ADMINISTRATION OF THE PRESIDENT OF THE KYRGYZ REPUBLIC

E-GOVERNMENT IN KYRGYZSTAN

DRAFT CONCEPT PAPER
AUGUST 2002

Translated, edited and distributed in English by the Coalition for Democracy and Civil Society (www.ngo.kg) and Development Gateway Foundation (www.developmentgateway.org)
The definition of e-government today is broader than its name, electronic government, implies. It would be more fitting to refer to e-government as the "electronic management of the state", namely the utilization of information and communication technologies (ICT), including Internet technologies, in the work of state bodies.

A modern approach to the notion of the state incorporates all of the attributes of a large corporation: it has a budget, expenditures, income, shareholders, and clients - citizens who have an interest in affordable and accessible state services. Given this analogy, the state should then strive to satisfy the interests of all of its shareholders, and increase the efficiency of its services, just as corporations seek to raise their capitalization by continuously improving their operating mode to become more technologically efficient.

Therefore, much like their corporate counterparts, the approach to the problem of reforming state bodies should be based on the following three principles:

- Maintain a focus on citizens;
- Ensure the concreteness and productivity of all actions and programs;
- Use market economy mechanisms and actively encourage competition.

In other words, an electronic government is a system of interaction of the state with the population, the private sector and non-profit organizations (NGOs) through information and communication technologies.

Information and communication technologies provide governments with the unique opportunity to transform themselves into electronic governments focused on the interests of their citizens. The creation of an electronic government is an important step toward improved interaction between state bodies, citizens, and commercial organizations, thus allowing state services to cut their expenses considerably and to improve the quality of service for citizens while ensuring confidentiality of information.

In a speech he gave in January 2002 at a government session on administration reform, the President of the Kyrgyz Republic A. Akaev noted that "it is necessary to emphasize the reorganization of the infrastructure of the state apparatus and to improve management technologies". He continued, “‘Paper work’ technology must remain in the past. Kyrgyzstan should be a country prioritizing new information technologies. Such opportunities do exist.”

The national strategy “Information and communication technologies for the development of Kyrgyzstan” was approved by the Decree of the President of the Kyrgyz Republic of March, 10, 2002 #54. It names incorporating ICT for effective
and transparent management in state bodies and institutions of self-governance as one of the main priorities.

The transition to an electronic government actually entails the transformation of almost all the elements of operation of the state bodies. It is a complex organizational, technological and social process, which demands significant financial expenditures and administrative efforts. The success of this transformation hinges on a good strategy and relevant tactics in each implementation stage of the program, and on the rational organization, coordination and interaction of all participants - executive, legislative and judicial bodies of all levels, businesses, universities, public organizations and citizens - in the process. It is equally important to resolve a number of interconnected political, legal, organizational and technological issues to identify funding sources and to train personnel.

The main objectives of an electronic government are to:

- Bridge the digital divide;
- Offer services to citizens and the private sector in an integrated manner;
- Increase the overall performance of state bodies;
- Reorganize the interaction of the state and its citizens using ICT technologies.

Effective implementation of the concept of an electronic government should:

- Enable citizens, companies, and civil servants to find and access information and services easily;
- Simplify the work of state services and decrease expenditures through the integration and elimination of unnecessary operations;
- Rationalize government operations using feedback in the process of interaction with citizens;
- Provide additional transparency and accountability of government.

Accountability is not just limited to providing citizens with information; it also provides state bodies and officials with performance parameters and creates accessible means for monitoring these said parameters. Such accountability would enable citizens to evaluate the overall performance of their state bodies independently, without having to rely solely on statements made by government officials and on the mass media.

Electronic government is comprised of four components:

- **Focus on citizens**: Interaction between the government and its citizens (G2C and C2G). Quick and easy access to state services, simplicity of use.
- **Focus on the private sector**: Interaction between government and businesses (G2B and B2G). Expenses of state bodies are reduced through more effective use of technologies and an open and transparent system of state purchases.
- **Focus on state bodies**: Interaction between and across government departments and state bodies (G2G) allows them to cut expenses, to improve the quality of services, and to obtain accurate data in a timely manner.
Focus on improvement of the internal efficiency of state bodies: Internal efficiency (IE). Ensures rational use of modern technologies that leads to reduced costs and improved operation of state bodies. State bodies can improve their operating efficiency by avoiding delays in the workflow and by motivating employees. Internal efficiency allows institutions to reengineer their internal business processes using new techniques and tools.

