

Authorities Heading for a Fall

- IT Policy White Paper Presented to the Folketing 1997

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Authorities Heading for a Fall

The information society means that a number of fundamental conditions in our society are changing out of all recognition. Authorities are heading for a fall, existing values and rights are being challenged.

We are experiencing a revolution of knowledge, which will change our ways of working, communicating, consuming and learning. It is change which will dislodge existing power structures in our society. The role of democracy is being challenged and must be discussed. We need new political space.

What is fascinating about the development is not so much the technological gains, but the potential of liberty which the information society entails; and the political challenge which it presents. Hardly all elected representatives of the people have realised this.

This is a white paper which sets the stage for an open and broad debate about the opportunities and pitfalls of the information society. It is a debate which invites both criticism and enthusiasm. We are novices in a new era.

This white paper will be followed up by an IT policy plan of action containing specific initiatives in a number of action areas in connection with the Government's presentation of the 1998 Budget.

A number of key figures for the information technological development in Denmark, "IT in figures 1997 - 19 pictures of the information society" will be published as a parallel to this white paper.

Jytte Hilden

Minister for Research and Information Technology

A New Democratic Agenda

The information society challenges the values and rights we as Danes have gained over the last 150 years. Constitutional rights such as freedom of speech, private property and personal freedom are affected by the Internet, and will prove inevitable topics in the years ahead. Can we hold on to freedom of speech when the Internet provides direct access from the nursery to violence and pornography? Have Internet suppliers the right to reject home pages on the basis of sexual, political or religious conviction? May law-abiding citizens protect their privacy by appearing anonymously on the Internet - may criminals?

In contrast to other media like TV or newspapers, the Internet provides everybody with the opportunity to disseminate their messages and collect information from all the world at no high cost. The Internet, in other words, introduces unprecedented competition into the information market. It means that the authority which used to be the prerogative of the few who possessed information will disappear.

Never before have so many questions been put against public authorities' services to citizens and enterprises; against the quality of the education provided by schools; against the fee and interest policy of financial institutions; against the foods from the food industry and against the pollution of industry. There are, naturally, many reasons for the erosion of confidence in authorities, but it is inherent in the Internet that it reinforces and contributes to this development.

Facts

- 1996 was the year when the Internet changed from being new technology to becoming a well-known concept for most Danes.
- On the Internet information is traded, interchanged and retrieved, letters are written, games are played, people "talk" and discuss. The Internet *is* interaction.
- By now more than 1 million Danes have tried to be on the Internet.
- Close on 200,000 Danish households (approximately 10 per cent) have Internet link-up and the number doubles every year. It means that more than 1 million households (50 per cent) will be on the Internet in the year 2000 if the trend continues.
- Danes are happy about the Internet. Only 10 per cent of those who have tried it are disappointed at what it is able to provide.

The Internet knows no opening hours, national borders or time zones. It provides independence of time and space; but also independence of age, gender and status. Everybody has the same access to having their messages disseminated, participating in discussions or retrieving information. Once citizens have no difficulty in gaining access to the decision-making basis of, for example, Bills before they are tabled, the man in the street will have new opportunities and elected

representatives of the people will face new challenges. It will be easier for citizens to keep an eye on public administration, to put critical questions and get replies to these. The individual will have new opportunities to exert influence. Once everybody knows more, it will be much more difficult for the few to hold their monopoly on power. And once more people participate in the public debate, we shall have a more active democracy. It means a new agenda for democracy in Denmark.

The new technological opportunities are to contribute to enhancing the quality of our welfare society. Better information, a higher degree of transparency and more participation and influence. These are the challenges which enterprises and public authorities must relate to, otherwise clients and citizens will go elsewhere. The individual has a responsibility for acquiring the knowledge which is necessary to fully utilise the new opportunities. It presents us all, especially the Danish educational and supplementary training and education systems with a great challenge and the opportunity to think along new lines.

An Example

The Statoil group has made a free PC with access to the Internet available to all 13,000 employees in their homes. The offer applies to managerial staff as well as to employees in production.

