EUD corporate systems. It must be kept in mind that they can be absolutely inapplicable to other specific decisions in the field of electronic control by documents, it as narrow problems of electronic office-work.

From the economic point of view introduction of the EUD systems can give two types of return from investments:

- Return which is directly measured in terms of money (hard dollar),
- Indirect advantages (soft dollars).

Both types of advantages can be easily received for the account of installation of the centralized systems of storage of documents and images which provide:

- intuitively clear user interface;
- universal access by means of the Web browser (without the private, specific, closed clients);
- uniform storage of images, video, audio-information and all types of documents;
- a blocking/unblocking at capture/return of the document;
- control of data, the notice by e-mail;
- multilevel security system.

Introduction of the EUD corporate systems of the organization serious improvements in quality of work and level of communications reduce redundancy

in storage of the same data, increase of productivity there, growth in degree of satisfaction of customers and satisfaction of employees in the work.

When carrying out an assessment of reduction of a reply to the requests of customers, reductions of a cycle of production or providing service, the organization can measure result from introduction in a money equivalent. For example, one organization has reported that its introduction of Domino.Doc over the infrastructure which is available for them has provided easy access for employees to documents from any geographically remote division. It was the critical factor for teams of the employees who are engaged in development of products that has allowed them to reach the necessary indicators in the speed of release of products on the market. When releasing a new product for 6 months mean loss of 40% of profit for this organization of a delay.

General Motors didn't carry out the formal analysis of return of investments. However, by their estimates, they have saved about \$10 million on licenses and have received 4-fold economy from introduction of Domino.Doc in comparison with Documentum. Originally the Caterpillar company after a formal assessment has chosen Documentum for management of documents. They have begun introduction of Documentum, but at a stage of the pilot project calculated on 50 users have spent all budget which was initially selected for 20000 users. As a result, Caterpillar has returned to decisions from Lotus in the field of management of documents and records.

The organization can receive two types of advantages of introduction of corporate systems of electronic control by documents: tactical and strategic.

Tactical advantages are generally connected with reduction of expenses. It is rather easy to define and measure them. The advantages measured in a money equivalent can be counted on the basis of calculation of that how many it is possible to clean physical cases for storage of documents how many the areas to release how many to release servers which often store a set of copies of the same documents. Thus, the following types of advantages belong to tactical:

- physical release of space
- reduction of costs of copying
- reduction of costs of delivery of information in paper form
- reduction of costs of resources: people and equipment
- reduction of costs of paper
- increase of efficiency of work
- faster performance of work

- increase in total of the performed works
- improvement of work with data/records (the documents having legal obligations)

As initial figures which can be used when calculating the corresponding returns it is possible to use data of the GM Uzbekistan company:

- 30% of time of the working groups are spent on search and coordination of documents.
- 6% of documents are lost forever.
- Each internal document is copied to 20 times.
- when using electronic document flow labor productivity of personnel increases by 20-25%.
- The cost of archival storage of electronic documents is 80% lower in comparison with paper versions.

An impression about economic effect of introduction in the organization of corporate system of electronic control by documents at a stage of conceptual development can be gained on some probabilistic calculations. Certainly, more receiving more exact figures demands carrying out complex check of the enterprise and approbation of model of system of electronic control by documents on one of structural divisions.

In the table No. we give data of the enterprise "Sanoat-trans" as an example of indicators of an assessment of a control system dokumentoobroty before introduction of system.

The general time used on creation of the document in paper form is formed from search of attributes of the document, preparation of the document and time of transfer for executions. That is:

$$T_{gen} = T_{fkd} + T_{cd} + T_{rd} + T_{md}$$

Considering the cost of the spent resources it is possible to calculate the general expenses on creation of all documents on preparation of the same documents and the general time of their creation:

$$D_b = T_{gen} \times C_t + C_r \times N_{pd}$$

The assessment of economic effect at the enterprise is formed due to reduction of the general rakhod by creation of documents in paper a look after introduction of a control system of electronic document flow, that is:

$$\Theta = \sum D_{boom} - \sum D_{\text{эл}}$$

**Average values of indicators of an assessment of a control system of the
“Sanoat-trans” enterprise before introduction of system of electronic control
by document flow**

