



# Resources to Serve Everyone

Policy of the Government of Iceland  
on the Information Society  
2004-2007



## Table of Contents

Prime Minister's address	2
Introduction	4
Resources to Serve Everyone	6
Opportunity	8
Responsibility	13
Security	15
Quality of Life	19
Appendix	23

# **Resources to Serve Everyone**

Policy of the Government of Iceland  
on the Information Society  
2004-2007

## Success demanding continued work

In governmental policy from 1996 on the information society, ambitious aims were expressed on further developing the information society in Iceland. Iceland shall be in the forefront of the world's nations in the utilisation of information technology in the service of improved human existence and increased prosperity. This policy has pointed the way towards the added use of technology for the benefit of the general public and the employment sector.

Ever since 1997, a project has been underway towards developing the Icelandic information society, based on the policy formulated in 1996 and directed by the Prime Minister's Office. This project was formally completed in February 2003, after finishing an appraisal of its results, which on the whole concluded that the project had achieved considerable success. It was decided, therefore, to follow up this success and review the policy in the light of the experience gained so far.

Iceland is in a favourable position to utilise information technology. Regarding public access to computers and the Internet, Icelanders were at the forefront of all nations in 2003. The same may be said about various other aspects of the information society, which are compared in international surveys. Great progress has been achieved, for example, in certain areas of business life. In many Icelandic schools, information technology has become an ordinary part of school activities, and in public administration the ministries and national institutions have stridden ahead.

In some areas, however, development has been slower than anticipated. In many parts of the country, access to high-speed connections through



the telecommunications system remains limited and in some instances unavailable. This will have to be rectified through systematic measures. Thus, Icelanders must make an all-out effort to maintain their strong position in international comparisons concerning this field, and it is necessary to take decisive action in those areas of society where technology is not being utilised to a desirable extent.

In the present paper, the Government of Iceland introduces its reviewed policy on the use of information technology in Icelandic society. During formulation of the policy, suggestions were requested from a great number of interested parties throughout society, with the prime intent of creating a future vision, a common understanding, and a desire for the general public, business life and governmental bodies to join hands in taking advantage of the opportunities offered by technology for improving Icelandic society. The rallying call is for responsible participation by all fields of work, private organisations, the directors of government institutions – in fact by everyone – so that this may succeed.



Davíð Oddsson  
Prime Minister



## Introduction

The aim of the governmental policy from 1996 was to bring Iceland to the forefront among nations in the utilisation of information technology. The present situation is that computer ownership and the use of telecommunications are more widespread in Iceland than in most other countries. It seems appropriate, therefore, to devote some time to considering the main tasks to be tackled in this important field in the coming years. As before, the objective is to maintain Iceland's leading position among nations as far as information technology is concerned; points of emphasis, however, need to be more clearly identified. Kilobytes and systems, hardware and software should not be the central topics of discussion, but rather how the citizens of this country can benefit from technology to improve their lives and make their communities more prosperous.

**The individual, his opportunities and welfare in society are the guiding principles of the policy published here. Information technology provides individuals, industry and public service with opportunities to benefit from the resources contained in information, knowledge and innovation. Consequently the policy carries the title:**

**Resources to Serve Everyone - Policy of the Government of Iceland on the Information Society 2004-2007**

Information technology should first and foremost be regarded as an instrument for achieving an improved quality of life for all the people of Iceland, for every community all over the country. The policy rests on four main pillars: seizing opportunities, ushering in change in a responsible manner, ensuring security and enhancing the quality of life.

The greatest opportunities relate to innovation. The competitiveness of Icelandic industries in the community of nations is based on being able to make use of new knowledge and on applying it as widely as possible.

The smooth and efficient application of information technology will without doubt enable the nation to tackle tough competition in a global context. It is necessary, therefore, to emphasise the need for Icelandic society to adapt to the rules of procedure in the international community and develop the capacity to create wealth generated by new knowledge and new technology. For this purpose, the state can stimulate a strongly competitive environment where individuals and companies are given the chance to confront the diverse challenges that await us in the field of information technology.