In return for the free PC, staff are given a training programme which they undertake to complete. The DKK 16,000 per PC which Statoil pays corresponds to a 5-7 days' course provided by commercial suppliers of IT courses.

The offer was accepted by 95 per cent of the employees.

The Internet is symbolic of a change in our way of working, communicating, consuming and learning. It means change which raises a number of questions as to what Denmark is to look like in the years ahead.

Denmark as a Pioneering Country in the Field of IT

Up to the year 2000 we shall work systematically at placing Denmark in the international front line. As a small and relatively homogeneous country we command a degree of manoeuvrability which we must utilise in order to draw up an ambitious and socially responsible agenda for the Danish information society model.

Our objective for the year 2000 is, therefore, that

- Denmark as one of the first countries in the world will have prepared a set of fundamental IT rights for the citizen.

- All Danes will have access to computers and the Internet with a Danish user interface at schools, at libraries, at the one-stop counter service of town halls and the like.
- The Danish educational system will be at the cutting edge regarding the integration of IT into the teaching and with respect to the development of new educational methods.
- Denmark will be a pioneering country in the development of IT products to be used by everybody. These products are computers, cash dispensers, automatic ticket machines, signposting etc.
- The Danish public sector will have reached a spearhead position in terms of information, self-service and electronic commerce.
- Danish enterprises will be up front in the global electronic marketplace.

Citizens' Rights in the Information Society

Information technology presents an inherent paradox: on the one hand it holds the potential to level out differences, on the other it may lead to new gaps between those who can and those who cannot. IT may, for example, help disabled persons to open doors to the life of work and leisure which to other people is a matter of course. IT may, however, also raise new barriers and in that way make life more difficult for the individual.

Information technology must not be imposed on anybody. We must, however, make demands for information technology to become more easily accessible: in Danish and also to those without higher education; its interface must be immediately intelligible; it must be cheaper to procure and available to all, also to other target groups than the usual ones. Even if many are enthusiastic users of computers and the Internet today, there are also groups who see the technology as irrelevant, inaccessible or even frightening.

As is the case with any societal change, new opportunities emerge and new pitfalls as well. Our task, and our responsibility, must be to secure that we utilise the opportunities and avoid the pitfalls. We are entitled to being enthusiastic, but we must also remember to put critical questions. It is virgin land for all of us.

In the field of education information technology offers new opportunities with regard to new educational forms, which take for their point of departure the special abilities and level of competence of the individual student. It must, however, not develop into mere machine-related learning, disconnected from any personal contact, cooperation and discussion. For the elderly, information technology provides better opportunities with respect to communication, shopping and social networks in spite of physical restrictions. It must, however, not develop into the sole contact

with the rest of the world. The Internet gives Danish consumers access to finding and buying goods in the global marketplace. This implies, however, that enterprises are simultaneously enabled to register and supervise consumers to an unprecedented extent. Information technology makes it possible for the public sector to suit the action to words about openness, self-service and interactivity. This must, however, not deprive anybody of the possibility of personal service.

The solution to these problems is not to be found in technology, but through dialogue, which reflects and develops the values our welfare society is based on. These are values such as social responsibility, equal opportunity for all and co-decision.

IT Rights

- Information technology must be accessible to all. Everybody must have free access to a computer with Internet link-up at libraries, at local government one-stop counters and the like. Everybody must have the opportunity to acquire the basic knowledge which is necessary in order to utilise and take a position on this technology. Insecurity, insufficient knowledge or financial constraints must not constitute barriers to taking the first steps.
- Equal access to information for all groups in society. The shift to electronic information must not in the short term replace the possibility of traditional ie personal, telephone or paper-based information.
- The Danish educational system's use of IT in teaching must take for its point of departure the individual student's needs and qualifications.
- The price of electronic communication must be at a level which prohibits no particular groups or regions from using it.
- Information technology must, to the greatest extent possible, be designed according to the principles of universal design so that, for example, elderly people or special groups of disabled persons are not barred from using it.
- The information technology language must be Danish. Both in the sense of Danish programmes and Danish as a language; but also in the form of Danish synthetic speech.
- Basic consumer rights must be safeguarded in connection with business transactions on the Internet.
- The protection of privacy and personal integrity must be ensured in the information society, also on the Internet.

