

Strategy of the Federal Council for an Information Society in Switzerland, January 2006

The Federal Council has revised, updated and augmented its 1998 Strategy¹. This new Information Society Strategy² is primarily relevant to action by the Confederation. In view of the subject matter, which extends beyond customary boundaries, it may also provide an orientation and a framework for the cantons and municipalities in particular. In what follows, the Federal Council formulates its objective, appropriate measures and the principles to which it attaches importance for the implementation of the measures. In this context, the strategy is limited to those high-priority areas of the information society which are not already regulated in the federal constitution, in laws or draft laws or which are already in hand.

I Objective

The objective of this updated strategy remains the same as in 1998: to apply the new information and communication technologies (ICT) quickly, in a coordinated fashion and for the benefit of all. ICT are an important means of achieving the Federal Council's "Guidelines for the Future", i.e. improving Switzerland's well-being and ensuring sustainability.

Highly trained, innovative and motivated human beings are a key resource for Switzerland. They produce goods and services with significant added value. The use of ICT underpins this strength and contributes to improving the position of the Swiss knowledge society in international economic competition. For the information society has as yet unrealised potential to increase the country's productivity and power of innovation, economic growth and employment, particularly in the (border) regions.

With its potential for increasing economic growth and conserving resources in qualitative terms through the use of knowledge, ICT make a substantial contribution to sustainable development in Switzerland. A prerequisite for this is the provision of, and access to, knowledge and information through sustainable education and research activities and compatible data formats or communications protocols.

¹ Cf. <http://www.infosociety.ch/site/default.asp> → Publications. Cf. also Federal Journal (BBl 1998 2387 ff.)

² The strategy's title was chosen above all for historical reasons, to emphasize continuity, i.e. the strategy bears the same title as that of 1998, even though the term information society is subject to a very comprehensive, pan-social regulatory requirement, which is not the intention here, as the strategy primarily describes goals and measures which can be implemented within the competency of the Confederation.

II Principles

The Federal Council wishes to exploit the opportunities offered by the use of information and communication technologies. ICT have the potential to extend the capabilities and communication possibilities of people, businesses and institutions. Thus ICT enable cross-border contacts and cultural exchanges. They produce positive developments in an open and democratic society in terms of cultural independence and diversity. ICT can potentially improve the possibilities for communication and participation of all inhabitants. In addition, they can contribute to increasing the attractiveness of Switzerland as a place to live and conduct business.

The Federal Council is aware that the use of ICT also includes risks which must be taken seriously, in particular possible infringements of personal rights or other basic rights. Moreover, ICT may entrench or reinforce existing social or economic exclusions and inequalities. In view of these risks, the state must work towards ensuring that these are minimised and that the forces of integration are strengthened.

The following principles apply in general terms:

Universal Service: The state creates the framework for the establishment of an economical, reliable and high-quality technical infrastructure and a basic content offering which allows the free formation of opinions and cultural development.

Universal Service

Confidence: The development of the information society requires confidence in ICT and their use. Establishing and maintaining this confidence demands transparency, competence and secure technologies. Protection from abuses and the application of the law must be guaranteed as central conditions of this confidence-building process. All users are required to use ICT responsibly and to respect basic rights.

Confidence

Access for All: All the inhabitants of Switzerland are part of the information society and have equal and unimpeded access to ICT in order to make use of them in accordance with their private and professional needs. In the process, consideration is given to the needs of potentially disadvantaged groups within the population. In particular, the Confederation promotes measures to ensure gender equality.

Access for All

Empowerment for All: Using ICT technology and content of is one of the basic skills of everyday life. Members of society must be empowered to use the available media for searching and compiling information, for forming opinions and for independently expressing their own opinions. This entails lifelong learning for everyone.

Empowerment for All

Federalism: The opportunities which the federalist organisation of the Swiss Confederation provide for the development of the information society are being consistently exploited. Federalism, however, can also hinder the development of the information society. In the implementation of this strategy, the Federal Council ensures that losses of synergy and inefficiencies are avoided through clear legal regulation and voluntary cooperation. This also takes place by means of an assignment of competencies in accordance with the constitution. Alternative models of cooperation (e.g. associations, cooperation agreements, cooperatives) take into account the country's linguistic, cultural and political diversity.

Federalism

Cooperation: The information society's features as part of the social contract, its future-proof development and broad basis in all strata of the population demand an effective partnership and cooperation from all those involved: the government, business, civil society and science. The Confederation therefore initiates and supports regional, national and international partnerships between all players.

Cooperation

Internationally: Switzerland promotes international exchanges and cooperation in all areas of the information society. In so doing, it works for the establishment and dissemination of compatible, harmonised standards and norms which promote competition and respect basic rights. The Confederation's commitment is in accord with the declaration and action plan of the UNO World Summit on the Information Society (WSIS) 2003 and 2005. Within the framework of its development work, the Confederation seeks worldwide and universal participation in the information society.