Information technology has increased human communication. With new telecommunications technology, a media revolution and digital communication systems Iceland has been drawn into the whirlpool of global culture. It is important to strengthen the position of Icelandic culture in this new technological environment, taking advantage, at the same time, of the opportunities created by its special characteristics. Thus, Icelandic culture is also a resource and a wellspring of innovation.

New technology engenders significant changes in our daily environment, working methods and the organisation of companies and institutions. Technological changes have to be accompanied by responsible planning where each and every person has a clear concept of his area of responsibility.

It is necessary to continue the development of secure networks and information systems. A solid framework has to be created to organise the use of information technology for individuals, companies and institutions and to prevent the technology from being abused, resulting in people's interests being downtrodden.

The information society is a concept that has been used about our kind of community, characterised by the general public gaining access to huge quantities of information and services that know no bounds. Communications among people have become more varied and convenient and less expensive than ever. In the wake of the information society, the importance of knowledge and the knowledge industry to national economies has grown steadily. Knowledge is preserved, rendered accessible and utilised for innovation. As it is used, it expands and becomes the most important resource of companies and individuals as well as nations. Knowledge is a prerequisite for the knowledge industry and the foundation for the next stage in the development of the information society, which has been called the knowledge society.

The policy presented here is for the next four years, 2004-2007. It is based on objectives generally connected with the information society, while focusing on developments that are leading to an even stronger emphasis on knowledge.



## Resources to Serve Everyone

The pivotal issue and future vision on which objectives and actions will be based are as follows:

Individuals shall have a variety of opportunities in a democratic society which is at the forefront in utilising information and knowledge.

Everyone shall have leeway to mature, to achieve improved quality of life, and to shoulder responsibility.

In order to attain these aims, the opportunities involved in the strengths and special traits of Iceland and its people must be exploited.

The right tool for this is secure and effective information technology.

The future vision consists of four key factors, more exactly expressed by the following main objectives:



## **Opportunity**

Individuals and companies shall be provided with increased opportunities for exchanging and seeking knowledge, communicating, and conducting business wherever and whenever they wish.



## **Responsibility**

Leaders in every area of society must shoulder responsibility and cooperate so that information technology will be used for the benefit of citizens and so that diverse individuals will be able to benefit from it.



## **Security**

Citizens and companies shall be guaranteed access to a secure, reliable, high-speed network at competitive prices. The security of information and the protection of personal privacy shall be guiding principles in developing the information society.



## **Quality of Life**

Added quality of life and a richer society shall be supported by exploiting the potential of information technology in education, culture and health, along with other community sectors.



# Opportunity

**Individuals and companies shall be provided with increased opportunities for exchanging and seeking knowledge, communicating, and conducting business wherever and whenever they wish.**

The constant development of technology goes hand in hand with its ever-increasing use and the more diversified services on offer. The capacity of technology has far surpassed what society has made use of till now.

Democratic modes of government can be further strengthened through the possibilities offered by new technology, thus contributing added quality to public administration. The administrative system has to adjust to altered circumstances and focal points in society, with the aim of improving services to individuals and increasing flexibility, economy and efficiency. This will further the opportunities of individuals to exchange and to seek knowledge, to communicate, and to obtain public services wherever and whenever they wish.

One prerequisite for a democratic form of government is that individuals be enabled to observe and to become acquainted with the activities and operations of public institutions. This allows each and every person easily to form an objective opinion on topics of government and to provide the government with restraints. The potential of government to communicate information and the opportunities afforded the public to access such information have increased dramatically in the past few years - not only through the advent of information technology, but also through passing the Information Act and other regulations on access to government information.

The introduction of e-government takes a long time, calls for huge expenditure and requires considerable administrative re-organisation. In the long term, however, e-government is undoubtedly in the taxpayers' interest, providing them with better service at lower prices.

Companies have diverse opportunities. Technology may be used to increase productivity, whether in conventional business operations, office work or

general government administration. New classes of employment, based on the resources of technology and knowledge, are gaining a foothold. Industries based on information technology and knowledge have the capacity for becoming mainstays of the Icelandic economy. Globalisation and consequent fierce competition stimulate companies to adopt progressive technology and modern business methods. The development of industries based on knowledge and information requires support, innovation needs encouragement, and obstacles to the use of technology must be removed.