Facts

- In May 1996 the Government and the National Association of Local Authorities entered into an agreement on IT for primary and lower secondary school. The agreement implies that in the year 2000 there will be approximately 12 students per up-to-date PC at primary and lower secondary school.
- At the end of 1997 all upper secondary schools and adult education centres are expected to be linked to the educational network along the same lines as the vocational schools and teacher training colleges.
- At the end of 1997 approximately 500 schools will be linked to the educational network. It is expected that 75 per cent of non-fee paying and fee-paying schools will be connected before the year 2000.
- Users have access to the Internet at 58 per cent of all Danish libraries. Access is expected to be provided by another 14 per cent over the next two years.
- At 30 per cent of the libraries there is a home page, which provides direct access to information retrieval from the library catalogue.

Greater Flexibility for the Individual

Even if the industrial society has had a positive impact on our economic wealth, it has also imposed a number of tight restrictions on our lives. Our working hours are rigidly fixed and family life is often squeezed into a time frame which means that children spend too much time at day-care centres. Now we have the opportunity to break the mould.

With information technology we shall introduce much more flexibility into everyday life. Activities such as work, shopping, and various contact with public authorities must be performed when it suits the individual. We shall also have a greater degree of co-determination with regard to how we plan our working, family and leisure lives. With a computer and Internet link-up many types of work may be performed from the individual's home; not to replace "going to work" but as a supplement once or twice a week, depending on how it fits into the rhythm of the individual and the workplace. Similarly, senior staff will be able to enjoy a more flexible retirement from the labour market.

For some people information technology will provide not only increased flexibility but open new doors as well. They will be able to communicate and participate in areas of social life from which they used to be barred. For disabled people IT may mean all the difference between living a life subject to the assistance and care of others and an independent and economically active life. The

elderly will have new opportunities for "going" shopping, cultivating their interests and keeping in touch with friends, children and grandchildren in spite of physical restrictions.

Facts

- In February 1997 the Minister for Taxation presented a Bill under which taxes will no longer be levied on fully or partly private use of company financed home PCs.
- In 10 years more than a quarter of a million Danes will be in a position to supplement their traditional work at the workplace with home-based tele-communication work.
- Close on a third of today's Danish municipalities, counties and private enterprises have experience of tele-communication work.

Open Public Sector

A Vision

Citizens and enterprises will choose themselves how to communicate with public authorities, by telephone, fax, letter, personal contact or the Internet.

If they choose the Internet, they may link up with public authorities' home page, "danmark.dk", and round the clock they will receive the information they need, supply information or ask questions. The point of departure of "danmark.dk" is the situation of the citizen and the enterprise, not the situation of ministries, municipalities or other administrative levels. It means that citizens and enterprises will have to contact one point only, irrespective of whether their inquiry concerns several authorities.

If for example a family is about to move house, it will be possible, via "danmark.dk", to report the change of address to the national register, to have children put on the waiting list of day-care centres, and currently to check their position on that and other waiting lists. It will also be possible to investigate the possibility of school transport service, choose a general practitioner, apply for permission to build a carport etc.

Furthermore, via the Internet citizens will gain access to the information stored in public registers about themselves. Students may, for example, look into what information constitutes the background to their student grant and they may themselves up-date this in case of change of studies, change of basis of income and the like.

- Up to the year 2000 ministries and agencies are to set up electronic self-service systems in all relevant areas. A plan of action for the process is to be drawn up before the end of 1997.
- All ministries and agencies are to have put all relevant user-targeted forms on the Internet by 1 January 1998.

- All ministries and agencies are to have established a home page on the Internet by 1 January 1998. Municipalities, counties and other governmental organisations are called on to do likewise.
- As a result of the Bill on digital signature, all public authorities are to have set up an official E-mail box in order to receive legally binding electronic mail. This obligation, however, will not come into effect until 1 January 2000 at the earliest.

The question of openness in public administration is of paramount importance in a democracy. Open public administration is characterised first of all by transparency and readiness to enter into dialogue with the surroundings. It must be made easy to communicate with public administration; it must be made visible how taxpayers' money is spent; and it must be made transparent what rights and obligations the citizen has, without having to contact an incredible number of authorities first. Public sector openness, therefore, is also a matter of efficiency, flexibility and a service-oriented approach to citizens and enterprises.

