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Content

General context. Understanding of the information society and electronic democracy

Information technologies, being nowadays actively introduced in Ukraine as well as all over the world, open up new possibilities for our country to carry out home and foreign policy. That means that when a simple aggregate of information technologies generates such a global civilization-level phenomenon as the information society, then citizens obtain an extremely effective instrument of influence upon development of society, state and economics.

The information society the formation of which at the present time in any country can be just hindered, but in no way brought to a stop, makes the most important thing possible - the real access to the mechanisms of influence by everyone who is interested thereof. Everybody's vote will be taken into consideration, it will not be disregarded or forged.

New telecommunication technologies are able to technically enable effective performance of the most efficient mechanism of democracy – plebiscite. Moreover, everybody's vote will be heard by any interested person, that is the process of the will-expression will be interactive besides its being permanent. In the unceasing dialogue of different viewpoints – not only final convictions, but also initial arguments – one way or another the viewpoint of those who under the existing system constitute a discriminated minority as for the right of at least any (minimal) influence will be always taken into account.

The information society guarantees democracy in the literal meaning – governing of people as an organism, what is somewhat more than just an arithmetic sum of individuals, that form it. Hence along with the formation of the information society more and more issues of the state functioning and its interaction with other governmental and supragovernmental structures will be settled by way of referendum.

Such society will ensure maximal realization of civil rights and liberties of every citizen according to the degree of activity of his/her social position. It will give not only possibility to realize that, but also it will form a need thereof, inasmuch as it will increase educational level of the society members, because the information society is the life-long education and not only at the very beginning thereof just to acquire a qualification.

An educated individual is capable to realize his/her interests, bring them into correlation with the interests of the others and correct them accordingly, do his/her best for the society to guarantee their protection – so that the formation of society meet his/her interests, which in their turn should agree to a certain extent with the interests of other members of the community, since in that case the individual-society interaction will be most effective.

The information society is the goal of Ukraine for several decades immediately ahead. The pressing goal which is possible to realize during several years without involving significant material, financial or other resources is the electronic government [1].

The need for the change of the content of the public administration system is explained by the fact, that new information technologies completely change the paradigm of the manufacturer-consumer relationship, that for the state means the revision of the whole system and procedure of interaction with clients and partners.

The state, while forming up an external (public) outline of its infrastructure in the network, has possibility to form mechanisms of rationalization and formalization of public needs (aspirations) and initiatives, forming mechanisms of influence and dialogue, on the one hand, and to directly make for the formation and implementation of new mechanisms of self-organization and self-government of communities of people.

Democracy as the value and the institution not only holds its actuality, but also acquires absolutely new nuances. Digital democracy is not only a well-protected web-based voting paper. Democracy should be considered as a complex of procedures, which guarantee public choice. To a considerable extent this is a way of organization of the society where the state of public opinion is recorded and gets an adequate access to official institutions to make balanced decisions. In this understanding the e-government provides broader possibilities to process information flows. Citizens and associations gain new possibilities to deeper influence the processes of society administration.

Place, role and importance (advantages) of the electronic government in post-industrial society

Electronic government not always had a single meaning and in a certain period this term was given to a futuristic government of "electronic citizens", that was to regulate life and security of the network on the whole and the electronic business in particular. According to the modern understanding the term e-government is interpreted much more wider than just "electronic government" or even more correct definition – "electronic state administration", that is the use of modern technologies in government administration bodies, including internet-technologies. E-government now is a very laconic account of the modern approach towards determination of role of governmental institutions in the life of the state and society, that is widely spread in the West.

The modern approach towards a state is based on that it has all the signs of a big corporation: it has a budget, expenditures, income, it has shareholders and clients at the same time – citizens, who are interested in that the governmental services be as cheap and available as possible. And according to this approach the aim of the state, the same way as of a big corporation, is to meet first of all interests of its shareholders, and to achieve that it has to increase its efficiency the

same way as a corporation has to increase its capitalization, replacing working models by more technological and effective ones.

In the countries with developed democracy the use of Internet by state administration bodies is considered now as one of the possibilities to increase efficiency of the government, that is why to the symbols "B" and "C" widespread in the Internet and meaning "business" and "citizen" accordingly and for a long time used in various combinations (B2B, B2C), now a new one – "G" ("government") is added. And the creation of the "electronic government" has taken an appropriate place in the plans of politicians and integrators.

As before in case of B2B and B2C now there are many those who expect, that introduction of information technologies into the state administration will allow to optimize everything fast: to cut administration expenses, speed up interaction among institutions of the government and between the latter and shareholders. One of the most weighty arguments, adduced in favour of the "electronic government" by its followers, is the increase of "transparency" of the state power in the expense of transition to a new level of a feedback both with citizens and business.

The stir about notorious "G" is very much alike the one about the electronic commerce, which is really gave place to the indifference. In point of fact the matter concerns the change of the government paradigm. The world experience shows that the electronic government model is natural and attractive for those countries and cultures where the government is perceived as a service structure.

At the first consideration e-government or, in a broader context, electronic administration is just an instrument, which answers new requirements and needs of the society, that is experiencing the consequences of one more industrial revolution, resulted from broad introduction of microprocessors and networks. But being just an instrument the network will not fundamentally change neither the state nor the society itself.

