

# **Realigning to a Network Society**

**IT and Telecommunications**

**Policy Report to the Folketing**

The Ministry of Research and Information Technology  
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## **Realigning to a Network Society**

*IT and Telecommunications*

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# Conversion to the Network Society



The network society is a reality. With computers in 1.4 million homes, with 226,000 home workplaces paid for by employers and with 1.7 million Danes using the Internet on a regular basis, Denmark has commenced its conversion to the society which is going to take over from the industrial society: the network society. In all aspects of life - work, training and education, leisure time, culture and trade and commerce - this will offer a large number of new technologies and possibilities which, if used correctly, will make the life of the individual citizen much easier and improve the services provided by society for the individual citizen.

The network society has its own economy with very great potential for wealth. The EU Commission estimates that 80 million Europeans will generate a turnover of DKK 3,700 billion on the digital market by 2002. The Internet is a network on which enterprises offer their goods to consumers worldwide in sharp competition with each other. This sets a new agenda for Danish trade and industry. New enterprises and industries are emerging, while others are disappearing. We are seeing the creation of new media and forms of communication. The economic and political rules are changing. The interaction between people, enterprises and public authorities is changing.

The challenge will be to exploit the future possibilities by realignment in all areas of our economy and society. In short, the challenge is to make Denmark a leading IT nation, while still preserving the best values of our welfare society.

### *A Historical Challenge*

We are not the only country facing this challenge. Virtually all Governments in the western world are working to meet similar objectives. Denmark has a number of advantages, which we can utilise in our conversion to the network society:

- In a number of surveys, Denmark has been assessed as the country in the world that is best prepared to meet the challenges of the future.
- We have a well-developed telecommunications infrastructure and widespread use of the Internet.
- Danes have a high level of training and education and we have a flexible educational system.
- We have an industrial structure with relatively small enterprises with great conversion potential.
- We have a well-functioning public sector.

There are also a number of conditions which make conversion difficult:

- Denmark has a poor high-tech entrepreneurial culture, and we do not yet fully utilise the potential, which our high level of training and education suggests that we have.
- We lack large enterprises that can push the digital market forward, including the many relatively small enterprises, which are ready for realignment.
- We have a sector-divided public sector, which makes it difficult to co-ordinate the process of conversion.

Denmark has the opportunity to be among the pioneering countries in the network society. We can use this to promote the use of technology to the benefit of all, at the same time as ensuring a share in the growth potential of the digital economy.

### *Telecommunications Policy*

The foundation of the network society is the telecommunications which are offered in Denmark. Just as the industrial society was held together by an infrastructure consisting of traffic by rail, sea and road, the network society connects us to each other via cables, radio waves and computers. Telecommunications are our ticket of admission to the global network.

Therefore, all citizens and enterprises are to have quick, easy access to the Internet, and all citizens must feel so comfortable with the technologies that they do not opt out of using them in advance. Being on the Internet must be just as natural, easy and inexpensive as turning on the water tap or flicking on a switch to turn on the light.

Competition, including the implementation of an invitation to tender for new frequencies, is the way to ensure that everyone feels at home in the network society. It is therefore important to stimulate a competition-based supply of several different types of connections between the individual consumers in the network society. These connections may either be wireless or wire-based.

On this basis, a number of possibilities will open up for individual consumers. The supply of new frequencies, for example third-generation mobile networks, is of importance for this development. It will bring the Internet out to citizens and enterprises in an even more finely-meshed form and free Internet development from its bondage to complicated computers in favour of mobile phones and other types of small devices which are just as easy to use as the remote control for the TV.

But also the development in consumers' wire-based access to the network society will open up new possibilities. One example is the so-called XDSL technology, which, when it really gains a foothold, may revolutionise the possibilities for consumers' to have easy access to the Internet.

Seen overall, this development will make it easier for citizens to link up with the Internet and will result in new applications and, consequently, new business areas for the enterprises which are ready to seize this opportunity.

The political challenge consists in promoting the establishment of a telecommunications market, which can meet the demands, and requirements of the ordinary consumer, not just today, but also in the long term.