International

III Measures

In terms of the measures the Federal Council is focussing on electronic communication with the administration (e-Government) and the use of information and communication technologies in the health sector (e-Health). The corresponding tasks are specified in sections 4 and 7. All other observations are intended to be a guide for the competent agencies in their work in the area of the information society.

1 The economy

The economy

ICT have the potential to increase productivity, the power of innovation and competitiveness and to increase economic growth in qualitative terms and conserve resources by the application of knowledge. The opportunity for a corresponding structural change is being seized. The importance of ICT is apparent both in the specialist ICT sectors and in the use of modern ICT applications in virtually all branches of the economy. Initiatives and general legal conditions which promote the use of ICT in the economy must be continued.

Initiatives and improvements in the general legal conditions which promote the use of ICT in the economy are to be continued.

A reliable and affordable universal service in telecommunications, with a wide range of quality services, is also important for the competitiveness of small and medium-sized enterprises (SMEs). The expansion of the internationally competitive broadband infrastructures with appropriate national coverage required for future ICT applications is taking place in Switzerland in the environment of a market economy, without state support measures on the supply side. The state's task is to reduce existing administrative or competitive barriers to entering the market to a minimum. Key statistical data are being collected on the economically relevant productivity effects of ICT.

Appropriately qualified specialists on the employment market and competent users are prerequisites for exploiting the potential of ICT in terms of innovation and economic growth. This also demands corresponding education policy measures with reference to life-long learning.

2 Security and confidence

Security and confidence

The continuing development of networks results in the increasing vulnerability of systems as well as greater international dependence. In order to ensure that the

population, the economy and the government have all relevant information, complete and uncorrupted, at their disposal, Switzerland must implement the following measures regarding information security and data protection, thereby assuming a leading role internationally. Key factors are the availability of critical infrastructures in extraordinary situations, the availability of mechanisms for identification and secure data transmission, and self-determination concerning the use of data, subject to guaranteed public security. One key requirement is targeted information provided to all those concerned, plus coordination between the players involved.

To this end, the measures already initiated in the area of information security concerning prevention, early warning, damage limitation and combating the cause of crises must be implemented by the Confederation and its partners. In addition, in cooperation with all parties involved, the Confederation is establishing a forum for management and coordination in the area of information security. It is also contributing to the training and education of all relevant circles in information security.

Information security and products which are relevant to security and support data protection are given a high priority within the framework of existing support instruments for research and the economy. The Confederation is adopting the profile of a model user of products which are relevant to information security.

The Confederation is implementing a pro-active and proportionate concept of data protection legislation, based on its effectiveness. In accordance with international developments and the professional IT associations, it defines and designs instruments which promote justified confidence in ICT and their use. In collaboration with the private sector, it ensures that digital identities are available to Switzerland's inhabitants. In this context, it is allowing the private sector a reasonable period of time to develop offerings. In any event, the Confederation will then examine whether to provide digital identities itself. The state recognises digital certificates provided by the private sector which meet its security requirements, particularly in respect of e-government applications with cantons and businesses.

3 Democratic opinion-forming and formulation of objectives

ICT are being systematically used as part of the state's information and communication activity. The indicators on their dissemination and use are updated regularly. Great importance is attached to ICT in the implementation of the principle of accountability. The federal authorities' websites must be designed to be transparent and user-friendly. This will

Democratic opinion-forming and formulation of objectives

promote social discourse and the population's opportunities for participation. On the basis of the ongoing trials, it is to be examined whether it might be possible to gradually introduce the exercising of all political rights (e.g. voting in referenda and elections, signing referenda and initiatives) electronically, in addition to the normal procedures.

The press, radio and television continue to perform a central function in democratic opinion-forming and the formulation of objectives.

4 E-government

E-government

The state exploits the optimisation potential of ICT in order to provide its services transparently, efficiently, cheaply and at high quality. In the process, ICT allows cost-conscious use of resources. In future, a country-wide e-government strategy in Switzerland will lay down the top-priority orientations and the details of implementation. In dealing with the authorities, electronic documents are to have legal effect. Every federal authority will issue or amend the corresponding legal provisions within its area of competency.

Simple, secure electronic interactions and transactions facilitate communication between the agencies of the state at all levels and between the state and private individuals, businesses and organisations. E-government promotes citizens' confidence in the activity of the government and administration and increases the attractiveness of Switzerland as a location to conduct business. The Confederation establishes the necessary legal and security-related preconditions, supports the application of standards for interoperability and promotes the national dissemination of solutions which have been developed on a decentralised basis.

The long-term free availability of high-quality digital content is a prerequisite for a satisfactorily functioning direct democracy and the participation of citizens in important political decisions. It is significant for economic and social development in a modern state.

For the creation, exchange and archiving of electronic data and documents on state activities and on social, economic and cultural developments, there is a need for transparency and clarity regarding access, copyright and rights of use, along with clarification on whether charging is to be applied, and if so how much. Uniform, standardised handling of electronic data and documents, from their creation to their archiving, is essential.

In cooperation with the cantons and relevant federal offices, by June 2006 the EFD will have formulated an e-government strategy for the whole of Switzerland. This will include

measures for implementation.