It is possible, though, that the interaction between citizens and governmental institutions will be realized in a more acceptable mode much as it is in the process of administrative automation in business-environment: if there is no possibility for optimization, then it is no point to spend milliards on national ERP.

In other words, if an official abuses his/her position now, he/she will find how to do that in a "digitized" department. According to David Bell, "control over information most often develop into the abuse, starting with secreting information and ending in its illegal promulgation" [2].

But there is another viewpoint, according to which information and communication technologies will fundamentally change not only interaction models in the society, but even the consciousness of the people. It is about that fact that the theorists of post-industrial society have been talking since 60-ties. Like any other theory this one also runs the trials through confronting with the reality and not always it stands the test.

The most evident "blunder" made by theorists-optimists is the image of a "post-industrial person": it was expected that the individual would have more freedom in self-realization, urge towards welfare and comforts, give place to creative work and a new person with a high level of education, become an active participant in taking governmental decrees. But even the West, despite all the signs of post-industriality (service delivery sector prevails over the industrial one, computers transform work conditions, information becomes the main capital) still presents a stable example of a consumption society.

Anyhow creation of the electronic government will favour not only more effective and low-cost administration, but also cardinal change of relationship between citizens and the government. The state administration process will become more transparent and open for the citizens. One of the most serious advantages of the electronic administration is the opportunity for broad masses of population to participate in debating bills. Every citizen will be able to express his/her view on the issue discussed and take part in adoption of laws.

Definition and theoretical principles (architecture) of the electronic government

Analysis of this question shows that there is no unified and single definition of the notion of electronic government. Summarizing the analyzed material it is possible to pick out three main approaches towards definition of an lectronic government.

On the one hand, electronic government is a virtual information space, where interaction between the governmental bodies and citizens and organizations is realized. This space rests on the aggregate of three constituents: information and communication technologies, normative-legal base and information and resource base [3].

On the other hand, the electronic government is a project, which is being realized with the aim to increase effeciency of the state administration system, provide the community with free access to information of governmental bodies and create conditions to obtain government services on-line. As a rule this project consists of two interralated but autonomous sub-projects: first, this is an internal government information infrastructure, built by analogy with corporative network. Second, this is an external information infrastructure, through which the government interacts with citizens and organizations [2].

Electronic government can be also defined as a new form or a means of services, delivered by bureaucracy (public service) to politicians, on the one hand, and citizens and business organizations on the other hand. This form or a means is embodied in organization of administration on the basis of electronic means of processing, transfer, communication and dissemination of information.

As a matter of fact the three proposed definitions have something in common with one another, describing the same phenomenon from different viewpoints.

Most researchers agree in opinion that the electronic government should not be considered as a cost-requiring partial technological solution, which in this case changes only the form of administration, but does not change its essence. The electronic government should be understood as a new paradigm, a new idea of realization of state administration as a service. This paradigm is a necessary and indispensable condition for global informational transformation of the society.

So, the electronic government consists of three principal modules: G2G, government to government; G2B, government to business, and G2C, government to citizens. It includes numerous applied elements: free access to government information for citizens, switch of governmental bodies to a paper-free record keeping, establishment for all governmental bodies of performance criteria and their control on a regular basis, carried out both by parliament and citizens, introduction of plastic cards for identification of state employees in governmental bodies, transfer of most standard transactions between the state and citizens or businesses to the network.

Global conditions, risks and prospects for development of the electronic government

Business structures all over the world have understood very quickly that information and communication technologies allow to optimize corporative administration, cut down

transactional expenses, improve the quality of work with clients. If the governmental bodies are considered to be regulating structures, which deliver specific government services, than it becomes evident, that with help of information and communication technologies they also can increase efficiency of administrative work both in internal environment and in regulation of social processes, more effectively spend budget funds, cut expenses on the keeping of the state machinery.

All countries have similar functions, obligations before the society, a similar system of state administration, so the prospects of creating the electronic government in Ukraine are exactly the same as in other countries. And so are the problems. Transition to new technologies, no matter if we talk about the business or governmental institutions, is less a technical or a technological process, but to a larger extent a process of re-engineering of administrative standards and procedures, administrative culture, which requires change of mentality and sometimes change of the whole paradigm of work.

Consolidation of the state authorities and citizens, development of the open society, acceleration of democratic processes are just a number of tasks which can be accomplished through the system of electronic administration. Its introduction in any country is supposed to consist of several necessary stages. The first stage is to be the organization of electronic document circulation in the institutions of the state power and local self-governing, for which case all of them must have a free access to the global network, the Internet. At the second stage the population will be provided with comprehensive and detailed information about work of governmental bodies through Internet. At the third stage citizens are supposed to obtain opportunity to address the governmental bodies through the Internet. At the fourth stage the state power is supposed to deliver administrative services to the population again through the world computer network. The final fifth stage is the delivery of administrative services almost without use of paper technologies.