Name of indicators of group	Name of an indicator	Designation	Unit of measure	Unit of measure	Before introduction of SEUD	After introduction of SEUD Change value of indicators
1	2	3	4	5	6	7(5/6)
Volume indicators	Average number of copies in electronic form	N _{ed}	Шт.	18	3	6
	The average number of copies in paper option	N _{pd}	Шт.	5	2	2,5
	The average number of the created documents	N _d	Шт./день	22	17	1,29
Temporary indicators	Time of registration of one document	T _{rd}	мин	10	4	2,5
	Time allowed for a performance of a document	T _{md}	мин	15	4	3,5
	Time of the direction of the document from one structural division to another	T _{sd}	мин	10	1	10
	Search of the document in the known attributes	T _{fd}	мин	30	2	15
	Search of the document in	T _{fd}	мин	60	5	12

	unknown attributes					
	Time of preparation and coordination of standard documents	Тед	МИН	120	60	2
	Time spent on preparation of the standard report	Тса	МИН	120	20	6
Indicators of values	Value of working hour	Ст	Сум/час	25,5	29	0,9
	Value of resources	Ср	Сум/шт.	51	47	1,1

On the basis of the average statistical data on the enterprise provided in table 4.2.1. it is formed change of economic effect within a month in the following look:

$$\Theta = 159,4 \text{ c.u.} - 47,8 \text{ c.u.} = 111,6 \text{ c.u.}$$

To present possible economic effect, we will use the following hypothetical calculations on the basis of an assessment of work of the employee during the work with documents on traditional paper technology:

The "average" employee carries out in day of 10 operations on search of various documents:

- search of one document takes on average 2 minutes;
- in 10% of cases the employee doesn't find the necessary document.

In case the document hasn't been found at once 2 more minutes in addition are spent for his searches:

- if the document after all isn't found, the employee switches to other work.

Average annual salary of 3600 c.u. a year (300 c.u. a month)

Overhead costs of keeping of the employee (taxes and so forth) 100%. That is 7200 m of page equal.

It is dismissed economy below:

$$Eel = (10\text{th time/day} \times 2 \text{ min.} + 10\text{th time/day} \times 10\% \times 2 \text{ minutes}) \times 1 / (8 \text{ hours} \times 60 \text{ min.}) \times 7200 \text{ c.u.} = 330 \text{ m of page.}$$

So, introduction of an electronic control system of documents gives 330 m of page of economy a year counting on one employee.

If in the organization 100 employees work, then the economy will make 33000 c.u. a year.

Thus, due to providing such opportunity as availability of technology to all employees and search of documents on the scale of the enterprise economic effect makes 330 c.u. a year counting on one employee at his average salary of 3600 c.u. a year.

At the cost of workplace about 140 c.u. when calculating on 100 employees (1 server and 100 licenses of access) we obtain twofold payback of licenses for technology within one year. It should be noted that we used everywhere rather conservative estimates including on a salary.

Simple calculations show that when using by the employees who are available in an electronic document management system of mechanisms of separate editing, control of versions and process of coordination and the approval of documents about 40% of time of employees are saved.

It is obvious that the corporate system of electronic control by document flow is, in effect, a control system of time of people, resources, etc. Therefore, all got advantages directly can be transformed to increase in turnover, reduction of cost, efficiency increase, etc.

- Improvement of moral atmosphere and degree of satisfaction of employees with the work;

- Wider set of the offered products and the provided services.

By means of a way of the creation of control systems of electronic document flow offered by us organizatsiimonut to receive results:

- Reduction of cost by engineering development of products at least for 10%

- Reduction of time of a cycle of development at least for 20%

- Reduction of time spent for realization of changes in a product or service at least for 30%

- Reduction of changes in products/services by 40%.

Increase of effective management of the enterprise due to introduction a control system of electronic document flow

Group	Преимущества
Strategic	Improvement in access to information
	Improvements in quality of fast service of customers
	Improvement in controllability of processes
	Improvement in results of audit inspections
Strategic	Improvement in process of guarantee maintenance
	Improvement of quality of products and services
	Increase in financial turns
Corporate	Faster and high-quality decision-making
	Ensuring compliance to the existing rules and laws
	Faster conclusion to the market of new products and services
	Improvement of moral atmosphere and degree of satisfaction of employees with the work
	Wider set of the offered products and the provided services
Organizational	Strengthening of extent of control from the management
	Reduction of processing of documents
	Improvement of document flow at the enterprise
	Improvement of transfer and storage of information
	Increase of safety of use of information
Economic	Economy of resources due to reduction of processing of information
	Reduction of costs of archival storage of documents
	Increase of efficiency of work

In the table No. the information on cumulative effect of introduction of a control system on the basis of the indicators given in the table No. which shows on how many percent is supplied efficiency of certain parameters has increased.

It is obvious that the corporate system of electronic control by document flow is, in effect, a control system of time of people, resources, etc. Therefore, all got advantages directly can be transformed to increase in turnover, reduction of cost, efficiency increase, etc.