Technology should be regarded as an open door for opportunities in industry. It has been demonstrated over and over again that in Iceland the use of technology is more widespread than in most other countries and that the nation is interested in and motivated to adopting innovations. Thus the Icelandic employment sector is in an ideal position among nations to pioneer in introducing e-government and e-commerce.

## Main objectives and implementation

### Democracy and government administration

1. Public administration - both on national and local government levels - should emphasise e-business and e-government. This involves, for example, the provision of electronic services by public institutions wherever it leads to improved efficiency and services for the benefit of the public and of industry. The possibility of using relatively simple technological equipment to communicate with administrative bodies should be emphasised, along with the adoption of new means of communication. Nevertheless, a choice must always exist, so that those who cannot make use of the technology can continue to avail themselves of conventional modes of service.

Under the auspices of the Prime Minister's Office, a special project management team shall be established to focus on e-government and shall have the task from 2004 to 2007 of assisting and encouraging public institutions in their efforts towards this main objective. In addition, the following committees shall be appointed and shall complete their assignments during 2004-2005:

- committee on the technical aspects of electronic case procedures
- committee on the preservation of electronic data
- committee on registering metadata for public information.

**Responsibility:** Prime Minister's Office in consultation with other ministries.

2. Special consideration should be given to ways in which small administrative units can adopt e-government and adjust to altered circumstances, considering whether their number can be reduced, whether they can be unified or whether they can increase co-operation.

**Responsibility:** All ministries.

3. An electronic service utility - a comprehensive portal - will be established to play a key role in communicating information and e-government. The portal ought to aim at the general requirements of individuals and companies in Iceland and abroad which communicate with government organisations. The objective will be to facilitate access to public services in such a way that the user will not need to know in advance which organisation provides the service he or she requires. The service will be accessible 24 hours a day, every day, all year round. The information and service will be the responsibility of ministries as well as of government and municipal organisations. Wide-ranging co-operation will be sought with bodies that communicate important information to the public. A project management team on e-government, appointed by the Prime Minister's Office, will be asked to organise the task and seek consultation with municipalities and other parties on its implementation in 2004.

**Responsibility:** Prime Minister's Office.

4. The general policy to be followed is that of making the most important public information accessible to the public as well as to companies at a minimum cost. This policy should be fulfilled by 2005.

**Responsibility:** Prime Minister's Office.

5. The means and the areas for potential increases in consultation and dialogue between the public and official institutions are to be investigated (2004-2005), for instance by conducting experiments on establishing discussion boards where opinions can be exchanged on specific matters. Such discussion boards are well suited to the ideology of citizen democracy and people's increased involvement in organising their immediate environment. Municipalities, ministries and governmental institutions will be encouraged to establish such discussion boards.

**Responsibility:** Prime Minister's Office (the survey); Ministry of Social Affairs in co-operation with municipalities.

6. Preparations are to begin for a centralised electoral roll to use in municipal and parliamentary elections, with the object of voters being able to attend any polling station for elections. The target is furthermore that it will be possible to use information technology for the voting process itself at the polling station. It is suggested that the Ministry of Justice and the Ministry of Social Affairs conduct a joint experimental project in this field during the next municipal elections in 2006.

**Responsibility:** Ministry of Justice and Ecclesiastical Affairs; Ministry of Social Affairs.

7. Public purchases of operating supplies are mostly to occur electronically by 2005.  
**Responsibility:** Ministry of Finance / State Trading Centre.
8. Public institutions should tender certain core functions, software development, and services in information technology and its operation where this can be arranged and is considered practical. The tasks of the government ought to be solved in the most feasible way, e.g. by private companies taking on such tasks if they can then be completed more successfully. Thus increased flexibility shall be the aim in operating public institutions.  
**Responsibility:** Ministry of Finance.