STAGES OF DEVELOPMENT OF ELECTRONIC GOVERNMENT

Currently, there are four stages in the development of an Electronic Government.

In the first stage (Information), a state web-portal is created in order to advertise state services and to publish general information such as business hours, lists of contact persons and phone numbers. Use of ICT in state bodies is limited; e-mail communication is common.

In the second stage (Interaction), interaction of the government with citizens and businesses grows. State bodies are able to provide broad and dynamic information to citizens using database search and e-mail communication capabilities. State bodies start to introduce various interactive services that enable citizens to access government websites and fill out various online forms. At this stage, it is necessary to address the issue of the legal status of electronic documents because documents available online may have a different legal status than those available on paper. State bodies start to use local networks, corporate networks and the Internet to access and exchange information.

In the third stage (Transaction), state bodies conduct online transactions, and financial and legal services are offered. Infrastructure, security, and the capacity to interface with old information systems to ensure independent use of services by citizens are important considerations. This stage requires that the security standards of the electronic government infrastructure be improved, an objective generally achieved through the use of electronic signatures and certificates, as well as with smart cards. Additionally, it is important to establish partnerships with the private sector in order to introduce the infrastructure and to manage it with the help of business processes. The physical identification of a person, for example, can be guaranteed by issuing person identification certificates. Electronic procurement is also introduced. State bodies use local and corporate networks, as well as the Internet, in order to access and exchange information.

In the fourth stage (Transformation), a dynamic transition takes place in which new technologies allow the use of information on an interdepartmental level in order to provide new types of services. It is important to introduce web portals that allow citizens to switch from one service to another without having to identify themselves repeatedly. State bodies coordinate their activities to ensure that state databases become interactive and are interrelated with one another. At this stage, management culture and responsibility within state bodies should have changed considerably.
Information and services can be grouped by theme. This phase marks the completion of the transition process from a traditional to an electronic government.

Such a transformation will lead to careful reassessment of the roles and structures of state bodies. Citizens can personalize access to web portals and use the services of their favorite commercial and public websites, in addition to the services of the state. The people would be better informed and more willing to actively participate in government processes thanks to easier interaction with state bodies and access to public information and official documents. The result will be the creation of information communities and the establishment of models of governance where citizens are more widely involved in the decision-making process.

**ELECTRONIC GOVERNMENT IN OTHER COUNTRIES**

The governments of many countries seek to improve their operating mode. Developed countries are struggling to reduce expenses and increase efficiency while developing countries are striving to offer new services to citizens and to decrease bureaucracy and associated costs. Every country is working on creating the infrastructure and conditions needed for the development of a favorable business environment, a key factor for success in the modern world. Many governments around the world are confident that a reliable technological infrastructure plays an important role in offering a full range of services to citizens, in creating favorable conditions for the development of businesses, and in attracting foreign investments. Technological infrastructure also plays an important role in strengthening education, increasing the efficiency of the state apparatus, and in decreasing state expenses.

In the last few years, nearly all developed countries and many developing countries have started to form national programs on creating electronic government. Some have even started to implement such programs.

The citizen defines the social and economic focus of the programs and strategies of western countries.

Legal environment development, personnel training, the improvement of ICT infrastructure, and the establishment of electronic government are among the priorities of these programs.

In the western programs, an emphasis is placed on the development of the human factor, including building trust towards ICT, support of small businesses and monitoring.

A distinctive feature of many western programs and their strategy of implementation is the integration rather than the fragmentation of online technologies (electronic commerce, electronic government, and electronic business) to ensure the transition to a digital economy and an information society.
### Table: Development of Electronic Government

<table>
<thead>
<tr>
<th>Strategic aim</th>
<th>Country</th>
<th>Date of completion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Creation of complete electronic government</td>
<td>USA</td>
<td>2003</td>
</tr>
<tr>
<td></td>
<td>Canada</td>
<td>2004</td>
</tr>
<tr>
<td></td>
<td>Ireland</td>
<td>2003</td>
</tr>
<tr>
<td></td>
<td>Great Britain</td>
<td>2003</td>
</tr>
<tr>
<td></td>
<td>Estonia</td>
<td>2005</td>
</tr>
<tr>
<td>Creation of partial electronic government</td>
<td>Finland</td>
<td>2002</td>
</tr>
<tr>
<td></td>
<td>France</td>
<td>2002</td>
</tr>
<tr>
<td></td>
<td>Japan</td>
<td>2003</td>
</tr>
<tr>
<td></td>
<td>Netherlands</td>
<td>2002</td>
</tr>
<tr>
<td></td>
<td>Singapore</td>
<td>2002</td>
</tr>
</tbody>
</table>

In order to evaluate the development of electronic government, it is useful to examine other countries’ experience with the implementation of an electronic government.