Based on the desire for healthy competition and genuine freedom of choice, a large number of parties in the Folketing, the Danish Parliament, entered into an agreement on telecommunications policy in September 1999. This agreement will be followed up by new legislation in the present session of the Parliament. The object is to promote real telecommunications competition - also within areas in which it is still difficult to make out the contours of the many possibilities for application in everyday life.

### ***We Must Establish Priorities***

Denmark cannot be at the forefront in all areas. We must establish priorities and concentrate our initiatives on the areas of priority chosen. This requires experience of life in the network society, and we will gain this experience through concrete projects. Two IT lighthouses are to put Denmark on the world map of IT. One is to be located in Northern Jutland. The other in Ørestaden in Copenhagen. The objective is to create a regional network society to which all citizens can be given a ticket of admission at the same time as the economic and financial potential is utilised optimally.

The development has its own momentum in many areas; in others, political initiatives are necessary to ensure quick development to the benefit of all. It is therefore an important political task to establish priorities as to what should be a Government task and what can be left to the market and other players.



The Government presents here 37 concrete initiatives as a first quick follow-up on the report from the Committee on Digital Denmark, November 1999, and on the cross-party telecommunications policy agreement in principle from September 1999. The report will be revised and supplemented annually.

The Government's objective is that Denmark:

- should have the most modern, future-proof infrastructure in which as many citizens as possible have cheap broadband access
- gives its citizens fundamental IT rights so that they feel comfortable and secure when they are on the Internet
- ensures its citizens of life-long learning and quality in the network society
- is committed to e-commerce and maintains Denmark's position of strength as a competent trading nation
- makes it easy for its citizens to contact the public authorities 24 hours a day
- enhances IT policy efficiency through, for example, annual network reports.



# Initiatives Which Will Be Implemented in the Year 2000



## Telecommunications Infrastructure

All Danes are to have the most modern, future-proof infrastructure to which as many citizens as possible have inexpensive broadband access.

### *1. Wireless Subscription Networks*

As long as there is only one subscription network in Denmark, there will not be genuine competition throughout the telecommunications market. This is to the detriment of consumers and Denmark's competitiveness. With the latest wireless technology (FWA technology), an alternative to the existing subscription network can be established. An alternative network will really create competition as to price and capacity. It must be cheaper and easier to make calls and to send large quantities of data. Therefore, an invitation for tenders for frequencies will be implemented with a view to the establishment of a number of new wireless subscription networks in Denmark.

This will be set in motion in the first quarter of 2000.

### *2. Mobile Access to the Internet*

Access to the Internet is to be expanded from complicated computers to mobile phones and other small portable devices which are easy to operate. The technology is there (UMTS). Consumers will receive even better mobile communication more cheaply. The task is to make use of the technology widespread. Therefore, an invitation to tender for frequencies will be implemented, which is to form the basis for the build-up of these third-generation mobile networks.

This will be set in motion in the fourth quarter of 2000.

### ***3. Cheaper to Make Calls on Mobile Phones***

Even though there is competition on the mobile phone market, further initiatives are required to maintain this competition. One way of doing so is by giving the mobile phone market access to use additional frequencies. With this initiative, we shall ensure even lower prices for making calls on a mobile phone - and better coverage and quality on the networks so that mobile phone customers in outlying districts will also benefit fully from the competition.

This will be set in motion in the second quarter of 2000.

### ***4. Increased Competition***

As part of the revision of telecommunications legislation, the rules will be tightened in a number of areas to ensure real competition for all telecommunications companies on the market. This will include new and more effective regulations for fixing the prices and terms which the other companies are to pay and comply with for leasing capacity on the network of Tele Danmark (joint traffic prices).

This will be set in motion in the first quarter of 2000.