According to the general business manager of the Intel corporation in the region of EMEA (countries of Europe, Near East and Africa), Stacy Gerel Smith, success in projects on creation of electronic government in any country of the world is achieved through availability of three basic components:

- Providing access to new technlogies for the broad sections of the public by way of reducing price for access to Internet, to the process of organization of study of new technologies, establishment of Internet-booths;

- Creation of a ramified telecommunication structure, which will favour an active development of various fields of social and economical life of the society;
- Adoption of an appropriate legislation, where the rights and obligations of a person in an "electronic society" and the basic terminology would be clearly defined [4].

Overcoming digital divide

According to Pavel Selmashchyk, the Intel corporation manager on relationships with government organizations in the EMEA region, creation of the electronic government is a real opportunity for different governments of the world to increase efficiency of their work and improve relationships with citizens by way of use of achievements of new information technologies. However, it is impossible to develop the idea of creation of the electronic government in an "electronic vacuum" – first of all a strong technological and programme platform should be established.

According to his words, in compliance with reasearch data, a condition for the system of electronic government to function in a full value manner in any country of the world is to provide access to the Internet for not less than 60% of the citizens of the country. However, at the initial stages it is necessary to realize only certain (specific) components, the same way as, for example, it was carried out in Estonia, specifically: placing of the state budget and that of certain regions in the Internet with the possibility to trace expenses, formation of an electronic purchase system (only during one year the volume of the contracts concluded through such a system in Estonia increased by 35 times – from 2 to 70 millions of US dollars).

Transformation of traditional forms of interaction between the government and citizens in a digital form should not become a ground for social unequality. The government undertakes to reduce digital stratification (divide) of the society. To achieve that it runs a purposeful policy in the field of improvement of computer literacy, formation of educational centers and improvement of conditions to promote qualification of personnel in the field of information technologies, including that through providing access to the national educational network and to the network library.

Only when not three, but at least ten per cent of citizens become users of the Network, then a breaking moment will ensue, from which an intensive self-development of the information society can start". With the existing digital divide as for the access to digital technologies the electronic governing only can give political activists one more opportunity to manifest their

activity, and, if the state begins to set out game rules in such a digital environment with outstripping, one more dimension of digital divide will arise – political.

Overcoming of the digital barrier , however, supposes not only improvement of public e-qualification and resolving of the problem of access to information. Some citizens do not want or have no possibility to become direct users of new technologies, but the considered strategy takes this category of people into account as well. New technologies allow to improve support of personal and phone transactions along with organization of interactive interaction of citizens.

Risk of formation of a "personal state"

Though the technologies are very important, the main bonuses, which the digital century can deliver, are all the same revolutionary processes in the social life: interaction of business, citizens and governmental institutions becomes more transparent, corruption is reduced, interactions are optimized to the extent that not only resources and time are spared, but changes are seen even in principles and traditions of social administration. Unlimited on-line connection between politicians, interest groups and communities of citizens becomes an every-day life matter.

However this picture of a "digital state" easily takes shape only in theory. The world is changing too fast to be able to rely on some idea and do forecasts on the basis thereof. We see that absolutely new relationships emerge and we do not know what is going to happen with the civilization tomorrow. The possibilities of development of information society cannot be foreseen: what seemed to be a rosy prospect of an open society in fact can develop into a digital dictatorship of the "Elder brother". Lack of determination of influences of information technologies complicates any forecast-doing.

For example, it does not seem too fantastic that the personalization of manufacture of products and services, which is actual for the electronic commerce, will concern the government administration as well. A citizen will be able to deal with an individually built-on state as a consumer of its services. The personal state is as real at the level of public access to services as the existing personal television.

The main idea of the electronic commerce has been and still is the reduction of transactional expenses and the numder of intermediaries; the same reasons were advanced for electronization of interaction between business, citizens, communities and governmental institutions. And of

course the undoubted benefit for the society seems to be the elimination of a bureaucrat from the interaction, if it is possible to do without him.

But the personal state model is hardly appropriated to the sphere of political participation and social regulation. Through mediation of institutes, which represent interests of different agents of the society, possible conflicts are levelled and elimination of these intermediaries threatens with the loss of the interests balance. Such intermediaries as parties, lobbies and trade unions uphold the interests of social groups and are necessary in any society, especially in a democratic one, so most likely they will reserve the influence in the digital era as well.

And the people's representative? In fact he is also a bureaucrat, elected by a group of citizens for for representation of their interests. And in this light the direct democracy as an extreme example of de-bureaucratization is nothing more than the power of the crowd, that is ochlocracy, and the larger the crowd, the lower the level of culture and informatization. That is why the working example of the direct political participation does not exist unless in a fiction.

However, not running to extremes of the direct participation, reduction of intermediaries all the same facilitates the interaction, leads to more direct "question-answer" system. So it is possible to talk about interactive pluralism, the content of which lies in the fact, that an effective stable feedback is formed between the institutes of the state power, parties and the society as well as between separate social and political groups.

In the distant prospect the electors, probably, will be able to more clearly control their representatives. The feedback from the electorate may have the form of approval or disapproval of the behaviour of a politician, his/her vote as for certain bills, and, probably, that will cause changes in the legislature: the deputy, deprived of the support of the electorate, will have to leave his position.