Information technology opens up new opportunities to retrieve, collect and disseminate information and in this way contributes to dismantling established power structures and hierarchies. Once access to knowledge and information has been made easier, the door will open to dialogue and interactivity. Citizens will make themselves heard as never before.

Facts

- In 1996 a total of 385,000 Danes made use of the Central Customs and Tax Administration's service to enter and transmit information for the advance tax assessment and the income tax return by telephone. 10,000 persons made use of the service to enter information via the Internet.
- 60 per cent of the ministries and 36 per cent of agencies and directorates have a home page.
- 90 per cent of the ministries and 53 per cent of agencies and directorates may be contacted via an official E-mail address.
- 36 per cent of the counties have a home page and 64 per cent have an E-mail address.
- 16 per cent of the municipalities have a home page and 30 per cent have an E-mail address.

Information technology is to be a means to achieving better service, both in terms of personal service and self-service, for example one-stop counter service at public offices as well as via the Internet, which will provide individually tailored information and service anywhere and at any time.

Self-service may mean many things. It ranges from information that answers general questions which are often asked by citizens to service which enables the citizen to transmit information via the Internet without having to contact an authority in person.

Information technology replaces neither personal service nor paper-based information. As a supplement, however, IT will contribute to opening the public sector and raising standards of service. Far from all public services depend on resource- demanding personal service and the more citizens are enabled to manage themselves, the more resources may be channelled into better personal service.

Digital Trade and Industry

A Vision

In the provisions trade a new type of discount supermarkets will emerge. They will have no shopping area, only a delivery point where customers will collect the goods they have ordered on the Internet.

The line of shopping streets in central Copenhagen, large shopping centres and pedestrian streets will be used, to a great extent, as we know them today, but the "enlightened consumer" will have gained ground. She will, in advance, have consulted the network and found the shops which carry what she wants. She will assess quality and make up her mind in the shop. A number of shops will supplement retail outlets with Internet sales of branded goods. It is not because it will be a matter of large quantities but because it is easy service once the information is on the network already.

Communication between public authorities and the private sector will have changed dramatically. Almost all administrative information will now be transmitted automatically from the enterprises' IT systems to public authorities, and it will be done only once. Not having to transmit the same information to various public authorities will make life considerably easier for enterprises.

Internally, enterprises will have achieved a higher degree of flexibility concerning the planning of work and relations to the workplace. Staff will make greater demands for information, involvement and developing work. The young will be much in demand as well as the elderly, and new forms of employment will gain ground.

Facts

- Today there are approximately 776,000 young people between 20-29 and approximately 463,000 elderly people between 60-70 years of age.
- In 2010 there will be approximately 610,000 young people between 20-29 and approximately 654,000 elderly people between 60-70 years of age.
- That means a 21 per cent drop in the number of young people and a 41 per cent rise in the number of the elderly.

Business on the Internet is one of the areas which will expand rapidly in the years ahead. The relationship between enterprises and customers will to a greater extent be tailored to the needs and wishes of the individual. Enterprises will be able to reach their customers without any cost-increasing intermediary. Customers will find it easier to look for the best and cheapest product where they may be sure that it is in stock. And they will become more conscious consumers.

Business via the network will also mean new challenges. On the Internet the logos and trademarks of enterprises may easily be copied and used for fraudulent marketing. Entire (virtual) shopping centres may disappear in a few seconds without any trace and both enterprises and customers' physical location and true identity will be uncertain.

Basic consumer rights must not be forgotten because we focus too one-sidedly on all the advantages which business on the Internet makes available to consumers and enterprises. We must ensure that consumer rights are enforced, also in connection with electronic cross-border commerce.

We must ensure anonymity on the network in order to avoid that our electronic traces are utilised to supervise what we buy and at what price; what we discuss on the network; what home pages we consult and the like. And we must ensure that enterprises do not bury us in electronic advertising.