### ***5. Better Communication for Emergency and Stand-by Purposes***

In critical accident situations, it is important that as much information as possible about the accident should be quickly available to those who are to turn out to the task. Typically several authorities will have to work together smoothly, and a shared information basis is essential. By means of digital technologies, we now have the possibility of improving communication in the field of emergency and stand-by arrangements. The technology is there (TETRA - Terrestrial Trunked Radio), and this is a good basis for a professional and reliable data network. The network can also be used by a large number of enterprises in Denmark, including the contracting trades, the transport sector and other sectors. An

invitation to tender for frequencies will be implemented with a view to issuing licences for the introduction of TETRA.

This will be set in motion in the third quarter of 2000.

## **A Network Society for All**

All citizens are to be given fundamental IT rights so that they feel comfortable and secure when they are on the Internet.

### ***6. Security on the Internet***

The citizens are to feel secure when they are on the Internet. In order to create transparency, IT rights for the citizens are to be drawn up making it clear which rules apply when, for example, the individual citizen communicates with the public sector or shops on the Internet. An encryption policy is to be drawn up securing right to free encryption for citizens and enterprises without the possibility of illegal interception.

This will be set in motion in the second quarter of 2000.

### ***7. Telephone Line to the Public Authorities***

Out of consideration for citizens without Internet access who need to contact the public authorities also outside normal opening hours, one collective telephone number to the public authorities will be established. The objective for this new service will be to be able to offer the citizens one collective telephone access to the public authorities from which they can obtain general information and, in the long term, have their inquiries directed to the proper authority. The possibilities will be mapped and turned into concrete proposals after review work.

This will be set in motion in the second quarter of 2000.

### ***8. IT in Danish***

Language barriers may constitute a major obstacle to citizens and trade and industry utilising the potential possibilities of the network society. In order to give Danes equal possibilities, language technological tools are to be developed which can automatically translate texts from Danish into other languages and vice versa. At the same time, these tools are to help make Danish information on the Internet more easily accessible to citizens and enterprises worldwide. A plan of action is to be prepared which has a Danish language technological dictionary as one of its main points.

This will be set in motion in the first quarter of 2000.

### ***9. IT and Public Service***

The public service channels are to help popularise IT. The first element in this popularisation process will be for this objective to be formulated as part of the core activities of DR and TV-2 and for the channels to strengthen their online activities as part of their public service obligation.

This will be set in motion in the first quarter of 2000.

### ***10. Accessibility for the Disabled***

The Ministry of Research and Information Technology will draw up a situation report on the IT initiatives aimed at the disabled which have been taken so far. The objective is to assemble these and, if required, propose new initiatives in connection with the Minister for Research and Information Technology's next report to the Parliament. At the same time, it must be ensured that the Government's new IT policy initiatives contain reflections on accessibility for all, including the disabled.

Finally, the Government has decided to set up an inter-disciplinary ministerial committee to deal with issues concerning the disabled. Until May 2000, the committee will consider barriers to the involvement of

disabled persons in social life and follow up on the initiatives which have been implemented so far.

This will be set in motion in the first quarter of 2000.

### ***11. The Public Libraries in the Network Society***

The public libraries are an important resource in the Government's efforts to develop a network society for all. A new Act on library activities will give the population better possibilities of having access to information. In accordance with the Bill, the public libraries will, in addition to books, etcetera, be under an obligation to provide access to the Internet and digital information resources and to lend music media and CD-ROMs. Finally, in accordance with the Bill, it will be possible to search and order materials at the libraries via the Internet.

This will be set in motion after the passing of the Bill in the first quarter of 2000.

## **Life-long Learning**

Denmark is to ensure its citizens of life-long learning in the network society.

### ***12. Virtual University***

Denmark has further education degree courses of a high quality. This is the basis for building up a virtual university, which can offer remote teaching for students in Denmark and abroad via the Internet. The virtual university is to be established as a virtual network organisation with members from universities and other higher educational establishments.

The virtual university is to be launched via a central educational platform on the Internet, where it must be possible to find, pay for and take courses. It must also be possible to take exams on the Internet.

This will be set in motion in the second quarter of 2000.

### ***13. Better IT at Universities***

Within the framework of the universities' development contracts, the focus in the future is to be on the universities' use, integration and supply of IT and IT-based studies.

