

# Christer Marking\*

## The Swedish ICT Commission

### 1 Background

International comparisons have ranked Sweden as one of the most “mature” countries in terms of information technology – penetration of PCs to homes, the use of Internet, mobile telephones, broadband etc. A number of factors might help to explain this. The early adoption of ICT in public administration, banking and industry made people familiar with computers at work and in their dealings with the authorities. Swedes also seem to have a positive attitude to new technology and are early adopters. In the middle of the 1990s, more than 40% of Swedish households had a PC. As all of them had telephones, Internet penetration soon became very high. Information technology was also used broadly in working life in general so most people met it at work.

For a small country, Sweden has quite an interesting history in the field of computers and information technology, related to both hardware and software. In fact, in the 1950s and 1960s, Sweden was at the international forefront of both industry and R&D. Today, apart from Ericsson, there are no real indigenous computer manufacturers in Sweden, although there are fairly broad activities in the field of specific ICT applications development.

### 2 Early public and political concern

The use of computer technology in more and more areas of life gave rise to public concern. The new opportunities to perform cross-computations of different registers or databases already created in the public and private sector, prompted the concern for privacy which ultimately led to the world’s first regulation on the national level of computers and privacy.

There was also growing concern about work conditions related to the application of automatic data processing. This related both to the area of public administration and to the use of computer technology to automate manual work in industry. In the late 1970s particularly, that concern surfaced and led to a number of government-initiated commissions looking into various aspects such as regulation by law, matters of security, and effects on working life and productivity. Meanwhile, the economic recession at the time prompted the oft-recurrent discussion about technology-induced unemployment. There was a subsequent need for policy formation related to computers and society and a number of different policy commissions were formed, with representatives from politics, public administration, trade unions and business organisations. They were all links in a chain of which the ICT Commission is the latest link so far.

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\* *Christer Marking* is the director of the ICT Commission since February 1999. He is also the chairman of the Swedish Centre for Internet Technology, a research institute, and was earlier the director of R&D policy at the Ministry of Industry. He has been involved in research on production systems and work organisation at the Royal Institute of Technology, The Swedish Work Life Centre and The Swedish Metal Workers Union and has been the director of the Swedish Commission for Skills and Competence in Working Life.

### 3 The formation of the ICT Commission

The Internet concept ushered in a new era. The myth has it that Sweden's prime minister at that time, Mr Carl Bildt, sent an e-mail to President Clinton in the USA in early 1994. That was an act of great symbolic import, inaugurating in Sweden the era of ICT as communication technology, as opposed to ICT as merely computer technology. We were no longer talking about stand-alone computers. No, we were talking communication, of which computers were only a part. Prime Minister Bildt set up an ICT Commission which included a number of ministers from his government but also many high-ranking businessmen and professors from the universities. The aim was to explore the opportunities of the new technology and to deal with the downsides, if there were any. In a way the remit could be termed that of alerting society to the prospect of a new future. The Swedish ICT Commission thus formed crowned its endeavours by publishing the book "Wings to Human Ability". Some say that this book inspired the young generation to move to ICT as the land of opportunities – these were the people who created the huge number of start-up companies in the Internet area.

### 4 The present ICT Commission

The present ICT Commission, formed in 1998, is the fourth since 1994. Its mandate expires in June 2003. In general terms one can say that the scope of the ICT Commission has shifted from the creation of general awareness of the opportunities of ICT to in-depth understanding of specific issues related to the use of ICT in society. The view taken by the Swedish ICT Commission of technological change is in a way rather mainstream, namely that the usefulness and acceptability of a technical innovation depends on its social and cultural context. In the Commission's view, it is fairly obvious that the present mismatch between aspirations and reality in productivity gains from ICT is primarily due to the technology being insufficiently adapted to social and organisational needs.

So far, the development of the Internet has been dramatic and has posed a number of new questions. Generally speaking, the proliferation of ICT at work and in people's homes has exceeded all expectation. That implies major adjustments over time to the way in which people and organisations co-operate and co-ordinate their efforts. The obstacles to improvements and development are not exclusively technical. The counterforces are just as often legal, economical or organisational and are often a part of cultural habits and preferences.