## E-business and the employment sector

1. Information technology should be exploited to strengthen industry, create new employment opportunities, stimulate innovation, and nurture spin-off firms. The development of an information and knowledge industry needs continued work, e.g. by means of experimental projects and co-operative ventures involving public institutions and private companies to create new solutions. Special emphasis ought to be placed on those areas of operation where Icelanders possess strong specialised knowledge.
2. Research needs to be increased on the uses and characteristics of technology as well as on the requirements of the public and of business.
3. Obstacles to e-business are to be removed from laws, regulations and the operating procedures of public bodies.
4. The competitive position of information technology enterprises vis-à-vis public companies will be secured.
5. It is suggested that information technology be specially treated by the Science and Technology Policy Council; in this context, formulating a specific target plan on information technology might be considered.  
**Responsibility:** the above tasks to be led by the Ministries of Industry and Commerce, although related to yet other parties.
6. The Icelandic tourist industry should be assisted in adopting e-commerce to a greater extent so that bookings and payments can generally be completed electronically. Companies within tourism need to be encouraged to install high-speed connections to the Internet, this being a necessary aspect of marketing operations which will help provide both foreign and domestic tourists travelling around Iceland with ready access to communal information portals.  
**Responsibility:** Ministry of Communications.

## Promotion and raising awareness

1. The technical and legal aspects of e-commerce should be promoted. Concise information needs to be compiled and, among other things, made accessible on the Internet.  
**Responsibility:** Ministry of Industry and Commerce.
2. The scientific community, business life and the public should be informed of and guaranteed continued access to international databases available through the Internet (cf.[www.hvar.is](http://www.hvar.is))  
**Responsibility:** Ministry of Education, Science and Culture.
3. An overview ought to be prepared of the electronic services already offered by governmental bodies, with individuals being encouraged to utilise the opportunities suiting each particular person. Work should also proceed on systematically presenting individual projects to government employees so that they may be familiarised with new developments and the state of the art at each moment. This task shall be launched in 2004.  
**Responsibility:** Prime Minister's Office; Ministry of Finance.

# Responsibility

**Leaders in every area of society must shoulder responsibility and co-operate so that information technology will be used for the benefit of citizens and so that diverse individuals will be able to benefit from it.**

Society is undergoing a period of radical change where new opportunities call for original solutions that some people may perceive as threats. There are obviously more opportunities for those who have the motivation and know-how to take advantage of them. The young have a head start on the older generation, finding their way better when it comes to collecting and communicating information. There is a risk of some groups not having the ability to avail themselves of technology and thus becoming disadvantaged in the information society. This must be dealt with to prevent a gap forming between those who possess know-how and those who do not.

Everyone should be given the opportunity to acquire the necessary basic skills for participating in the information and knowledge society on their own terms. The public sector, not in the least the education system, carries heavy responsibility, though this is also the case for employers, employees and individuals. Skill in the use of information technology has to become as natural as the ability to use various electrical appliances, telephones or cars. Access to computers and the Internet should seem a matter of course, e.g. in workplaces and public institutions.

Directors of companies and institutions are expected to shoulder their responsibility to lead society through the period of change towards e-business and e-government. This responsibility also involves the adapting of operations, the merger of work units where suitable, and striving towards technical co-ordination within and among companies.

Parents are facing the fact that with the advent of new communications media children now have virtually unlimited access to information and various types of material in their homes and everywhere. Although this promises huge potential for self-development and education, it also entails various hazards. Parents and schools will have to cope with the new situation and assume responsibility for the computer, Internet and telephone usage of their children.