This will be set in motion in the first quarter of 2000.

### ***14. Home Pages for Students***

All students at universities and other higher educational establishments are to be offered a special home page which they can use in a number of fields via the Internet, for example for communication with academic staff, presentation of essays, registration for examinations, enrolment on courses and applications for student grants.

In line with the experience gained, the scheme will be extended to cover all students.

This will be set in motion in the second quarter of 2000.

### ***15. Learning Lab Denmark***

In the network society there is a constant need to develop new ways of co-operating and learning. A new research and development unit will be set up to promote the possibilities for Danish enterprises and educational establishments to use new methods of learning. Through experiments with the participation of enterprises, educational establishments, researchers and teachers, partnerships will be established to develop new methods for learning and competence development.



The Learning Lab is expected to be established with an independent Executive Committee as a faculty under the proposed Danmarks Pædagogiske Universitet.

This will be set in motion in the first quarter of 2000.

### ***16. IT Integration in All Subjects***

Denmark is to be the first country in which IT is included as an integral element in all subjects. The IT integration will have a significant influence on the contents, methods, pedagogy, didactics and forms of evaluation of all subjects. New learning methods and working methods and a changed organisation of teaching may be expedient.

There must be a systematic collection of experience from the large number of implemented and ongoing trials, and further trials should also be started. This work is to form the basis for an extensive review of Acts and Executive Orders for all training and education, with a view to a revision of the regulations to ensure that IT is really integrated in teaching and at examinations.

This will be implemented on a continuous basis.

### ***17. Life-long Learning***

Training and education are only of limited durability in the network society. Therefore, all citizens, irrespective of their age, educational background and residence, are to be offered the possibility of keeping up and developing the new competence and skills, which are in demand in the network society. Life-long learning must be based on the situation of the individual citizen, and the training and education offered are to be adjusted accordingly. Virtual training and educational offers and courses are to be developed in which physical presence is not a requirement and which can be realised, for example, at the workplace, at home or in an

educational establishment. The initiative is to be given more concrete form in the Ministry of Education's current work on life-long learning.

This will be implemented on a continuous basis.

## E-commerce

Denmark is to be committed to e-commerce and to maintaining Denmark's position of strength as a competent trading nation.

### ***18. Electronic Signature***

In order to strengthen e-commerce and the exchange of information via the Internet for use, among other things, for communication with public authorities, the Minister for Research and Information Technology will table a Bill on electronic signatures. An electronic signature guarantees who has signed an electronic letter and that unauthorised parties have not made changes to the message. A so-called key centre guarantees that the signer is who he or she purports to be. As this is a new market in which technological development is very rapid, the legislation must, in so far as this is possible, be technology neutral and able to be taken forward in to the future. In addition, the Ministry of Justice has set up a committee which is to prepare proposals on how to ensure that the legislation does not contain requirements as to form, etcetera which will present inconvenient obstacles to the use of electronic communication.

This will be set in motion by the passing of the Bill in the second quarter of 2000.

### ***19. Objectives for Public E-commerce***

The public sector is to act as an engine for Danish trade and industry's use of e-commerce through consistent use of digital communication in connection with public procurement. A plan of action is to be prepared for when public institutions are to switch to electronic procurement of

various product groups such as travel, office supplies and IT equipment. In the long term the public's trading partners are to be charged fees for employing paper documents.

This will be set in motion in the second quarter of 2000.

### ***20. A Public Auction Hall on the Internet***

To ensure as cheap public procurement as possible, a public Internet auction hall is to be established at which enterprises can make bids for supplying of goods and services to the public sector and where public institutions can make joint procurements. The electronic auction hall is to be co-ordinated with initiatives which have been started under the auspices of Statens og Kommunernes Indkøb A/S and Statens Information (the Danish State Information Service) and it is, moreover, to be based on commercial incentives and commercial business models.

This will be set in motion in the second quarter of 2000.