But all the above could be realized only under condition that the electorate is as active as if at the elections. And this is another question – the consciousness of the "new" individual. Because as some theorists of the information society think the aim at the personal state can result in the loss of a collective feeling, the solidarity of groups of citizens.

Openness of information and the problem of privacy

One-way transparency is one more desired element of the information society – the transparency of interactions regardless of their nature – governmental tenders, licensing of commercial activity or just a simple interaction between an official and a citizen. But with all the desire to become stronger in this idea it is necessary to take into account, that the interactions can become one-way transparent only if one of the members of the inrteractive process does not reveal the information about self.

Under these conditions the citizen will become just a consumer of the proposed government services, that does not affect their content, the same way as a subscriber to the traditional television cannot affect some programme unless he/she switches the programmes using the remote control. The officials are least of all interested in automation, that documents and reveals their activity, because the today's lack of transparency allows them to keep off personal responsibility. But the society does not aspire to establish transparent relations with them, too.

On the one hand, e-government systems give an opportunity to supervise the work of officials and departments. But there are few those who fall to thinking that without a computer an official badly deals with the control over the business and private life of citizens, and with a computer it will be much more difficult for him to do that.

Technology can change the methods of regulation, but it does not change the essence. Informational openness will not become a direct result of digitization of relationships between citizens and governmental institutions and hardly will it lead to liberalization of social relationships. By the way, this is supported by the experience of Singapore - a country which is in no way democratic, however according to the estimation of Accenture, which is a leader as for the effectiveness of use of e-government systems. A compact country with increasing level of high-tech faster than others masters systems of electronic government and at the same time the governing structures keep a rather tough control over the society.

Electronic revolution cannot make a police state more open. On the contrary, owing to the technology the society becomes more and more transparent for the state power, and, therefore, more controlled. This peril was predicted by the ideologist of the information society Daniel Bell: "Now the danger of police and political supervision over individuals with the help of sophisticated information techniques becomes more and more evident", - he wrote [2].

Another important moment lies in the fact that control over information most often develop into the abuse, starting with secreting information and ending in its illegal promulgation and in order to prevent these abuses it is necessary to introduce institutional changes, first of all in the field of information.

Internet for the first time in the history of the mankind provides technical possibility for mass reveal of information, but in no way it determines the necessity to do that. One of the problems of transparency of governmental structures lies in legislative sphere, because in certain countries, unfortunately, in Ukraine as well, there are no traditions to reveal information nor the legislative regulation of this sphere.

Besides the lists with closed information, which, for example, constitutes state secret, it is also necessary to make in an obligatory manner lists of information, which is subject to open publication, - not only at the highest or constitutional level (for example, laws), but also of different legal acts, departmental instructions, statistical information etc. In many cases this will eliminate the ground for corruption and it will make the real interaction between citizens and the state possible.

Review of international experience

"e-Europe" programme

In March 2000 heads of governments and states from 15 countries of the European Union proclaimed a strategic task for the European economy for the next decade to turn into "the most competitive dynamic economy of the world built on knowledge". The approved resolutions oriented the governments of the countries of the European Union towards fast development of economy, built on effective use of information and communication technologies, including the Internet. The appropriate initiative resulted in adoption of the "Electronic Europe" programme in June, 2000.

"Electronic Europe" is an initiative of the European Commission, which is directed at acceleration of transformation of European industrial society into the informational one. The digital era will unite the mankind, create not only general, but also cultural, economical and political environment. At the modern stage it is important to make the states as open, democratic

and legal as possible, approve the principles of civil society. The governments should be resourceful in distributing the load so that the given task would be accomplished as fast and effectively as possible. All this will be rewarded with the interactive network, that will unite people and open new horizons in the sphere of education, commercial activity and in every-day life of citizens in general.

1) European youth in the digital era Crucially important fact, that determines economical and social progress of the society, is the educational level of the population. In the digital era the education will acquire more importance: it is necessary to organize the process of training of new generation of technologists, research workers and providers and also provide every citizen with an opportunity to actively influence the development of the informational society. In the countries of the European Union much attention is attracted to the orientation of the school education and training of citizens for activity under conditions of the informational era, and this initiative is aimed at the acceleration of this process and transformation of the digital literature into the basic informational base for the youth education. The European initiative consists of three main directions:

- improvement of the Internet and multimedia resources;
- use of these resources for mastering new qualifications;
- development of basic skills of team working, adaptation, creative approach towards things, desire to broaden knowledge and intercultural communications as well.

The success of the initiative depends on the extent of attracting teachers and directors of schools as well as on the ability of the industrial sphere to favour the educational sphere, specifically, production of high-quality products, services and content by common efforts. According to the experts the educational systems are meant to create comfort environment for teachers and students, with a special attention to technological criteria (equipment, means of access, content and services) as well as to the methods of their usage.

2) Cheap access to Internet The European Union's policy of liberalization of the market of telecommunications and telecommunicational services, which started on the 1st January, 1998, resulted in cut of prices and increase of the consumer demand in this sector, which confirms the correctness of the chosen path. The conditions for realization of advantages of competition in different countries of the European Union are not equal. The pan-european service is underdeveloped, basically because of significant divergences in licensing legislations of the states. That is why the European Council and Europarliament call to do all the possible to speed

up legislative processes so long as the states of the European Union can influence the market liberalization with their own resolutions.