# Main objectives and implementation

## Access for everyone

1. Convenient access to sources of information and knowledge needs to be ensured. This is to be accomplished, for example, by the ready availability of computers and the Internet in schools and Iceland's libraries and by further strengthening services for individuals at these establishments. All the country's main libraries are to receive support in installing wireless networks for access by their customers.  
**Responsibility:** Ministry of Education, Science and Culture.
2. Public access to the Internet shall be established in some of the main municipal and state service institutions at the same time as their service becomes accessible on the Internet. Institutions should be urged to prepare the introduction of new service elements carefully, to guide their customers adequately, and to instruct them on gathering information and availing themselves of electronic services. Special emphasis will have to be placed on institutions involved in health and social welfare.
3. A selection of courses needs to be guaranteed for those who are at a disadvantage in the information society. Companies ought to be encouraged in assisting employees who are in the greatest difficulty.  
**Responsibility:** Ministry of Social Affairs.
4. It must be ensured that electronic services of the public sector are adapted to the needs of varying groups, e.g. the blind, visually debilitated and handicapped. Companies should be urged to follow the same policy. Standards or guidelines are to be formulated by the consultation group on the Government Website in co-operation with the Ministry of Social Affairs.  
**Responsibility:** Prime Minister's Office; Ministry of Social Affairs.

## Everyone's responsibility

1. Special attention shall be paid to the welfare of children in these times of change. Parents and schools must be encouraged to shoulder responsibility for the computer, Internet and telephone usage of their children as the younger ones seek routes through the complications of the information society.  
**Responsibility:** Ministry of Education, Science and Culture; Ministry of Justice.
2. Assistance shall be provided for research into the effects of computer games on children and young people.  
**Responsibility:** Ministry of Education, Science and Culture.



## Security

**Citizens and companies shall be guaranteed access to a secure, reliable, high-speed network at competitive prices. The security of information and the protection of personal privacy shall be guiding principles in developing the information society.**

Access to high-speed connections and prompt, secure telecommunications services are a key factor in the development of the information society and of settlement in Iceland. A long-term aim is that all Icelanders who so wish can obtain a high-speed connection so as to be able to reap maximum benefit from the advantages of the information society, electronic services and other services made available by such access.

A prerequisite for private companies as well as the public sector being able to offer services aided by information technology is that people trust these services. As the use of information technology continues to grow, it is important to bolster the security of the Internet and of data. Since telecommunications are international in character, it is essential that Icelanders join other nations in these matters, acting as partners in international co-operation and as members of the international institutions which tend to security aspects of the information society. Secure telecommunications are not only a cornerstone to business operations and government administration but also of major interest to individuals. Government authorities will have to define their role more distinctly, clarify the division of work in the administrative sector and show ways of enhancing public awareness of personal protection, security issues and the approaches available in these areas.

# Main objectives and implementation

## Telecommunications

1. During 2004, a long-term policy shall be formulated regarding telecommunications in Iceland.  
**Responsibility:** Ministry of Communications.
2. Measures shall be taken to ensure public access to inexpensive and secure telecommunications. Solutions need to be found for ensuring that all Icelanders who so desire, including residents of sparsely populated areas, can connect to a high-speed network and enjoy adequate telecommunications service.  
**Responsibility:** Ministry of Communications.
3. The aim is that all the principal government institutions will be connected to a high-speed network by 2006 and secure communications achieved between them during the same year.  
**Responsibility:** Ministry of Finance in consultation with the Ministry of Communications.
4. A high-capacity connection shall be built up between Icelandic university and research institutions and research networks abroad, ensuring Icelanders the option of participating in international research and development.  
**Responsibility:** Ministry of Education, Science and Culture; Ministry of Communications.
5. Medical institutions are to be connected in 2005 to a health-service network with efficient high-speed connections.  
**Responsibility:** Ministry of Health and Social Security.
6. Improvements shall be effected in accessing mobile-telephone services on Iceland's public roads. The Public Roads Administration is to address this task in consultation with telephone companies, and operations shall be completed by 2005.  
**Responsibility:** Ministry of Communications.
7. Support shall be given to developing a transmission system for digital television that will reach every section of Iceland.  
**Responsibility:** Ministry of Communications in consultation with the Ministry of Education, Science and Culture.
8. Municipalities will be encouraged in their efforts to provide all compulsory schools and the leading cultural institutions under municipal control with high-speed connections by 2005.