### ***21. E-hus Danmark - A Danish E-commerce House***

The spread of e-commerce and increased globalisation will be of great competitive importance to trade and industry. At the same time, it will revolutionise and redefine business models and procedures in both the private sector and the public sector.

Denmark is to build on its traditional role as a trading nation and develop into a centre for e-commerce. In concrete terms, Ørestaden is to be made into a centre for an innovative e-commerce environment which will be built up in connection with the large-scale initiatives which have already been planned in the area (the IT College, the IT Science Park, etcetera). To this are added a number of new elements:

- In connection with the IT College and the IT Science Park, an E-commerce House will be established - a building in which know-

how, methods, tools and international contacts can be built up and where e-commerce enterprises can locate their business.

- An annual international e-commerce competition is to be held with prizes being awarded to the enterprises and countries which have done best.
- An overall home page (Copenhagen Cyberport) is to contribute to establishing an international environment in which knowledge about e-commerce can be exchanged.

This will be set in motion in the second quarter of 2000.

### ***22. E-commerce Thermometer***

In order to keep a finger on the pulse of the network economy of the future, an e-commerce thermometer is to be established which shall closely monitor the development in Danish e-commerce. The focus will be on enterprises, public institutions and consumers and on the e-commerce between these.

This will be set in motion in the second quarter of 2000.

### ***23. Better Management of the Enterprises of the Network Society***

Increased e-commerce will, together with the new network economy, revolutionise and redefine business models and procedures in both the private sector and the public sector. This will make great demands on the training of Danish managers. A partnership is to be established on e-management development with participation of trade organisations, educational establishments and other relevant science centres. The task of which will be to establish nation-wide initiatives within the e-management of the conversion of the enterprises to the network society.

This will be set in motion in the third quarter of 2000.

#### ***24. Prize Awards for Digital Businessmen***

In order to promote the awareness and widespread use of e-commerce, a quarterly prize will be awarded to the digital businessman or businessmen - public or private - who has or have made a particularly noteworthy effort to convert the enterprise to the digital world.

This will be set in motion in the third quarter of 2000.

### **Digital Administration**

The digital administration is to make it easy for citizens to contact the public authorities 24 hours a day.

#### ***25. Electronic Bridge across Øresund***

On the initiative of the Government and in co-operation with the relevant Swedish authorities, an information function is to be established in the Øresund region on, among other things, the labour market, tax regulations and social services regulations on both sides of Øresund. The initiative is to facilitate the integration of citizens and trade and industry in the Øresund region and consequently create a basis for Ørestaden as an e-commerce centre. The Øresund information will be based on the Internet, call centre, etcetera.

This will be set in motion in the first quarter of 2000.

#### ***26. Citizens' Access to Their Own Electronic Data***

It must be ensured that citizens can use the existing access to acquire information about themselves and that public data about citizens are not monopolised by various public authorities and enterprises.

This will be set in motion in the first quarter of 2000.

### ***27. Personal Internet Access to the Public Authorities***

All Danish citizens are to be offered personal Internet access which can give them access to publicly registered information about themselves, to a customised information system and to easy, rapid, secure self-service in relation to public authorities and institutions. The objective is better service, enhanced efficiency and more openness.

This will be set in motion in the first quarter of 2000.

### ***28. Public Information Server***

On the basis of already existing public registers, a public information server is to be established. This information server is to give citizens and enterprises easy, secure access to the large quantity of information registered by the public authorities on Denmark and Danish citizens. This is the first step on the way to citizens only needing to give data to the public authorities once.

This will be set in motion in the first quarter of 2000.

### ***29. Electronic Forms***

Before the end of 2000, citizens are to be able, via the Internet, to retrieve, complete and submit the most common forms used by citizens, such as notices of change of address, notices of change of doctors, etcetera. An increasing number of forms are to be offered on the Internet so that all important forms can be found on the Internet before the end of 2002.

This will be set in motion in the first quarter of 2000.