3) Acceleration of implementation of e-commerce The volume of e-commerce, that is sale/purchase of goods through the Internet, in the states of the European Union is estimated at approximately 17 milliard of euros. According to the expert forecasts, by 2003 this showing will rise up to 340 milliard of euros. However in USA the return from utilization of e-commerce is three times higher. At the same time Europe has strong positions in a line of directions of top priority. For example, in technologies of providing security and data enciphering as well as in the sphere of electronic banking. Mass utilization of euro for electronic transactions will significantly favour development of the pan-european electronic market.

Europe needs to speed up the process of practical realization of e-commerce by way of attracting into this sphere of small and medium-size businesses as well as creating of conditions for them to understand the territory of Europe as their own market segment. This task requires in its turn realization of the legal regulations of the internal market, which is to provide a legal base for this kind of commerce and liquidate existing inter-state barriers. Europa also needs a state administration to manage electronic auctions to supply goods and services with the purpose to meet the state needs.

4) Fast Internet for reseachers and students Internet presents exceptionally broad opportunities for research work and makes it possible to realize absolutely new approaches for education in the form of organization of the "e-education" system, when students get on-line access to academic and scientific materials. Communication via e-mail and transfer of information via the network have become the basic aspects of academic and professional life. In spite of this the on-line cooperation in Europe has not yet come into every-day practice. Certain countries of the European Union modernized their research and educational networks, but the case is that the whole picture varies geographically. As a result, many reseachers and students are deprived of the possibility to associate with their colleagues, that in its turn limits pan-european cooperation, because users cannot realize the potential of digital communication in full measure.

Fast Internet is especially active as a way of organization and realization of joint interactive investigations while their participants are geographically separated from each other. In this case they obtain possibility to collectively use data or instruments for generation of new knowledge: this technology marks appearance of a new form of research work – "e-research". To support this kind of research it is necessary to present the final consumers multimedia communication of

a guaranteed quality as well as methods and ways for demonstration of achievements of virtual associations and institutions.

5) Smart-cards for electronic access. Smart-cards are the advantageous instrument to realize electronic payments for medical service, mobile Internet, public transport, paid TV programmes and many other information and communication services. Every citizen should have such a card and the main requirement to this card is the problem of guarantee of reliability and security of storage and transfer of data. These cards can be individual, multi-functional or they can be built in various devices. If Europe is able to develop such technologies, than a large-scale market will appear which will become promising for a great amount of consumers and the business on the whole. However, to achieve any success in this direction it is necessary to build a new insfrastructure to support these technologies in the boundries of the European Union. To successfully accomplish this task it is necessary to establish cooperation between European providers and governmental bodies with the aim to develop general principles of organization of mobile connection, ensuring security, establishment of rights of property and organization of consumer control.

6) Risk capital for high-tech medium-size and small businesses. Often promising ideas, proposed by European businessmen and providers of the continent, university students and employees of companies, do not obtain necessary financial support and because of that they cannot be realized. In USA where the culture of business favours risky investments and the initial capital of innovative companies is three-four times higher than in the European Union, the situation is somewhat different and the experience of this country is indicative that the commercial realization of advanced ideas favours creation of thousands of additional working places.

Europe turned out to be backward, as there exist serious obstacles here for risky and initial investments. Some of the existing obstacles have already been identified as for actions in the sphere of risk capital and financial service, developed by European Union. But on the whole the current situation in the European Union does not by far favour the flow of risk capital to the markets of Europe, and thus slackens the pace of the European Union approaching to new economy. At this stage it is necessary to intensify interaction between providers of risk capital and generators of ideas, which have commercial prospect. Each of the parties has to realize mutual needs, what will allow to maximize the return from the investments.

7) Attracting of incapable citizens to the electronic society Development of digital technologies favours overcoming of various barriers (social-economical, geographical, cultural, temporal etc.), that hinder social adaptation of incapable people. Owing to the existence of modern technologies such people obtain opportunity to take a full value part in social and professional life. However it turned out that the European industry is not capable to instantly provide invalids with products and services.

The given situation can be somewhat changed thanks to cardinal measures which are taken, specifically, in boundaries of introduction of new principles of "Design-for-All". With this approach at the stage of conceptual design of articles specific needs of invalids and citizens who belong to the category of incapable are already taken into account. The states of the European Union in Declaration 22 of the Amsterdam agreement have already assumed certain responsibilities to meet specific needs of this part of the population. Now it is necessary to support efforts as for realization of these resposbilities in the sphere of the informational society.

Special attention should be paid to the improvement of education and re-qualification of this category of citizens as well as ensuring their full value participation in the life of the society. Medical networks should provide for special multi-language on-line service, and digital technologies on the whole should simplify formalities, related to the use of private and public systems of social service.

8) On-line medicine Delivery of efficient and quality medical services to citizens is one of the most serious cares of european governments. Needs in availability of tehcnologies of health care are rapidly increasing. The governments have come across such problems as general aging of the population and increase of expenses on the care of public health. The increasing contradiction between the need to improve the quality of medical services and increase of their price is impossible to overcome without modernization of medical systems and widespread use of digital technologies. However, this potential is not used – only 1% of all the expenses in the field of the health care is directed to the informational society.