Conclusion according to the third chapter

Information work of the bodies providing interactive state services have to be to accent attention on ensuring completeness, timeliness and reliability of information provided to citizens.

For this purpose, it is required to unite all activity on information support of the state within uniform state PR strategy. PR strategy will be balanced from the point of view of representation of all spheres of activity of the population: education, work, health care, emergency situations, civil rights, etc. From the uniform center also intensity of application in general on various communication channels and formats of data presentation will be regulated.

It is required by time to rethink mechanisms of management of information space with accurate differentiation of spheres of responsibility, powers and functions of the separate government bodies and organizations defining the general strategy. The new mechanism has to be reflected in the uniform algorithm of interdepartmental interaction excluding duplication of functions and taking into account information work of the state in the period of significant events in country life. At the organizational level it will entail the following changes:

- the press services of government bodies are transformed to the full-fledged PR divisions bearing responsibility for a total information product on the branch that means timely definition of key queries of the public;
- means of state programs and projects have to be provided within their own budgets, the special attention at the same time will be paid to use of new technologies, including the social media directed to information maintenance of the major events in country lives, cultural and educational problems of national value.

In general it will be necessary to head for fixing of a priority role of information work of government bodies that will be reached through the systematic methodical work including:

- increase of efficiency of response of the press services to inquiries of mass media and public;
- improvement of quality of information and applied services of the state websites.

Level of knowledge of the population of activity of the state it has to be provided through direct interaction of government bodies with audience of mass media, including technologies of crowdsourcing.

For a solution of the problem of due technological support of business processes on monitoring of information space, methodical and analytical providing questions of realization of the state information policy offers on equipment have to be made by modern telecommunication oborudovaniye, means of collecting and long-term storage of information, systems of processing of the text, audio-, video given with application new technologies and other elements of material and technical resources.

Within above-mentioned tasks offers on introduction of the automated system of monitoring of information space have to be made. It will allow to increase objectivity of an assessment of information work of government bodies with application of uniform algorithm to various data. The essential benefit will be brought by a possibility of the accelerated processing of big data array that it is impossible when using the traditional ways characterized by limitation of human opportunities.

CONCLUSIONS

Improvement of the state interactive services on the basis of ICT are the powerful tool which can be used as information center in any state - his real force, and, therefore, lies in his ability to keep development which will lead to long-term social and economic achievements. If to use the state interactive services effectively, they can help to create the prepared, educated and healthy workers that in turn can create live and successful economy.

Allows to conclude the carried-out analyses in this dissertation work that the sector of the state interactive services on the basis of ICT in medium-term and a long-term outlook will keep high rates of dynamics and will make powerful impact on development of business and public administration, growth of quality of life, emergence of new forms of socialization of people and their communication. Life cycle of technologies, the corresponding products and services will only accelerate. In these conditions extremely significant is a role of scientific researches and developments.

Among the results expected during the period till 2030 — prototypes of the systems realizing the new principles of the organization of calculations, and multilingual programs of extraction and formalization of knowledge; technologies for work with huge data arrays; new analytical tools (personal analytical systems, means of data processing, arriving in real time, mobile analytics, etc.)

Breakthrough level of researches is noted in telecommunication technologies (information transfers, the organizations of networks and distribution of content).

Rapid growth of the markets of application of the specified scientific and technological achievements is predicted in different spheres, namely: health care, power, mechanical engineering and on transport, and also in the sphere of personal consumption of ICT - products and services. In the forthcoming 5-7 years development methods of universal positioning and identification of objects in the concept "The Internet of things" is expected; perspective platforms of collecting, generalization and representation of content and knowledge.

Evolution of cloud computing, creation of new architecture and principles of the organization of calculations involve transformation ON and introduction of

innovative changes in business of strategy of the enterprises of all sectors of economy. Enormous growth of volumes of available information will lead to radical increase of efficiency of administrative decisions.

OFFERS

Improvement of the state interactive services on the basis of ICT is an important factor of successful introduction leaving from bulky and excessive administrative procedures and their reduction by carrying out their optimization, the become obsolete methods of public administration, ensuring increase of level of transparency of activity of government bodies due to introduction of essentially new methods of management.

1) In this regard acceleration of further improvement of the current legislation for effective implementation of the Law "About the Electronic Government", including adoption of 10 new normative legal acts, modification and additions in 11 government decisions, and also development of drafts of the laws "About Administrative Procedures" and "About Bodies of the Public and Economic Board" is necessary.

2) Further implementation of the Comprehensive program of development of National information and communication system of the Republic of Uzbekistan for 2013-2020, taking into account ensuring input next years in operation:

- three central databases of the electronic government (databases of natural and legal entities, reference books and qualifiers);

- six complexes of information systems (interdepartmental integration platform, uniform system of identification, complex of information License systems and another).