### ***30. Effective Electronic Filing***

The Danish Public Records Act stipulates, as does the Danish Freedom of Information Act and the Danish Public Administration Act, that records must be kept of public documents. The Ministry of Research and

Information Technology is implementing a review as an introduction to a plan of action, which is to speed up the switch of the public administration to electronic administration, including effective electronic filing.

This will be set in motion in the first quarter of 2000.

### ***31. Mark Book for Public Home Pages***

In order to improve the quality of the public home pages, a quality check will be made four times a year. The evaluation of the public home pages with the grades awarded will be published. The objective is to ensure that the public sector is at the forefront regarding the utilisation of the possibilities offered by the Internet for better service and greater user-friendliness, including general accessibility for the disabled.

This will be set in motion in the first quarter of 2000.

### ***32. Open Mail Lists on the Internet***

The Ministry of Research and Information Technology is starting a trial with open mail lists. In the light of, among other things, the experience gained from this trial, a plan may be prepared for how public authorities can offer citizens easy access to monitor the public sector, for example by public authorities making their mail lists available to the public on the Internet.

This will be set in motion in the third quarter of 2000.

## **IT Lighthouses, IT Maps and IT Reviews**

Denmark is to enhance the efficiency of its IT policy through, among other things, annual network reports.

### ***33. Denmark's First Network Society (Northern Jutland)***

In several places in the world, strong IT environments have been established in demarcated areas via massive, focused investments. These IT environments are today acting as magnets which attract high-tech enterprises, financial investors, entrepreneurs, researchers and students, who are absorbed into a dynamic, strongly competitive interaction. Denmark needs to establish similar environments, which are to develop and support the special niches of the network society in which we have a special tradition and culture to build on. The Danish network societies are to focus on both „soft“ network areas such as democracy, trade and commerce, teaching and service and „hard“ areas such as research, innovation, development and production.

The Danish investments and initiatives are to be made with the establishment of a regional IT environment, which, in full scale, will demonstrate the potential of the network society for enterprises and citizens.

On the basis of the very positive co-operation which has already been established between enterprises, Aalborg University, Forskerparken Novi A/S and central political decision-makers in the region, an IT lighthouse will be established in Northern Jutland.

This will be set in motion in the first quarter of 2000.

### ***34. Strategy for Ørestaden as a Network Society***

A strategy is to be prepared for Ørestaden as a network society based on the large-scale initiatives which have already been planned in the area, but with greater speed, more focus and a clearer strategic cohesion.

This will be set in motion in the third quarter of 2000.

### ***35. IT Maps***

With a view to achieving synergy effects from the many IT projects around Denmark, an initiative will be taken to gather and communicate



experience of projects at political, administrative and technical levels which are otherwise kept separate. The experience from Northern Jutland, Ørestaden and other interesting IT areas is to be used as a springboard for new initiatives to create growth.

This will be set in motion in the fourth quarter of 2000.

### ***36. Report on Convergence in the Network Society***

In the network society, known technologies are merging and forming new ones (convergence). For example, TV, computer and mobile phone can become one united technology. A report is to be prepared on convergence in the network society which is based on the breakdown of the borders between the telecommunications, IT and media sectors. The report is, among other things, to look at the need for new regulation in the network society of the future.

This will be set in motion in the second quarter of 2000.

### ***37. Annual IT Policy Review***

The Government is to prepare an annual IT policy network report to the Parliament, in which:

- the IT policy initiatives are compared with the many objectives, strategies and plans of action within various sectors
- a review of legislation pertaining to IT policy assesses which Bills in the last session of Parliament have had the greatest significance for the development of IT and the conversion to the network society
- a comprehensive IT statistical model quantifies the development of IT in Danish society and Denmark's position in relation to other leading IT nations.

This will be set in motion in the fourth quarter of 2000.



# Further Proposals



In addition, a number of initiatives are being considered:

## ***1. Share Options***

In the global network society, there is increased pressure from competition on Danish enterprises. To give the enterprises more versatile and flexible possibilities for attracting and holding on to key employees, the rules on the taxation of share options are to be changed so that they can be used to a greater degree as a tool for recruiting and holding on to employees.