At the same time fragmentation of the European market strongly hampers innovations and spread of advanced experience, though the health protection is one of the basic kinds of business. The states of the European Union spend approximately 8% of their national gross revenue on the health care, that is why creation of a common market of medical products and services is to favour increase of global competitiveness of Europe. In this context the European Union has already taken important steps in direction of protection and improvement in the field of the care of public health. However, it was not possible to achieve total harmonization of this field at the

European level and that is why it is necessary to continue joint work of institutions of health care of European countries in support of scientific research, concordance of standards and specifications of products and creation of pan-european medical library.

9) Intellectualization of transport Volumes of transportation of people and goods in Europe by different kinds of transport vehicles are constantly increasing and at the same time transport problems are redoubling. Last year in the countries of the European Union as result of transport accidents approx. 43 thousand people died and 1,5 million people were injured. Economical expenses from overloaded roads are increasing, a significant number of air-trips is carried out with deviation from time-table, and adverse effect of transport on the environment becomes stronger. Digital technologies allow to make transport more safe and to cardinally improve the quality of control over the public transport.

10) On-line government The Europeans are interested in improving and facilitating access to government information. This will ensure transparency of work of the governmental bodies as well as guarantee purposefulness of resolutions approved by the European Union. It is necessary to do a great amount of work to provide the citizens with access to Web-sites of governments of certain countries and European institutions, providing them with convenient facilities for search and discovering of required information.

Limited access to basic statistical and business data hinders development of the business on the whole and specifically the private sector of auxilliary services which are directed at providing information to the society. Thus it is necessary to simplify the obtaining of government information that in its turn will stimulate development of new sectors of services, which are based on open sources of information.

Potential effect after accomplishment of this task is hard to overestimate:

governments will become closer to average citizens;

possibility to reduce expenses on keeping of government officials will appear;

extra working places for providers of auxilliary services will be created;

pan-european information market of government information will be created;

The Conference of Ministers of countries of Central and Eastern Europe held in Warsaw in May 2000 approved a resolution on development of a programme, similar to the "Electronic Europe" programme aimed to demonstrate political obligation and good will of the countries-candidates to join EU as for their purposes which constitute the content of this programme. To the joint work on development of the programme of the countries-candidates governments of Cyprus,

Malta and Turkey were invited and the joint programme of all these countries, which was named "Electronic Europe Plus", was proclaimed in June of 2001.

Successful examples

State of the issue in Ukraine

Informational policy

The state information policy should be understood as the regulating activity of governmental bodies, that is directed to development of information sphere, which covers not only telecommunication field, information systems or mass media, but the whole complex of production and relationships, which are related to creation, storage, processing, demonstration, transfer of information in all its forms: - business, entertaining, scientific-educational, learning etc. Such broad interpretation of the information policy is now well-grounded, because digitization of information and up-to-date telecommunication and computer technologies wash away the barriers between different sectors of the information industry.

The all-around consideration of processes which take place in the informational sphere of the society and the structure of modern methods of its state regulation is urgent enough for Ukraine, because the state has not yet clarified itself completely in this field. Existing attempts to create a conception of the informational environment solve the problem just partially, because the environment itself is formed by the market and modern commercial structures rather than the state. The history of the Ukrainian computer market clearly confirms that.

Analysis of foreign practice of regulation of informational sphere of the society allows to distinguish a number of directions, including the following:
- encouragement of competition, struggle with monopolism (control over the concentration of property in mass media, issue of permissions for merging of companies, solving of issues as for the disintegration of big companies-monopolists);
- providing the right and technical possibilities for the access to information and informational resources for the whole population;
- observing of the freedom of speech;
- defense of interests of national minorities;
- defense of national cultural heritage, language, opposition to the expansion of other countries;
- guarantee of informational security;

- protection of intellectual property, struggle with piracy;
- struggle with computer and technological crimes;
- control over the use of information and telecommunication technologies in official bodies;
- censorship in global computer networks;

The state information policy is supposed to lie in positive control of formats, standards, state licensing of involved information technologies in the sense of indirect control of the structure of the information market withing the bounds of tasks on the informational security. The state cannot regulate the work of the members of the information market neither through the price policy, nor through the regulation of access to this market, nor through the control of the content. And that is not because somewhere it is prohibited, but because no country could achieve that on account of the specific character of the network itself and the information itself.

In Ukraine at the present time the only document of the policy in the field of informatization is in fact the National programme of informatization, apporved by the appropriate Act of Ukraine as of the 4th of February, 1998 [].

National programme on informatization determines the strategy of resolving the problem of meeting informational needs of and providing informational support to social-economical, ecological, scientific-technical, defence, national-cultural and other activities in spheres of the state importance.

National programme of informatization includes:
- conception of the National programme of informatization;
- the aggregate of governmental programmes on informatization;
- departmental programmes and projects on informatizations;
- regional programmes and projects on informatization;
- programmes and projects on informatization of local governmental bodies.

