

IT investments policy of Estonian Government

Country paper

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1 Creation of the IT infrastructure

After the restoration of independence in Estonia in 1991 the creation of the IT infrastructure of the public sector started practically from the beginning. In the first years the public administrative agencies used the allocations, appropriated to them from the state budget, in a widely different manner, as regards the development of computer engineering; by 1993 the availability of IT equipment in various governmental institutions was utterly out of proportion, so was the use of IT equipment. To streamline the systemic development of IT, the Government of the Republic passed in 1993 a resolution to use, as from 1994, a certain percentage of budgetary means for development of the IT environment. In the state budget was created an additional Article of expenditure for IT investments and established a special routine, under which the funding from that Article was to be applied for, different from the conventional procedure of budget formation. The said routine stipulated that ministries, county governments and constitutional institutions will submit to the Department of the state information system their IT investments applications with the meaningful descriptions of work in form of “application projects”.

The independent expert commission consisting of IT specialists was set up for consideration and appraisal of the applications. The commission submitted proposals on allocation of the marginal sum, agreed upon by the Ministry of Finance, for IT expenses between the vying applications, in accordance to their substantiation and weight.

The routine of application for IT expenses stipulated that for the governmental agencies the IT investments will include: the expenses on acquisition of IT hardware equipment, the expenses to be made for purchase of authorised or licensed software products, those upgrades and additions, the expenses made for creation of information systems or parts thereof, by outsourcing the jobs.

Besides the financing of IT expenses of public administrative agencies from Article of expenditure for IT investments, the basic national registers, the strategic and infrastructural

¹ the document is compiled using the material by Imre Siil, Ivar Odrats and Katrin Edasi

information systems as well as the basic expenses for carrying out the IT-related target programs, are also financed from that Article. These are allocated to the Estonian Informatics Centre, where the respective contracts are made and the fulfilment thereof observed. As a matter of fact, the planning and evaluation of the IT investments has remained unchanged, until the year 2000. Although the amount of money of the IT- budget has increased from year to year, it has remained, as compared to the whole state budget, through the years, in the proximity of 1%. It was 2-3 times less than asked. Still this has put computers on the desks of almost all employees of ministries, authorities and inspections, as well as on those of most employees of most government institutions. So it may be said that IT infrastructure had been created on the basis of which it became possible to start with the design of major projects. This caused the need to draft and elaborate the information policy of the state as a whole.

2 Drafting of the Principles of Information Policy

In 1998 the exchange of views and opinions concerning the information society in Estonia was by and large related to the drafting of the Principles of Information Policy. Every citizen was given a chance to speak his/her mind. The above process, originated in the Estonian Council of Informatics was tackled in high echelons of power: the document was discussed in the Government of the Republic and thereafter in Riigikogu (Parliament), whereto the Government submitted it. There were a lot of amendments and corrections introduced into the bill. It was emphasised, in particular, that the information policy must foster the creation of a competitive economy, underpinned by demonopolization, speeding up of the property reform, and promotion of electronic trade and banking. Riigikogu added to the Foundations of the Information Policy the subclause concerning the protection of intellectual property and calling for a relentless fight against all sorts of distributors of pirate copies of data carriers and multimedia carriers. Much attention has been paid in Riigikogu at regional aspects of formation of the information society. The role of the state is to guarantee the universal abidance by the principles of openness. Riigikogu stressed in its resolution that public organisations must duly provide information regarding their activities. The state must become the supplier of services. Information should be provided as a comprehensive and integral package, helping people to find out the items they need in the overwhelming flood of information. To facilitate access to information by each and everybody, the state must set up information access points at schools, public libraries, post offices etc. The citizens will have to be provided access to decision-making processes and documents of the bodies of state

authority, by means of electronic channels. If this process should also generate the mechanisms of adequate feedback, we would really be able to talk about the formation of an "electronic democracy".

Estonian Information Policy was approved by Riigikogu 13th of May 1998. See APPENDIX. The Principles of Estonian Information Policy is document, which gives general rules for IT and its policy in Estonia and mostly regulates the IT development in public sector. According to the Document information policy is a general part of public policy. It reflects the principles of the actions of state in the creation of an information society - areas of interest and regulation mechanism - in an area of rapid technological change. Principles of Estonian Information Policy is a document describing shared societal values that serve as a basis for making public policy decisions to support the rise of the information society. Supported by different political forces, these principles ensure sustained movement towards the information society. The Document prescribes general rules for such topics as information society and areas of state intervention, goals to achieve - problems to avoid, developments in the private sector, legislation, taxation, developments in the public sector and the elements of implementation of information policy.

3 Action Plan of the Information Policy

The action plan for the Estonian information policy makes this general document more specific. It also takes into account the perspective accession of Estonia into European Union. The action plan consists of four parts. The first part, the introduction, characterises the background, the goals, the intended audience, the scope and the principles of the plan. The second part of the document is devoted to ways of making this document work. It presents an overview of associated mechanisms, interested parties, financing, time schedule, priorities, opportunities, risks, and evaluation of results.