For Danish enterprises electronic commerce will mean an opportunity and a challenge. The Internet provides the many small and medium-sized Danish enterprises with global presence at minimum costs. On the network it is more a question of understanding the opportunities than having backup capital. The enterprises and countries that know how to make the most of the opportunities will reap the benefits.

Facts

- Approximately 50 per cent of Danish enterprises with more than 5 employees have access to the Internet and approximately 20 per cent of them have a home page.
- Almost 80 per cent of the enterprises communicate electronically from the enterprise via call connections or leased lines.

Denmark is to play an important role in drawing up the international rules and standards in the electronic marketplace. We shall achieve this by targeted and coordinated efforts made by relevant public sector bodies; and which is equally important by securing a leading position for Denmark in key areas as, for example, in the payments area.

The area where electronic commerce will have the speediest impact is in business-to-business transactions. With purchases totalling approximately DKK 90 billion annually public authorities play a considerable role and are to serve as a catalyst in this field.

Once information may be distributed globally at no major cost, the mobility of labour, knowledge and capital will increase. This will lead to the break-up of the entire value chain from financing and product development to sales and distribution. Enterprises may place activities in regions and countries with optimum knowledge, resources and industrial structure; research where research centres are taking leaps forward in knowledge; testing of new products in areas with advanced demand. Similarly, it will prove easier to change production and adjust the individual product according to national preferences, different types of consumers etc. Consequently, information technology will change enterprises' way of organising fundamentally.

The combination of Inter and Intranetworks implies that more enterprises will have "virtual" features. The technology is for example able, in a few minutes, to set up project groups that will share documents, bulletin boards, fora for discussion, make their own closed or public home pages and the like, as long as every member of the group has access to the Internet and an E-mail address.

The development of flexible organisations will mean a great challenge for the Danish educational system and Danish enterprises in the years ahead. Danish enterprises must, therefore, be urged to participate in this development.

On the Way towards Digital Trade and Industry

Focus will be on consumer rights on the Internet and information campaigns targeted at citizens; "The Fiction and Facts of Business on the Internet". The fundamental attitude is that electronic commerce is to benefit consumers but that issues such as anonymity and purchase and contract law must be considered in detail.

Digital transfer of goods, services and money makes new demands on the regulation of VAT and taxation. A committee set up by the Minister for Taxation will assess the need for changing the rules governing this area. The committee will submit a report at the end of 1997.

By the end of 1998 at the latest it will be possible to report all administrative information via EDI where there are standards today.

In the course of 1998 all public authorities will be able to start doing business via EDI. Together with National Procurement, Ltd. the Agency for Financial Management and Administrative Affairs is developing a basic procurement system for public economic management systems. During 1997 the procurement system will be made operative for municipal and central government users.

New Plan of Action

It is not only a question of getting there first in the information society. That is just a matter of

jumping on the bandwagon and following the technological mainstream. By contrast, the challenge is to do it the right way. In Denmark we now have a unique opportunity to give our welfare society a boost and in that way provide better quality of life for the individual. We must make the most of this opportunity.

The Government will, therefore, follow up on this white paper with an IT policy plan of action in connection with its presentation of the 1998 Budget.

Franciska Clausen, Composition on a Black Background. Berlin 1922.

Gouache on cardboard, which belongs to the Foundation Franciska Clausen Collections, Kunstmuseet Trapholt (Trapholt Art Gallery).

In the early 1920s Franciska Clausen lived in Berlin, the mecca for artists, where she became acquainted with the simple and abstract-geometric figurative language of constructivism. This is reflected in "Composition on a Black Background", which testifies to her ability to develop a genuine geometric idiom. Oblongs and squares are painted in harmonious colours and glide quietly in and out between each other in constant movement. In this work Franciska Clausen has succeeded in capturing a moment of movement which continues ad infinitum.

"The information society challenges the values and rights we as Danes have gained over the last 150 years..". These are the opening words of this year's white paper to the Folketing.

The Minister for Research and Information Technology has set the stage for a broad debate about rights and obligations in the information society. It is a debate which takes its starting point in, and challenges, the values our society is based on.

This white paper also invites sweeping innovation as to how the public sector services and communicates with citizens.