## Electronic signatures

1. The policy will be to aim for the general and widespread use of electronic certification so that any communicating partner may be positively identified; electronic signatures and coding shall be introduced insofar as is deemed appropriate.  
**Responsibility:** Ministry of Finance.
2. An open but standardised market is Iceland's goal, through the use of electronic certificates and certifying services. The state's requirements shall be published with regard to the content, form and handling of electronic certificates for transactions with national institutions. Those requirements might become the model for a general Public Key Infrastructure (PKI) for industry and municipalities. A simple system, economic in operation, should be the object, so that cost may be distributed in proportion to user benefits.  
**Responsibility:** Ministry of Finance.
3. European and international standards shall be adhered to, aiming for integration with the Public Key Infrastructure of neighbouring countries when the time seems right.  
**Responsibility:** Ministry of Finance.

## Standardisation and consultation

1. The introduction and increased use of international standards and recognised methods will receive encouragement in Icelandic society. Policy is to be formulated on applying standards for e-government, with the objective of providing guidance for constructing public administration systems.  
**Responsibility:** Prime Minister's Office; Ministries of Industry and Commerce.

## Ethics and security

1. A policy on information technology shall be created for subject categories pertaining to the Ministry of Justice and Ecclesiastical Affairs.  
**Responsibility:** Ministry of Justice and Ecclesiastical Affairs.
2. A committee shall be appointed to discuss the division of work between public bodies in security matters having to do with the utilisation of information and telecommunications technology, protection against electronic terrorism, junk mail, consumer protection and such ethical issues as immoral material on the Internet, etc. Furthermore, the committee is to present suggestions on requirements for revising Acts

of Parliament concerning the integration of information technology, telecommunications and the mass media. The committee shall complete its assignment no later than 2005.

**Responsibility:** Ministry of Communications.

3. Support shall be given to improvements to the security of information systems and to the enhanced protection of private information. Public institutions and companies will be encouraged to deal in an organised manner with security matters in their information systems, e.g. by adopting the use of security standards.

**Responsibility:** Ministry of Finance.

4. Support shall be given to communicating guidelines and educational materials on security matters, consumer protection, the protection of privacy, and controversial ethical issues related to the ever-growing use of technology. Such information shall be accessible on the World Wide Web no later than 2005.

**Responsibility:** Ministry of Communications / Post and Telecom Administration.

5. Security standards are to be established for the operation of general telecommunications networks in Iceland as well as for Iceland's connections abroad, based for instance on the principle of ensuring security in telecommunications connections both domestically and between Iceland and other countries. The minimum requirement shall be that two submarine cables are always connected to the country in addition to its reserve connections by satellite.

**Responsibility:** Ministry of Communications / Post and Telecom Administration.

6. Iceland's participation shall be increased in consultations abroad on security matters and protection aimed at securing the uninterrupted operation of networks and information systems. Furthermore, a Computer Emergency Response Team (CERT) is to be set up which shall have links with comparable teams abroad and have the role of reacting to external interruptions in the operation of networks and information systems.

**Responsibility:** Ministry of Communications.

A teal background featuring a close-up, slightly blurred image of several apples. The apples are dark green with some lighter highlights, suggesting a natural, fresh setting. The background is partially obscured by a white curved shape on the left side, which contains the title.

## Quality of Life

**Added quality of life and a richer society shall be supported by exploiting the potential of information technology in education, culture and health, along with other community sectors.**

To ensure continued improvements in the quality of life, Icelanders need to adopt information technology and the information society's way of thinking. Because of ever-increasing globalisation, the Icelandic people must protect and preserve their cultural heritage, ensuring that future generations will be conscious of their cultural and historical uniqueness in the community of nations. This uniqueness also offers opportunities for innovation which the employment sector may be able to utilise in the future.

The human resources latent in well-educated, qualified individuals are a prerequisite for being able to benefit from the opportunities provided for creating new wealth. The creation of wealth and innovation occur not only within production and technological branches, but also in other sectors such as education, health care, culture, commerce and a diversity of service businesses. In the knowledge society of the future, increased prosperity will be founded on original ideas, fresh knowledge and novel methods of using such ideas in the lives and work of citizens.

The knowledge society cannot thrive without a diversity of life qualities. Information technology as a tool for innovation will serve an important future purpose in harnessing the human resources of Icelandic society among the various sectors of the business world. Information technology offers the potential to increase flexibility in industry and to co-operate with families and those living at a distance from their place of work.