The Federal Chancellery, the EDSB, the EDI, the EVD, EFD and EJPD are being commissioned to draw up, by mid-2007, a concept and an action plan which provide information on the objectives, the individual measures to be taken, the costs, partnerships, procedures and timetable for the internal government use of electronic data and documents, including e-mail, from their creation to their archiving. In the process, it must be clarified how production (from procurement to archiving), administration, distribution and accessibility of electronic content for citizens and businesses is to be regulated. The concept paper must additionally provide information regarding which content is to be free of charge or subject to charges. Projects already under way for electronic archiving and for electronic management must be continued in order to achieve the objective and must be taken into account in the new conceptual work.

5 Education

Education

Education makes a major contribution to ensuring the well-being of the population and the competitiveness of Switzerland in a global knowledge society. The possibilities offered by the use of ICT to acquire, transmit and apply knowledge must be exploited efficiently and innovatively. The goal must be to promote individuals' independence, to encourage their ability to integrate themselves in society and the world of work using ICT and to continue their own development. The technical, and in particular the substantive use of ICT must be considered as a core skill at all stages of education and training. The educational measures must be sustainable in their effects by giving users skills which are applicable in the long term, using the example of contemporary ICT.

The Confederation should contribute to ensuring the sustainable success of the excellent approaches in the broad education offensive. Harmonisation of strategies and the cooperation of the Confederation and the cantons are key. By analogy, the measures to train and professionally develop teaching personnel and integrate ICT in teaching must continue. In the area of digital learning and teaching content, as well as generally with regard to pedagogic resources, networking of the partners must be supported and must contribute to production, access and use. A quality assurance system must be elaborated. Since the competencies of the Confederation are limited to vocational training and the universities, the Federal Council urges the cantons to undertake the coordinated elaboration of a strategy in their area of competency, at all levels of education.

The Confederation is promoting growth in the number of specialists in the ICT sector. In particular, the Confederation

promotes the education of women, both in the corresponding vocational education courses and in the tertiary sector. It also supports application-based research and development in the ICT sector.

A system of education monitoring, which is internationally compatible, allows regular examination of the effectiveness of the efforts which are being made.

6 Culture

Culture

ICT allow new artistic forms of expression. They can additionally contribute to the promotion of cultural diversity and identity, linguistic diversity and the creation of local and regional content. The development and production of media art, its dissemination and education and training in its use and application must be supported. The emphasis must be placed on networking and partnerships of cultural producers, business, educational institutions and research.

Media art and its predecessors are also part of the national heritage, like all other cultural artefacts. The inventories in Swiss museums and collections must be recorded. To ensure that they endure and that they can continue to be used in the future, standards for their description and norms for technical conservation must be elaborated.

Multimedia and interactive possibilities must be used for the dissemination of culture. The inventories of libraries, archives, museums and collections must be opened up in such a way that they are accessible to all on the net. In this context, the cooperation of the Confederation and the cantons is key. As far as the Confederation's own inventories are concerned, the principles elaborated as part of paragraph 4 of the strategy are to be applied analogously (e-government).

The protection of rights of ownership and copyright must be guaranteed. In this respect the interests of owners and users must be balanced. In these areas, the organisations of cultural producers play an important role and require public support.

The EDI is being commissioned to consolidate the current measures to promote media art and to push ahead with the preliminary work on electronic accessibility of inventories, with particular emphasis on examining its feasibility.

7 Health and health care

Health and health care

The integration of information and communication technologies in the health system (e-health) should guarantee the Swiss population's access to health care which is affordable, high-quality, efficient and secure. The

preconditions for achieving this political objective are the elaboration of a national e-health strategy, coordination of the strategic e-health

activities and, where necessary, concrete legal provisions. These tasks can be fulfilled only in cooperation with the cantons, private organisations and in the international context (the EU, the WHO). The current work on the insured person's card must be positioned within the strategy.

E-health must have a positive effect on the evolution of costs, by ensuring that all those involved in the provision of health care can communicate efficiently and exchange data using consistent, standardised electronic processes. In addition, e-health must contribute to empowering the population, healthy and sick, as well as health professionals, to use medical and health information and increase the quality and reliability of health care provision through better management of medical knowledge. Here, it is important to use technology in a way which reflects citizens' needs, which is secure and which is sustainable. One of the greatest challenges, however, lies in promoting understanding of the possibilities of e-health and in motivating all players to cooperate in creating a future-oriented health care system in Switzerland.

The EDI is being commissioned to submit, by the end of 2006, a plan of a national e-health strategy and an action plan for the implementation of these measures, which must provide information in particular about the objectives, action areas, costs, partnerships, procedures and the timetable.

8 Coordination and cooperation

Coordination and cooperation

The strategy is being implemented in the competent departments and offices. An Interdepartmental Information Society Committee (IISC) is coordinating the work in accordance with a mandate from the Federal Council.

9 Evaluation

Evaluation

Implementation of this strategy will be evaluated.