- more than thirty new modern interactive services for the population and to subjects of business.

3) Further introduction and development of modern information and communication technologies in the enterprises of real sector of national economy, is only this way possible to reach increase of their competitiveness on internal and foreign markets.

4) A key factor of efficiency of introduction and use of information and communication technologies is strengthening, along with the taken measures for improvement of studying of English, training in mathematics and physics, for the

purpose of high-quality preparation of youth for the higher education in the sphere of computer and program engineering.

5) Further development of broadband access to the Internet on the basis of fiber-optical communication lines, creation of a data-processing center for system of the electronic government, and also increase of reliability of telecommunication networks, ensuring information security and information security.

Studying of foreign experience in the sphere improvement of the state interactive services on the basis of ICT to the population can be used as offers for his improvement in Uzbekistan:

- it is necessary to develop the register and carrying out inventory of the state services;
- it is required carrying out an assessment of potential of public servants, the rendering services to the population;
- adjustment of qualitative feedback with the population is necessary;
- rendering the state services by means of mobile means and services is necessary;
- creation of available information communication infrastructure is necessary for the population;
- today the system approach to rendering of services to the population in electronic option (look) assuming the decision organizational, economic, legal and some other questions is necessary;
- an important task is formation and development of the industry and corresponding infrastructure increasing level of demand on the electronic services focused on the mass consumer with use of the information (electronic) resources providing a high level of quality, availability and efficiency of providing electronic state services;
- formation of the uniform system of rendering of services in electronic form including creation of the uniform database, the requirement to structure and contents of information on the rendered service in electronic form, the mechanism of authorization of users of services is necessary;
- today creation and development of the state interdepartmental electronic interaction allowing to exchange data and to make decisions in real time at the same time providing security of the recipient and representative of the services rendered in electronic form is necessary.
- unavailability of a number of government bodies to application of effective technologies of management on the basis of information technologies;

- realization of works has to be followed by a complex of the organizational actions providing coordination of activity of government bodies in the sphere of informatization, development and deployment of standard decisions and methodical recommendations.

Thus, Improvement of the state interactive services on the basis of ICT - a necessary stage of the transition of the country to information society providing creation of conditions for increase of efficiency of functioning of economy, the public and local administration, distribution of information on a condition of economic and social development of society.

Legal bases

1. The law of the Republic of Uzbekistan "About informatization" No. 560-II of December 11, 2003.
2. The law of the Republic of Uzbekistan "About a digital signature" No. 562-I of December 11, 2003.
3. The law of the Republic of Uzbekistan "About electronic document flow" No. 611-II of April 29, 2004.
4. The law of the Republic of Uzbekistan "About addresses of citizens" No. 1064-XII of May 6, 1994.
5. The resolution of the President of the Republic of Uzbekistan "About measures for further development of information and communication system of the Republic of Uzbekistan" No. PP-1989 of 06.27.2013.
6. The resolution of the Cabinet of the Republic of Uzbekistan "About measures for introduction of system of an assessment of a condition of development of information and communication technologies of the Republic of Uzbekistan" No. 355 of December 31, 2014.
7. The resolution of the Cabinet of the Republic of Uzbekistan "About measures for further improvement of interaction of bodies of the public and economic board, the government on places with legal entities and individuals with use of information and communication technologies" No. 181 from 8/23/2007.
8. The resolution of the Cabinet of the Republic of Uzbekistan "About the approval of the list of the state information resources, and also the government bodies responsible for their formation, use and support" No. 27 from 2/20/2006.
9. The resolution of the Cabinet of the Republic of Uzbekistan "About improvement of standard and legal base in the sphere of informatization" No. 256 of November 22, 2005.

10. The resolution of the Cabinet of the Republic of Uzbekistan "About measures for introduction and use of the uniform protected e-mail and an electronic document management system in executive office of the cabinet, bodies of the public and economic board, government on places" No. 126 of May 4, 2011.

11. The resolution of the Cabinet of the Republic of Uzbekistan "About measures for further improvement of activity of the Government portal of the Republic of Uzbekistan on the Internet taking into account providing interactive state services" No. 378 from 12/30/2012.

12. The provision on documenting of information, the account and registration of the state information resources approved by the order of the Uzbek communication agency and informatization No. 42 of February 10, 2006 (per. No. 1558 of April 4, 2006).

The provision on an order of the account and registration of information systems of government bodies approved by the order of the Uzbek communication agency and informatization No. 355 of November 17, 2006 (per. No. 1646 of December 21, 2006)