# Main objectives and implementation

## Education and science

1. The policy of the Ministry of Education, Science and Culture on using information technology in education and culture is to be revised.
2. Further developments in distributed learning should be supported in order to render studies independent of time and place. Educational establishments should be encouraged to increase courses on offer through the Internet. Information technology is to be used to strengthen all types of continuing education and to increase co-operation among schools, business life and homes.
3. A major effort shall be undertaken in creating curricula based on new ideas for applying information technology in the field of education, and conditions shall be created for competition in compiling study materials. Digital cultural materials will be used to a growing extent when preparing educational materials.
4. Teachers should be provided with counselling, support and training in the use of digital course materials. Efforts to develop the Education Gateway will continue, e.g. as a forum for exchanging ideas and the latest knowledge regarding teaching methods and the use of information technology for designing study materials.
5. There will be a sustained effort to bolster teacher education in the field of information technology and support specialist study in information technology at secondary school and university levels.
6. Efforts will be made to co-ordinate databases within varying disciplines of science and academic study. These are to be made accessible on the Internet to both the public and academics, thus contributing to the improved utilisation of scientific data as well as to innovation, e.g. by private enterprise.

**Responsibility for the above tasks:** Ministry of Education, Science and Culture; Ministry of Agriculture where appropriate; the respective educational and scientific institutes.

## Culture

1. Work will continue on securing the position of the Icelandic language within the information society.
2. Progress in the use of modern media is to be encouraged, e.g. digital movies, digital television, computer games and multimedia in general.

3. A campaign should get underway for the digital republishing of Icelandic cultural materials, with the needs of the educational system in mind. A policy is to be formulated with regard to preserving digital materials.
4. A computerised register of cultural materials is to be compiled in accordance with international standards. The databases of cultural institutions will be co-ordinated and made accessible.
5. The application of information and communication technology in sports and youth activities is to be strengthened in order to improve the communication of information to parents and participants. Information on the services and operation of sports and youth organisations will be made accessible on the Internet.  
**Responsibility for the above tasks:** Ministry of Education, Science and Culture together with institutions and organisations in the area of culture and sports.

## Environmental issues

1. The possibilities are to be explored for using technology in connection with regional development and family policy, as well as for how the number of journeys by the public to and from work can be reduced in accordance with the main objectives of Local Agenda 21. This task is to be implemented during 2004.  
**Responsibility:** Ministry of Finance in consultation with the Ministry for the Environment and the National Association of Local Authorities in Iceland.
2. An effort shall be made to develop an integrated database on Icelandic nature, with emphasis on a digital, geographical database and on vegetation and habitat maps of Iceland. The latest technology in the field ought to be engaged, e.g. satellite data and geographical information systems. This is a long-term project.  
**Responsibility:** Ministry for the Environment and Ministry of Agriculture, as appropriate.
3. Access on the World Wide Web to information on the natural environment, land qualities and real-time information about weather, weather patterns and climate is to be improved for individuals and companies. Furthermore, work needs to proceed towards ensuring that education on environmental matters and sustainable development is made accessible on the Web.  
**Responsibility:** Ministry for the Environment.
4. Information technology shall be used to a greater extent for monitoring natural catastrophes, e.g. earthquakes, volcanic eruptions, extreme gales and avalanches.  
**Responsibility:** Ministry for the Environment.

5. Support shall be given to connecting information on various kinds of local services provided by businesses with geographical data, and subsequently making the results accessible to the public via mobile telephones, global positioning system devices and the Internet.

**Responsibility:** Ministry for the Environment.

## Health care

1. The health care network that links health-care institutions and enables for example telemedicine should be made fully operational by the end of 2006.
2. Systematic action shall be taken with respect to introducing an electronic patient register for all health-care services, to an equal extent in hospitals, healthcare centres and among independent health-care operators. A cost estimate is to be established and an operational plan made ready by 2004.
3. Electronic transactions shall be enabled between the State Social Security Institute and health-care workers (specialist doctors, physiotherapists, dentists, etc.) no later than 2005.
4. Electronic transactions are to be implemented between the State Social Security Institute and the public. All the main types of service are to be accessible on the Internet no later than 2006.
5. A survey shall be conducted of the possibilities which people suffering from handicaps have to make use of information technology in their communications with the health-care system. The Ministry of Health and Social Security is to sponsor such a survey during 2004.