The National programme on informatization is formed on the base of long-term priorities of social-economical, scientific-technical, national-cultural development of the country taking into account international directions of development and achievements in the sphere of informatization and is oriented to resolving the most important general social problems (ensuring development of education, science, culture, protection of the environment and health care, state

administration, national sacurity and defence of the state and democratization of the society) and creating conditions for integration of Ukraine into the international information space according to modern tendencies in informational geopolicy.

The National programme on informatization constitutes a complex of interrelated separate tasks (projects) on informatization, directed to realization of the state policy and priority directions of creation of modern informational infrastructure of Ukraine at the expense of concentration and rational use of financial, material and technical and other kinds of resources, production and scientific-technical potential of the country as well as coordination of work of governmental bodies, local governments, enterprises, institutions, organizations of all forms of property and citizens in the sphere of informatization.

The main goal of the National programme on informatization is the creation of necessary conditions for providing citizens and society with timely, trust-worthy and complete information by way of wide use of information technologies, and ensuring informational security of the state.

The programme is directed to accomplishment of these basic tasks:

- formation of legal, organizational, scientific-technical, economical, financial, methodical and humanitarian pre-requisites for development of informatization;
- application and development of modern information technologies in appropriate spheres of the social life in Ukraine;
- formation of system of national information resources;
- creating of all-state network for informational provision of science, education, culture, health care as well;
- creation of all-state systems of informational-analytical support of work of state bodies and local governmental bodies;
- increase of efficiency of domestic production on the basis of wide use of information technologies;
- formation of and support to the market of informational products and services;
- integration of Ukraine into the world informational space.

Specific initiatives (programmes and projects)
"Electronic Ukraine" programme project

"Ukraine proclaimed its European choice as a long-term strategy of social and economical development. The goal of this strategy is to turn our country into a modern, developed democratic state with strong market economy, a state where interests of all layers of population are properly represented and protected without any exception. Actions of the government of Ukraine are directed to persistent realization of tasks, which come out of this goal. To more completely use ICT there were approved in the state and are in force National programme on informatization, Complex programme on development of the communication field, State programme of computerization of village schools, State programme on creation of a Unified state automated passport system, other programmes on implementation of ICT in everyday life of the society and in the work of all branches of the state power. At the same time there is a need to introduce integrated, inter-branch and inter-disciplinary approach to more effective and fast accomplishment of tasks which are currently faced by the Ukrainian society and the Ukrainian economy. The "Electronic Ukraine" programme first of all is a social programme as distinct from scientific-technical programmes, listed above, and it is aimed to integrate all the above programmes in a single whole what will result in ensuring their effectiveness", - is stipulated in the preamble to the programme project.

Thus the "Electronic Ukraine" programme with its content and architecture is a logical continuation of the "Electronic Europe Plus" programme, because the main purpose and instruments for its implementation are identical with those that will be used by countries-candidates to EU during implementation of the "Electronic Europe Plus" programme.

First steps of independence were marked with significant curtailment of production of high-tech products, outflow of specialists abroad, a number of other negative phenomena. At the same time it was possible to preserve modern educational system, create a footing for new market economy, go over to economical development with increasing gross (GDP). Today the society can benefit from a so-called "tunnel effect" to make a rapid leap over several stages of development of ICT and more efficiently implement the most up-to-date technologies for the sphere of telecommunications and the sphere of informatization.

From the point of view of makers the "Electronic Ukraine" programme is aimed to favour building of modern market economy in Ukraine, ensure increase of its competitiveness and at the

same time it takes into account the real state of affairs in the society, its readiness and ability for implementation of up-to-date ICT.

To estimate the current state of accomplishment of the Programme the criteria, envisaged in the "Electronic Europe Plus" programme are applied. The comperative analysis of the state of accomplishment of the "Electronic Ukraine" programme and the state of accomplishment of the "Electronic Europe Plus" programme will favour more efficient use of the budget funds and off-budget income by way of their concentration for accomplishment of the most important tasks.

The Programme project envisages resolving of a whole complex of tasks which will affect both economy and organization of the government activity. It will result in implementation of new mechanisms of interrelations between citizens and the state power, citizens and enterprises and public ohganizations.

It is planned that the realization of the Programme will be carried out by way of active cooperation with the countries of the EU and countries-candidates to the EU with the purpose to take into acccount the experience of these countries, what will favour accomplishment of the main task – formation of the modern competitive economy.

Realization of the Programme will base itself on use of the same indices of ICT development as are introduced in the EU, what will give possibility to introduce fundamental constituents of the Informational society more efficiently. At the same time this will favour more rapid and effective integration of Ukraine into European structures.

The following tasks are determined in the Programme project as having great priority:
1. Creation of base of the Informational society:
   - Building of modern telecommunication infrastructure available for everyone.
   - Creation of national informational resources system.
   - Carry out training of the great part of the population.
   - Creation of legal basis for functioning of the Informational society.
2. Cheaper, fast and reliable Internet for everybody:
   - Providing access to the Internet as a universal service
   - Providing scientists and students with fast Internet
   - Creation of protected networks and use of intelligent cards
3. Development of human potential:

- Ensuring comprehensive computer competence of the young generation
- Creation of conditions for development of intellectual-rich economy
- Creation of conditions for each citizen to have possibility to work under conditions of intellectual-rich economy

4. Stimulate use of Internet:

- Speed up of development of e-commerce
- Creation of the electronic government system – from keeping informed to delivering services
- Creation of an electronic system of health care
- Filling the Ukrainian informational resources with content, oriented on an European consumer
- Development of intellectual-rich systems of the public transport
- Creation of electronic systems of encouragement of the environment protection.