## ***2. Access to the Internet for Every 10<sup>th</sup> Pupil***

In order to ensure the best possible basis for the integration by primary and lower secondary schools' of the Internet in their teaching, an analysis is to be made of the status of and plans for high-speed Internet access for the pupils in primary and lower secondary schools and out-of-school educational establishments. On the basis of the result of the analysis, it will be considered whether to include the subject in the negotiations on the coming municipal agreement to ensure at least one high-speed link-up to the Internet for every 10<sup>th</sup> pupil. It should also be considered whether to establish local networks with wireless technologies to ensure that the possibilities for IT use in schools can be carried forward into the future at the same time as portable computers and other mobile technologies are gaining ground.

## ***3. More Computer Science Graduates***

The number of students admitted to the computer science degree courses is to be doubled over three years.

#### ***4. PC Scheme for All Publicly Employed Teachers***

For a 2-year period, all publicly employed teachers and instructors are to be offered a home PC with Internet access. The PC shall be acquired for an educational and/or vocational purpose. The PC scheme is to be financed by a combination of user payment via subtractions from the gross salary and employer's contribution.

#### ***5. Development of Digital Teaching Aids and Materials***

Digital teaching aids and materials are a prerequisite for being able to implement actual IT integration in Danish teaching.

A specialist and financial partnership is to be established between the Ministry of Education, producers of teaching aids and materials and multimedia on the development of digital teaching aids and materials of a high quality for different levels in the educational system. The Ministry of Education will highlight the levels in question on the basis of an evaluation of requirements. The participants in the partnership are to contribute equally to the development of the teaching aids and materials, both financially and in terms of specialist input.

#### ***6. More IT Research and Teaching on Further Education Degree Courses Are to Attract More IT Students***

The number of IT researchers is to be increased in order to attract more students with an interest in IT. This will ensure better qualified teaching on further education IT degree courses, which will make it more attractive to apply for admission to an IT degree course.

#### ***7. Danish IT Research***

In some areas, there is a special need for promoting Danish research initiatives in the network society, including within:

- security and encryption of telephony, data transmission and over-the-air communication

- the consequences of the expected fusion of different media, the so-called media convergence.

An IT and telecommunications consortium is to be established, involving existing public and private centres in this field.

### ***8. Research Programme on a Network Society for All***

Increased, focused research initiatives are to increase our knowledge of the social perspectives in the network society - with special focus on IT and democracy, the cohesion of Danish society and the risk of an IT knowledge gap between different population groups.

### ***9. Five IT „Incubators“ as a Food Chain for the Innovation Environments***

Up to five IT incubators are to be established in the immediate vicinity of training, education and research environments in the field of IT. These incubators are to give researchers and students the possibility to test, at an early stage, ideas with a long-term or highly risky commercial aim.

### ***10. Efficiency in the State Sector***

Digitisation of the State sector's internal administrative routines, which offer possibilities of economising by large-scale operations, is to be commenced. For example, payroll and personnel functions, IT operations and support, electronic case-handling systems and government procurement.

### ***11. www.foreninger.dk***

A main portal, [www.foreninger.dk](http://www.foreninger.dk), is to be established. In addition to providing information about associations, this portal is also to support the associations' interactive communication with their members, public authorities and other interested parties.

## *12. Green IT Policy*

As part of the Danish environmental protection policy, calculations are to be made which highlight the environmental consequences of increased communication and e-commerce in the network society. At the same time, the communication of knowledge about environmentally-friendly electronics for buyers and consumers is to be given higher priority so that consumers' possibilities for green shopping are strengthened. One of the ways to achieve this is through increased use of existing marking schemes.



# Continuous Strategy

As the report shows, a number of initiatives will be implemented right away. However, it is essential for the Government that all interested environments and citizens in Danish society participate in shaping the continuous development of the network strategy. Therefore, three regional IT policy conferences will be held in the course of the spring of 2000. In order to further secure the continuous development of IT policy, a network report is to be submitted to Parliament in the autumn, supplemented with further proposals for IT policy follow-up.