**Responsibility for the tasks outlined above:** Ministry of Health and Social Security.

## Social services

1. An effort shall be made to make the most important family-related information and services accessible on the Internet, as part of the general service utilities provided by state and local governments. The needs of foreigners residing in Iceland are to be particularly considered.

**Responsibility:** Ministry of Social Affairs.

2. Information technology is to be utilised in order to improve social services for the benefit of the handicapped.

**Responsibility:** Ministry of Social Affairs.

## Appendix

**The policy formation project was organised through the appointment of a policy formation committee consisting of the following:**

Ásdís Halla Bragadóttir, Mayor of Garðabær;  
Sigfús Ingi Sigfússon, Marketing Manager;  
Svava Garðarsdóttir, Software Developer;  
Þór Sigfússon, Managing Director;  
Guðbjörg Sigurðardóttir, Chairperson of the Governmental IT Task Force, who also chaired the committee.

The committee consulted numerous parties concerning ideas and suggestions. For example, students were contacted in every Icelandic university, as well as experts in various sectors of society. The policy formation project was presented on the website of the Prime Minister's Office, where ideas and suggestions were requested from as many parties as possible.

Two formal partners co-operated with the committee: a consultation group comprising representatives from various stakeholders and a consultation committee of the Ministries on matters relating to the information society.

**The following were appointed as members of the consultation group:**

Arnór Guðmundsson, Ministry of Education, Science and Culture;  
Eggert Ólafsson, Icelandic Society for Information Processing;  
Einar Ólafsson, Icelandic Society for Computer Scientists;  
Frosti Bergsson, Iceland Chamber of Commerce;  
Guðmundur Ásmundsson, Federation of Icelandic Industries;  
Halldór K. Valdimarsson, Association of Academics;  
Haukur Oddsson, Service Organisation for Icelandic Industries;  
Ingimar Einarsson, Ministry of Health and Social Security;

Jónína S. Lárusdóttir, Ministries of Industry and Commerce;  
Jóhann Guðni Reynisson, National Association of Local Authorities in Iceland;  
Jóhann Gunnarsson, Ministry of Finance;  
Jóhannes Gunnarsson, Consumer Association;  
Margrét Lind Ólafsdóttir, Icelandic Confederation of Labour;  
Ólafur Hilmar Sverrisson, Ministry of Communications;  
Ragnar Þorgeirsson, ICEPRO, Iceland Committee on Trade Procedures and E-Commerce;  
Róbert Marshall, Union of Icelandic Journalists;  
Rúnar Már Sverrisson, Icelandic Standards (IST);  
Sigurður Á. Friðþjófsson, Confederation of State and Municipal Employees.

**The following were members of the ministries' consultation committee:**

Arnór Guðmundsson, Ministry of Education, Science and Culture;  
Ásdís Ingibjargardóttir, Ministry of Justice and Ecclesiastical Affairs;  
Guðbjörg Sigurðardóttir, Prime Minister's Office;  
Ingibjörg Ólafsdóttir, Ministry for the Environment;  
Ingimar Einarsson, Ministry of Health and Social Security;  
Jóhann Gunnarsson, Ministry of Finance;  
Jónína S. Lárusdóttir, Ministries of Industry and Commerce;  
Karl Alvarsson, Ministry of Communications;  
Kristinn Hugason, Ministry of Fisheries;  
María Sæmundsdóttir, Ministry of Social Affairs;  
Níels Árni Lund, Ministry of Agriculture;  
Pétur Ásgeirsson, Ministry for Foreign Affairs.



© Published by the Prime Minister's Office  
April 2004  
ISBN 9979-9647-0-7

<http://eng.forsaetisraduneyti.is/information-society/>

Design and layout: Himinn og haf  
Printing: Prentmet



PRIME MINISTER'S OFFICE