**USA**

The level of infrastructure development in each country determines the potential effectiveness of an electronic government. It is certainly no surprise that the USA is the leading country in the implementation of an electronic government.

According to the research of the Momentum Research Group Company, 60% of Americans have used the services of government sites. Forrester Research Company forecasts that by 2006, there will be 14,000 governmental programs operating in the network, through which 15% of taxes, or $600 billion, will be collected.

In 2000, President Bill Clinton officially declared the launch of a new project, www.firstgov.gov. The site contains nearly 27 million pages as a result of combining 20,000 separate government web sites. www.firstgov.gov allows Americans to perform different operations online, ranging from social security services to making reservations for camping in national parks.

The total sum of the federal government’s expenditures on information is approximately $43 billion per year. The sum does not include the expenditures of regional governments (states and counties).

While the e-government achievements of the US are significant, only $5.5 billion of the country’s total expenditures are allocated to the electronic government. Electronic
government is a relatively small component of information technologies as it applies to the work of the government.

More specifically, electronic government is defined as state computer systems intended for interaction with the population of the country, US citizens, foreigners and tourists, and with non-government structures. Such structures may be businesses, public organizations, and regional and municipal authorities.

**Estonia**

Estonia is among the most committed of the former Soviet republics when it comes to developing its electronic government services.

The Estonian Information Policy’s top priority is to develop e-services for its citizens by integrating the decision-making process into Internet-based information systems.

The government is paying particular attention to the development of the ICT-related infrastructure and related services, as well as electronic commerce, including the introduction of ID cards (identification card), digital signatures, electronic citizen projects, the TOM program (“Tdna Otsustan Mina-today”, or “I am making decisions”), electronic tax management, and the creation of online state libraries, among other projects.

In order to implement laws and regulations on state information and digital signatures, a wide range of activities has been initiated and will be followed by the launch of a program on administering document circulation among state agencies.

State databases are being modernized in Estonia to launch a search system using Internet technologies. The goal is to accelerate and simplify the process of obtaining data from numerous databases (Project X-road).

Estonia’s ICT spending is $US20 million, which is 1% of the state budget.

**Russian Federation**

The e-Russia program (2002-2010) has been approved and the Ministry of Communication is in charge of coordinating the program.

Implementation of the program will allow the entire Russian population to access modern information resources and improve Russia’s position in the high-tech market within ten years. The program will form the basis of the development of Russian society overall.

In order to implement this project by the year 2010, 76 billion rubles need to be spent. Half of this sum will be allocated from the federal budget, 30% from regional budgets and 20% from other sources not included in the budget.
It is worth mentioning that the specific components of the e-Russia program remain general and vague. Additionally, the length of time of the program raises some doubts in terms of the validity and effectiveness of the allocated funding.

Nevertheless, the e-Russia program as a whole is a necessary and positive document designed to create a favorable basis for the development of the legal environment, personnel, technology, etc. These are requirements for the creation of a knowledge economy and information society.

In the context of electronic government, the e-Russia program has two basic goals: improving the efficiency of the state bodies, and transforming civil society. To increase effectiveness, it is necessary to pass and adopt appropriate laws and regulations, to introduce high technologies in the real sectors of the economy, to train personnel, to provide access to the Internet, and to modernize state apparatus. To establish a legal society today, it is necessary to provide a certain level of transparency of the state bodies and introduce information technologies in the mass media.

In order to solve the aforementioned issues, Russia should organize a single system of management and transfer of data between the state bodies (10 billion rubles have been allocated for this task; $US315,000 as of October, 2002). Openness of authority should be maintained (9 billion rubles), a single system of document circulation should be introduced (6 billion rubles), certain laws should be developed (1.25 billion rubles), etc. The indicated sums, which constitute a third of the program budget, will be allocated over nine years.

In comparison: In Japan, $US9 billion are invested annually for the development of electronic government, in the USA – $US5.5 billion, and in Great Britain – $US3.5 billion. Thus, the percentage allocated for information technology in Japan’s GNP makes up 2.27%, in the USA – 4.38%, and in Russia – 0.61%.