The Programme is designed for the period from 2003 to 2010. It is supposed to realize it in two stages. For each of the mentioned tasks specific measures are determined which will be taken, responsible institutions, clear terms and criteria of execution are determined. By these indices the "Electronic Ukraine" programme is advantageously distinct from many other Ukrainian programme documents which often do not have clear criteria of effectiveness.

"e-Government" project

The Cabinet of ministers prepares to approve a draft of a resolution of the Cabinet of Ministers "On creation of the informational system "Electronic government of Ukraine", developed as an execution of the president's order of 17.05.01 #325 "On preparation of propositions about providing publicity and openness of activity of governmental bodies". This resolution approves a plan of top priority measures on development, creation and introduction of the electronic informational system "Electronic government" (hereinafter – the System).

The System is aimed to ensure openness of activities of governmental bodies and realization by citizens of constitutional rights to take part in state affairs administration, increase of efficiency of work of governmental bodies at all levels.

It is stipulated in the draft of the resolution, that one of the top piority directions of policy of the Government in the field of informatization is delivery and development of informational, financial and other services to citizens and juridical persons through the electronic informational system – "Electronic Government". Here for the first time a definition of the "electronic

government" is officially given: "Electronic Government" is a system, through which informational-legal relationships among executive power bodies and between the latter and citizens and juridical persons are realized by way of use of Internet-technologies".

According to the information of the State Committee on communication and informatization of Ukraine, the main tasks of the System are:

- organization of reliable informational communications between subjects of the state power of all levels, creation of centralized databases to provide all structural subdivisions of the bodies of the state power with work facilities;

- delivery of informational services to the citizens through the Internet in a convenient and trustworthy form and ensuring realization of all aspects of informational interaction of citizens with state institutions;

- favouring development of the electronic market of goods and services to ensure effective accomplishment of government orders, organization of tenders, attracting of interested parties to realization of programmes on social support of people;

- introduction of electronic democracy as a form of ensuring "transparency" in relationships citizen-state, elector-deputy. Creation of the electronic voting system.

As a result of introduction of the System the following can be expected:

- growth of trustworthiness, completeness and operationality of information, which is used and stored at governmental bodies;

- "transparency" of execution of resolutions and instructions to the government by the executive bodies and a high level of control over their execution;

- reduction of overhead expenses in governmental institutions;

- growth of confidence of the society to the work of the Government;

- ensuring interaction between citizens and governmental bodies with realization of a feedback, directed to meet individual informational needs of the population of the country in the field of obtaining necessary information and delivery of individual data, directed from citizens to the governmental institutions.

In accordance with the resolution draft the creation and introduction of the electronic informational system "Electronic Government" is meant to be realized in three stages:

1) creation of the Unified web-terminal and integration thereto of web-sites and electronic systems of the executive bodies;

2) delivery of informational services of general purpose to citizens and juridical persons via Internet;

3) delivery to citizens and juridical persons via Internet of financial, commercial and other services, which need identification of subjects of legal relationships and ensuring integrity and trustworthiness of the information.

By July of 2003 it is planned to develop and approve enumerations of obligatory services of general and special purpose and order of their delivery via the "Electronic government" system starting from the 1st of January, 2004.

"Ukraine – development via Internet" project

Ukraine and the World Bank are preparing a project named "Ukraine – development via Internet". The main idea of the project lies in the use of international experience, resolutions and methodical documents in the field of information technologies with the purpose of increasing transperancy and efficiency of the state administration in Ukraine, development of electronic business as well as strengthening of the dialogue between public organizations, private sector and citizens of Ukraine.

The team of developers of the conception has determined the following three components:

1. "Electronic government" component, that consists of two modules:

1) "electronic purchase" module: new, more effective procedures of organization and carrying out state purchase; open access of subjects of the market to information about needs of governmental bodies of the country in specific commodities and services, possibility to take direct part in tenders; possibility of organization of public control over the process of state purchase;

2) "electronic document circulation" module: significant cut of spent time and resources; increase of effeciency of work of governmental bodies; broadening of possibilities of contol; providing access to the most complete and opportune information.

2. "Legislation in the field of electronic business" component. It is supposed to use advanced experience and best methodological works in this field to create an appropriate legislative base,

what is one of the most important factors for further establishment and development of the "electronic business" in Ukraine.

3. "Electronic democracy" component. The kernel of this component is in giving the civil society an opportunity to discuss and share ideas on questions of administration and development, thus directly influencing the development and approval of resolutions at all levels of the state administration. In the frames of this component it is planned to develop: informational terminal and regional informational centre, which will serve as a virtual place to lead discusions, considerations, forums (the principle of bilateral interactive connection between the state and the citizens).