The Commission has thus set out to explore a number of societal aspects of ICT implementation. In a number of areas considered to be of prime interest, the ICT Commission has formed its own so-called Observatories, each comprising prominent actors and savants in its particular area. There are six main areas of such ICT related studies, viz "Law", "Infrastructure", "Information Security", "Democracy and Citizenship", "Learning, Knowledge, Competence" and "ICT and Growth".

The legal aspects are numerous. They concern the pressure exerted by the fast spread of ICT use on existing norms and regulations. They also concern various more or less foreseeable demands for institutional changes that emerge from increasingly widespread use of ICT – not least the transition from simple, local use of computers to nationwide use of complex systems and platforms where ICT serves as the basis and the necessary prerequisite.

Since its work began, one important area for the Commission has been the development of the communication infrastructure. In 1999 the Commission published its

vision of a “future-proof IT-infrastructure”.<sup>1</sup> That vision was based on a comprehensive analysis of the technical and economical preconditions for building an infrastructure that could accommodate steadily rising demands for transmission.

Security and safety are also among the Commission’s prime concerns. They may be regarded as aspects of the infrastructure and they touch upon issues such as privacy, redundancy in the fibre optic network system, and securing your own PC so that you are not a potential menace to the net.

Presently, the area of ICT in relation to learning, knowledge, and competence is dynamic. The Commission emphasises ICT as a means for broad access to learning opportunities both at work and in other situations, at school and in everyday life. To reach the desired goals, new kinds of learning environments must be developed. The Commission seeks to support and accelerate this work.

Gradually, more and more of the Commission’s work is being devoted to information as a fundamental resource in society. The development of tomorrow’s digital services presupposes the widespread availability of all kinds of information on the net. This means that considerable efforts are needed to achieve standardization of both syntactic and semantic resources. The importance of a transparent information infrastructure cannot be exaggerated and concerns all areas of interest of the Commission, not least ICT and democracy and ICT and growth. To label its strivings, the Commission has launched the notion of “Broad Services”. Such services are based on three basic elements: (a) Services that are truly useful to a large number of citizens. (b) Services of a high value due to combined use of information from many sources. (c) Widespread availability of broadband communication facilities.

## 5 The future of ICT policy?

Starting with Government Bill 1981/82:123 on “a co-ordinated data policy”, a number of computer- or ICT-related bills and policy documents have been passed by the Swedish Parliament. Although very differently worded, they are rather similar in spirit and principle. The focus is rarely on technology itself, apart from some fairly comprehensive R&D programmes. Today, numerous government agencies are responsible for different aspects of the public use of ICT. Co-operation with organs in the private sector is often vital. The efficiency of an overall ICT-policy is therefore highly dependent on the day-to-day work of many organs. From the point of view of the Commission, concerted actions and preparedness for swift changes are of the essence. The Commission can help by spotting problems at an early stage, by engaging itself in future-oriented debates on the ICT society, and by exploring opportunities, obstacles and levers for future productivity and welfare gains. The assessment of policy in action is an important task, although policy formation is still the dominant mission. In its present work, the Commission has pointed to the need for a new “phase” in ICT policy formation with a focus on information as a general resource for the development of new, electronic or “digital” services of great value and benefit for society, industry, and individuals.

Will ICT policy be as prominent in the future as it is today? Or will the development and use of ICT be a “mainstream” activity in all areas while not forming a policy area in itself? Much remains to be explored in the deployment of ICT in society. The effects of ICT use are not fully understood. Technology changes our society and ICT is now becoming a

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<sup>1</sup> ”In 5 years, at least 5 Mbps to everyone, at no more than the cost of a monthly bus pass and with the possibility for everyone to choose between at least 5 operators at his or her access point”. See: A future-proof IT infrastructure, SOU 1999:134.

more powerful agent of change than ever before. That in turn underscores the need for a comprehensive social effort to assess, to understand, and to raise social awareness, which in fact is the present ICT Commission's prime task. The experience of the present period of change underlines the need for policy formation in the ICT area; the potential for dramatic changes is still too great to make mainstreaming an option.