For the gradual transition to electronic government, it is necessary to fulfill the following steps:

- Assess the current state of electronic government
- Develop a long-term concept, including expected results
- Formulate achievable strategic goals
- Define priorities and impact

**ASSESSMENT OF THE CURRENT STATE OF ELECTRONIC GOVERNMENT**

When creating and implementing electronic government, it is essential to analyze the following areas of activity and key factors, and to evaluate the risks and problems that need to be addressed:
<table>
<thead>
<tr>
<th>Areas of activity</th>
<th>Key factors</th>
</tr>
</thead>
</table>
| **Political sphere** | • Awareness of the political importance of electronic government  
• Management support  
• Legislative base  
• Participation of the population in state affairs  
• Management and coordination of electronic government |
| **Legislation** | • Legislation on information security  
• Ensuring security of personal information  
• Legalization of online transactions  
• Legislation on liberalization of telecommunication market  
• Tax privileges for ICT equipment |
| **Organizational conditions** | • Administrative structure and functions  
• Reform of state administration  
• Reform of government services  
• Central administration body of electronic government  
• Coordination of policy in area of ICT  
• Interstate communications  
• Managing the changes |
|-------------------------------|--------------------------------------------------------------------------------|
| **Human Resources**           | • Culture, traditions and languages  
• Level of education  
• Computer literacy  
• Educational ICT programs  
• Relation and adaptability to changes, especially in state bodies  
• Focus of government services on citizens |
| **Financial conditions**      | • Gross national product  
• Allocation of resources  
• Access to alternative financial sources  
• Partnership with private sector  
• Mechanisms on attracting investments |
| **Communication**             | • Awareness and understanding by the citizens of the role of ICT and electronic government  
• Communication channels  
• Information and knowledge |
| **Telecommunications Infrastructure** | • Telecommunications infrastructure  
• Use of telecommunications  
• Lagging behind of the remote areas  
• Software engineering  
• ICT standards |
| **Information resources**     | • Data analysis, management of information and decision making systems  
• Accessibility of data and information  
• Standardized collection and storage of information  
• Data security  
• Ability to use and analyze the data  
• Ability to manage information flow in the process of decision-making |

Based on these key factors, the following SWOT analysis focused on political, social, economic and technological aspects of electronic government is made:
**POLITICAL ASPECTS**

<table>
<thead>
<tr>
<th>Strengths</th>
<th>Weaknesses</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Strengthening of the democratization process and state administration reform</td>
<td>• Insufficient financing of ICT</td>
</tr>
<tr>
<td>• Internet boom</td>
<td>• Legislative gaps</td>
</tr>
<tr>
<td>• Time demands</td>
<td>• Lack of coordination of ICT development</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Opportunities</th>
<th>Threats</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Attraction of foreign investment</td>
<td>• Bureaucracy</td>
</tr>
<tr>
<td>• Increased transparency</td>
<td>• Piracy</td>
</tr>
<tr>
<td>• Government transformation</td>
<td>• Inappropriate use of ICT</td>
</tr>
<tr>
<td></td>
<td>• Corruption</td>
</tr>
<tr>
<td></td>
<td>• Political instability</td>
</tr>
<tr>
<td></td>
<td>• Counteraction</td>
</tr>
</tbody>
</table>

**SOCIAL ASPECTS**

<table>
<thead>
<tr>
<th>Strengths</th>
<th>Weaknesses</th>
</tr>
</thead>
<tbody>
<tr>
<td>• People are striving to learn ICT</td>
<td>• Weakness of elementary education</td>
</tr>
<tr>
<td>• ICT utilization may boost exports</td>
<td>• Low computer literacy</td>
</tr>
<tr>
<td></td>
<td>• Multilingual environment</td>
</tr>
<tr>
<td></td>
<td>• Lack of knowledge in comparison with private sector</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Opportunities</th>
<th>Threats</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Creation of new jobs</td>
<td>• Possibility of brain drain after capacity building</td>
</tr>
<tr>
<td>• Improvement of educational system</td>
<td>• Certain negative aspects of the influence of other cultures</td>
</tr>
<tr>
<td>• Internet promotion</td>
<td>• Internal resistance</td>
</tr>
</tbody>
</table>
### Economic Aspects