The main body of the plan is presented in the third part. It includes sections devoted to:

- The information society and awareness about it, including protection of personal data;
- Accession to the European Union;
- Legislation development;
- Creating a competitive economy, including improvement of private sector and support of the information industry in Estonia;
- Education, research, and development;
- Regional development;

- Modernisation of government, including the open government issues, state budget, IT procurement, state information systems, and statistics;

Each section presents a number of projects in its area, giving the name of the project, the intended intermediate result, the implementation mechanism, contributor(s), financing, proposed duration, and reference to the underlying document. Characteristics given for each project can be used as performance assessment parameters for policy implementation.

The fourth part characterises completed projects.

4 Areas and guidelines for IT investments requests in 2001

As said before, the planning and evaluation of the IT investments has remained unchanged, until the year 2000. In the IT budget requests of 2001, other direct costs of IT application and development, which were so far covertly financed under other expenditure items of the state budget, were taken into account for the first time. These were costs of data communication, hardware and software maintenance and annuity premiums of software licenses

For the assessment of received requests the State Secretary's directive formed an IT budget expertise and supervision committee of 13 members; which proceeded from the following principles:

General preferred development sectors:

- Projects noted in the state information policy outline and coalition agreement;
- ICT obligations provided by law;
- So-called "information society" projects, i.e. projects the purpose of which is to render a better service to the citizen or which help to improve the service process;
- Priority of requests in the preference list of ministerial development projects;
- Joint projects (state/local government/private enterprise);
- Continuing projects that end in 2001

Recommended preference of development of state information systems:

- Projects arising from coalition treaty;
- Projects related to information policy outline;
- Document management;
- Databases;
- Interactive solutions based on the Internet technology;

Preferences arising from IT application conditions or aims:

- Existence of an informatics manager and IT staff in an agency;

- Balance of hardware, software and project works requests;
- Compliance of legal demands of the used software;
- Capacity of an organisation to administer a project (30,000 USD per one full-time IT specialist — to the extent of the whole IT budget);
- Average market prices that are the basis for requests for maintenance and projecting works, software and hardware;
- General ICT situation of an agency;
- Economic and social benefit of a project;
- Existence of an electronic service rendered by the state to the citizen.

Taking into account the results of the Cabinet discussion on IT budget principles, the following costs were brought out separately:

1. Basic costs:

- Costs of replacing outdated computers (20 % of work place computers);
- Costs of annuity premiums of software licenses (purchase of new software licenses excluded);
- Costs of payment for maintenance contracts of software and hardware;
- Costs of data communication.

The financing of basic costs was considered a priority because the daily functioning of systems depends on that. The basic costs of ministries and chancelleries were planned as sum total of their administration field.

2. Development costs of state information systems:

The development costs of information systems had to be applied for separately as project-orientated for each project and administrative agency.

In the finance discussion the committee proceeded from the principle to finance to full extent those projects that will be completed in 2001 and the request of which is explained in detail.

The committee decided to finance the following actions as separate big joint projects:

- E-government: target program of document management of state agencies;
- Databases reform: creation of a common service layer of databases; development of services rendered by the state via Internet to the citizens and the application of systems for using state's basic registers;
- Implementation of digital signature;
- Data communications reform of the public sector: the sums for the functioning of backbone network and for the joint procurement of external Internet connection were planned as base costs.

3. Co-ordination costs of state information systems:

Co-ordination costs were required for financing several joint actions and also for joint support actions. Allocated funds are necessary for the organisation of work groups work, analysis and monitoring of IT situation in agencies, standardisation, organisation of information days, publication of yearbooks and other printed works, organisation of joint training, etc.

5 What do the IT audits show?

In the years from 1993 to 1999 three hundred and fifty IT development projects were launched in the public sector with the total cost of 56,000,000 USD. Two thirds of the development activities were the development projects of IT infrastructure (computerised work places, computer networks, data transfer etc), one third is connected to development of information systems and databases in the institutions. By the year 2000 every public officer who needed it had a computerised workplace and almost 90% of computerised work places had Internet connection.

Up to now twenty information systems have been examined in the course of audits by the State Audit Office. Three of the audited systems turned out to be a total failure. With regard to three systems preparedness for the year 2000 was assessed. Recently, during the government wide audit "The effectiveness of the development activities of information systems" we analysed the development of fifteen the most financed information systems and brought out the deficiencies in the design, implementation and application of the systems. One of the essential conclusions of the last-mentioned audit was that in 1993-1999, depending on the historical and technological development, most of the created information systems and databases were institutional. That means that they are not adequately adapted for cross-institutional co-operation and for rendering services outside their governing area. Therefore a considerable amount of the potential of the created information systems in raising the efficiency of the state apparatus and render better service citizens remains unused. However, it should be noted that in a short time a contemporary information technology infrastructure was developed in the Estonian public sector and the development of information systems was launched. The decentralised management of IT investments guaranteed a sufficiently rapid and uniform development in the whole public sector. Several reports and overviews by internationally recognised consultation companies who have carried out the analysis of the situation positively assess the readiness of Estonia to meet the challenges of the information society.