<table>
<thead>
<tr>
<th>Strengths</th>
<th>Weaknesses</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Attraction of external financing for electronic government projects</td>
<td>• Investors</td>
</tr>
<tr>
<td>• Transparency in government procurement</td>
<td>• Control of the budget</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Opportunities</th>
<th>Threats</th>
</tr>
</thead>
<tbody>
<tr>
<td>• High economic efficiency</td>
<td>• Corruption</td>
</tr>
<tr>
<td>• Emergence of new types of businesses</td>
<td></td>
</tr>
</tbody>
</table>

### Technological Aspects

<table>
<thead>
<tr>
<th>Strengths</th>
<th>Weaknesses</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Starting from scratch: no past burdens to bear</td>
<td>• Lack of ICT training</td>
</tr>
<tr>
<td>• Opportunity to leapfrog</td>
<td>• High cost of Internet connection</td>
</tr>
<tr>
<td>• Internet as a determining factor</td>
<td>• Heterogeneous data</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Opportunities</th>
<th>Threats</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Use of old equipment</td>
<td>• Dependency on technology</td>
</tr>
<tr>
<td>• Use of common standards</td>
<td></td>
</tr>
</tbody>
</table>

Thus, when implementing electronic government, it is necessary to take into account the following features:

- **Openness and scope.** Government services should be widely available and based on existing standards to ensure that services are accessible to all citizens at any time. An information society should reach everyone in the population, thus the state should take steps to prevent partial access of services to certain people or private companies in certain areas or settlements.
• **Focus on the needs of citizens.** Government services should increasingly focus on the needs of the citizens. Using Customer Relationship Management (CRM) systems, state bodies should analyze feedback from citizens in order to ensure high quality of services. A growing number of online services and the two-way exchange of information will encourage more citizens to use these services.

• **Integration of services.** Government services should operate as a completely integrated system and should provide access to as many of the services of different government departments and branches as possible. The system should represent a set of services of all state bodies.

• **Partnership between the government and the private sector.** Many state bodies lack skilled and experienced employees in the area of ICT, employees with the right balance of necessary expertise and management skills to oversee large-scale projects on the automation of the government’s workflow. It is important that state bodies partner with the private sector to ensure the transfer of the necessary knowledge and technology.

The following data on E-Government is based on the monitoring and evaluation of ICT as of July 2002. The full version of the assessment report on the current state of electronic government will be ready in September-October, 2002.

1) Government to Citizen (G2C)


The quality of those 30 web sites remains an issue. Most of the sites are rarely updated and no modern technological solutions that would allow contextual searches or interaction with the users have been used. Most of the websites are not registered in search engines, making it impossible to find them through the search engines.

17% of state bodies provide some information online, of which only 4% provide electronic publications and documents on a regular basis.

Of the total number of state services approved by the government from December 28, 2000 #759, only 1% of the services are available electronically.

Essentially, there is no information on the state budget or bills under consideration, however some efforts to make these available have been undertaken.

2) Government to government (G2G)

Only 25% of the computers used in the state bodies are connected to Wide Area Networks (WAN) and only 10% of state institutions have local networks.

ICT specialists working in the state bodies make up just 0.4% of the entire working population.
Expenditures on ICT make up 0.1% of total state budget expenditures.

3) Internal Efficiency

On average, there is one computer for two public servants, and one computer with an Internet connection for eight public servants.

It is worth noting that computers are used to perform daily tasks by technical staff, but not by public servants.

There are about 20 technical staff members per 100 computers in the state structures. Also, a number of small-scale specialized software programs are used to solve specific tasks.

4) Government to business (G2B)

State bodies have started providing relevant information to the private sector and nonprofit organizations through the websites. However, mass media (press, radio and TV) is used more extensively for disseminating government-related information.

---

**CHALLENGES AND SOLUTIONS**

It is clear that serious challenges face the electronic government development process.

**One:** The absence of public access to the Internet. Only 2% of the population (80-100 thousand people) has access to Internet.

The state may develop and implement a sound electronic government program offering a wide range of e-services, however, citizens may not use them due to lack of knowledge about these services and limited opportunities to access them. The marketing of electronic services is an important factor but in order to attract people to use them, it is necessary to grant access to all social groups. To address this issue, it is necessary to provide simple, inexpensive Internet access points (Internet kiosks) for the general public. These systems should be connected to WAN. Therefore, the creation of public access points in remote areas should be considered the most important task.

It is necessary to **create a network of public access points in cooperation with international organizations.**

**Two:** The informatization of the state bodies is another issue that needs to be addressed. The most important obstacle to the development of electronic services is insufficient financing and the unwillingness of ICT-trained specialists to enter public service.
State bodies are using information technologies to automate existing processes instead of reengineering and improving business processes. Each government organization uses information systems for internal needs only, and such systems are not designed to connect to each other.

Citizens must therefore access several state bodies in order to locate the necessary service. Commercial organizations also have to submit the same documents and information several times, and state bodies do not have access to a single unified database.

Budget limitations did not permit the allocation of the necessary resources for the creation of interdepartmental information systems. Also, the management culture of the state bodies and the reluctance to reform create additional barriers to integrating and developing a single information system by and for a number of state bodies.

Thus, it is necessary to **develop and introduce a single mechanism of financing ICT in the state bodies of the Kyrgyz Republic** to enable the creation of a single program for modernizing ICT in state bodies and to create uniform standards. A single mechanism would prevent the duplication of efforts and increase the responsibility of each state body.

**Three:** People expect much from the state, and transition to electronic government should be a priority. If services are offered faster, better and more effectively, it results in a positive response from citizens and private companies. The automation of state services is successful when it both involves and influences society as a whole.

The probability of success is higher when state bodies can **establish partnerships with private companies that have effectively developed their information and communication technologies.** These partnerships would ultimately establish online communication with citizens and companies.

A transformation would lead to the rethinking of the roles and structures of state bodies. Citizens will ultimately define the time, place and manner in which the e-services should be offered. Citizens would be able personalize access to the web portals of state services and use electronic government services, as well as the services offered by commercial websites. People will be better informed and more willing to participate in state affairs thanks to the easy interaction with state bodies and access to public information and official documents. The result will be the creation of information communities and the establishment of models of governing, with citizens who are heavily involved in the decision-making process.

**Four:** Electronic government is effective when it strikes a balance between the quality of electronic services, their impact on the economy and the political benefits. The relationship between the government and its citizens is more complex than the relationship between government and business because providing e-services to citizens may be influenced by certain political interests. Depending on the value of the services offered to citizens, political benefits can either further or impede electronic government-related initiatives.
Although government process automation is essential, tangible benefits become evident when fundamental changes in the approach of state bodies to the issue of dialogue with citizens and businesses are realized. The changes described in this document can only become reality when internal changes in the mode of operation of the government and the state bodies is achieved through the use of ICT.

Therefore, in order to effectively implement electronic government, it is necessary to develop and support the policy, laws and regulating structures required for the successful development of an electronic government project. In this regard, the following three basic elements must be determined:

1. Development and introduction of ICT necessary for everyday operation of the state
2. Establishment of a common structure managing various departments of the ministries and other state bodies on the basis of a single information architecture
3. Policy making and regulating on the scale of the whole country.

The following measures play an important role in achieving success:

- Analyzing accomplishments and mistakes;
- Piloting projects and conducting experiments involving new models of financing and qualified personnel;
- Attracting ICT specialists in the process of political decision-making;
- Developing clear and comprehensive programs with concrete goals and targets to be achieved.

**Implementation**

For implementation to be successful, an effective control system is needed, one that will overcome barriers to achieve necessary changes. The Council on ICT will provide financial support to projects from the Fund on Development of Information and Communication Technologies.

The Council on ICT will also work on implementing changes in the organizational structure of state bodies in order to satisfy the needs of citizens. Thus, the Council is an important body in managing the process of transformation of the government to an electronic government. To implement such changes, special working groups will be formed to manage projects in four segments: G2C, G2G, G2B, IE. Members of these groups will be selected from departments that work on implementing these projects. These groups will provide recommendations to project managers and will assist in overcoming barriers to carrying out the projects.

The Council on ICT will check the progress of electronic government and will hold meetings on a regular basis. Control measures will be in place throughout the implementation of each project.
The Council on ICT and a team of consultants have to cooperate closely with governmental bodies to ensure effective implementation of projects and rational use of resources.

It is important that the ICT Council members, the team of consultants and the Presidential Administration work together to muster enough political support to avoid internal opposition to reform.

The following bodies will carry out the management and control of the electronic government implementation plan:
- Council on ICT
- Presidential Administration and the cabinet of the Prime Minister
- President’s team of consultants

It is necessary to focus on the following issues when creating an electronic government:
- State bodies should use ICT, including the Internet, for rendering their services;
- State bodies should use information and data at both the regional and local levels whenever possible;
- State bodies should ease the work of commercial organizations by allowing businesses to obtain the information they need from a single source.
- State bodies should adopt corporate management approaches to lower costs and simplify the work of public servants, especially in the field of finance and human resource management.
- The government should create a state body to control and assess the implementation of the program.

The development of an electronic government will impact the performance of state services. It is therefore necessary to evaluate electronic government projects based on their ability to rationalize operations using information technologies.

It is necessary to create a clear chart of the state bodies to explain how the government interacts with citizens, which government services are covered and what management approaches are used. The role of each state body and the services it provides must be clearly outlined. Citizens are often forced to repeat official procedures and endure extra paperwork because of the duplication of work both within and between state agencies.

The ICT Council under the President of the Kyrgyz Republic shall select projects based on their potential impact. The projects selected should be of significant importance to citizens’ interests, reduce state costs, and increase the effectiveness of their work. People will have access to information and services through one integrated source. However, in order to carry out these projects, it is important to select qualified specialists and to conduct a detailed analysis of the projects.

Analysis of these projects should be conducted by a working group that is ultimately accountable to the President.
The working group shall make suggestions on what steps should be undertaken for state bodies to improve the quality of the services they provide considerably within the following 18-24 months. The realization of these plans will allow both state bodies and citizens to save time and money.

The goals of the working group will be to:
- Make recommendations on how multiple departments can create effective projects that are easy to implement;
- Define basic obstacles that the government will face during its transformation to electronic government and suggest possible solutions;
- Make suggestions on the development of a technological base for the integration of state services.

The activities of the working group will include:

1. Collecting information, defining strategic partners and presenting strategic vision in certain areas;
2. Identification of opportunities and integration with projects to be implemented;
3. Working out the rules, and sequence of projects according to the priorities of the state;
4. Carrying out preliminary research on the projects;
5. Defining the main barriers to implementing projects;
6. Creating a documented action plan for each area.

Also, the working group shall develop and suggest the following initiatives:

1) Project on "Common architecture for integrated electronic government services" which has two objectives:
   - Developing a structure for each electronic government project, and creating models to address technology-related issues.
   - Collecting and analyzing the information and data of all the state bodies in order to identify new solutions and ideas. The purpose is to eliminate duplication of efforts in the work of state agencies, starting with social services, security, and economic activity.

2) Project on electronic identification to create an atmosphere of trust between citizens and government. Electronic identification will ensure confidentiality and security of information, and will include the electronic signature system.

---

**PROJECTS TO BE IMPLEMENTED**

**GOVERNMENT TO CITIZEN (G2C)**

Areas of application: openness and transparency of government-related information; social security services; provision of grants, loans; taxation; security of personal information.
To ensure government transparency and openness, the following measures are necessary:

- Transition to openness, completeness of information and transparency of activities of state bodies;
- Use of ICT to minimize the costs of publishing and access to information. Existing statutory acts required to reveal certain types of documents, reports and other important information to the general public and the media. It is necessary to add a provision to existing statutory acts to require state bodies to publish information online as well.
- Identification of the type of information necessary for online publishing.
- Use of international standards (in terms of both technology, and standards of back office automation and workflow)
- Expanding the volume of information that is mandatory for public disclosure by state bodies. This may require certain changes in existing legislation.

The following should be the main principles of increasing the transparency of the state on the central and regional levels:

- Transparency of statutory acts includes the requirement for publication of documents and statutory acts that concern the interests of citizens and international organizations (including texts of bills being considered in Jogorku Kenesh, the Kyrgyz Parliament, resolutions of the government and statutory acts related to government agencies and institutions). Parliamentary hearings should also be mandatory for publication;
- Transparency of the budget process means that all state budget-related information is published in a very detailed manner;
- Transparency of procedures and results of state procurement should be achieved through mandatory online publication of messages on provisions and results of tenders, competitive bids on purchases of goods and services, sale of state property, granting of quotas and licenses, etc;
- Transparency of state ownership management means publishing results of state-owned inventory, profits and losses of state enterprises, and reports on the dividends transferred to the state budget;
- Transparency of state audit implies publication of reports on the results of the audit that is carried out by the Accounting Chamber;
- Transparency and availability of statistical information on economic public administration indicators.

**GOVERNMENT TO GOVERNMENT (G2G)**

G2G projects allow state bodies to use the same information and databases on both the state and local levels to maximize the return on investment in the ICT sector and to provide the highest possible integration of the main functions of the state.

Application fields: economic development, resource management, public safety, combat violations of law, and management of extreme situations.

The implementation of this component requires a common technological platform for all state bodies. It should also create a forum for discussing the issues related to the
successful automation of public services. Some of the issues include security and the protection of the data needed for exchanging information. On a practical level, it is important to forge agreements and to define the basics of business interactions. In addition to the use of information by state bodies, a description of technological solutions must be available so that software engineers working on new projects can easily integrate them into existing state systems.

The measures are the following:

- To create common and/or compatible standards for building and accumulating information in the state databases;
- To coordinate activities of the state at all levels (for example, compatibility of the data exchange standards, digital signature enforcement);
- Inventory and step-by-step publication of government statistical databases (without violating personal data security) including subsequent updating.
- Development of interdepartmental electronic document circulation systems that would reduce the terms of processing various documents between various state bodies. It is necessary to ensure compatibility of the standards for information storage and document flow in various departments, including information exchange between authorities at different levels, including local government.
- Development of systems of horizontal interaction between regional and local authorities for knowledge-sharing and exchange of information on best practices and lessons learned related to solving various social and economic problems, as well as capacity building purposes. This will improve the quality of administrative decision-making processes.

**GOVERNMENT TO BUSINESS (G2B)**

These projects will simplify the work of commercial organizations by eliminating redundancy in the bureaucratic procedures of the state bodies and providing online support for businesses. Also, digital dialogue will be supported using XML language.

Area of application: taxation, support of competition-based economy, property protection, economic development, trade, licensing, and offering of grants and credits.

It is necessary to consider providing e-government services in the following fields:

- Taxation (State Taxation Agency, Social Fund, etc.);
- Statistical reporting of enterprises (National Statistical Committee);
- Customs documentation when exporting/importing goods and services (State Customs Agency);
- Reporting of the companies upon issuing additional stocks;
- Registration of intellectual property rights; licensing (Kyrgyz Patent);
- Government procurement;
- Online auction of stocks and bonds (Central Bank).
INTERNAL EFFICIENCY (IE).

Internal Efficiency projects enable state bodies to utilize the most successful methods and approaches in the work of commercial organizations, especially in the field of human resource management, financial management, and record-keeping.

Areas of application: human resource management, finance, and business management.

Measures are the following:

- Creation of an electronic mail system and document circulation, which will be part of an integrated information system. It will support the following primary tasks: departmental workflow management, coordination of the management activities over regional administrations and territorial divisions, and internal office work.
- Establishment of a step-by-step transition to paperless document circulation. Paper documentation will eventually be phased out entirely in favor of electronic circulation, which will become mandatory;
- Development of a system of interdepartmental document circulation, including development of local area networks and intranet;
- Creation of human resource management systems, which should then be transformed into an effective management system of the entire organization;
- Implementation of the electronic government program should be coordinated with the overall program of administrative reforms.
<table>
<thead>
<tr>
<th><strong>PROJECT</strong></th>
<th><strong>CONTENT</strong></th>
<th><strong>DATE</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Government to Citizens</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electronic government services</td>
<td>Conducting research to identify 10 leading state bodies whose services are in high demand</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Further development of the portal of the government services to combine all electronic government sites</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Creation of Public Access Points</td>
<td></td>
</tr>
<tr>
<td>Public access points</td>
<td>Preparation and implementation of a project based on India’s experience</td>
<td></td>
</tr>
<tr>
<td>Introduce Internet kiosks in remote areas and on the local admin. level</td>
<td>Preparation and implementation of a project based on India’s experience</td>
<td></td>
</tr>
<tr>
<td><strong>Government to Citizen</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>System of electronic taxation for organizations</td>
<td>Creation of electronic system of taxation for commercial organization to simplify control of tax flows</td>
<td></td>
</tr>
<tr>
<td>Consulting services for organizations</td>
<td>Creation of information system for commercial organizations on issues of environment protection, public health, safety, employment and taxation</td>
<td></td>
</tr>
<tr>
<td>Getting micro-credits online</td>
<td>Use of search engine to simplify search of information on micro-credits</td>
<td></td>
</tr>
</tbody>
</table>
Government to Government and Internal Efficiency

Source: http://www.developmentgateway.org/ 08/2002