

## European Telework Status Report 1998: Denmark

This is an extract from the country summaries section of the European Commission's 1998 Status Report. The complete report is online at <http://www.eto.org.uk/twork/tw98> in a variety of formats, including Word, HTML pages and Acrobat .pdf files. Links to further information about telework in Denmark are in the Denmark national page at European Telework Online - <http://www.eto.org.uk> .

### *Summary*

Denmark is among Europe's most highly invested users of IT and PCs, but until quite recently telework was not a topic of discussion, let alone action. 1997 saw a complete transformation, with a surge of both interest (in the media, conferences, by government) and activity, with telework moving from below 1% to between 5%-15% of the workforce, depending on definitions and survey methods. While there have been many influences at work to bring this about, one stands out in terms of policy: the decision that a computer supplied by an employer for private use at home is not a taxable benefit so long as there is some use for work-related tasks. The fiscal impact of this on Government revenues is marginal; the value in terms of business and consumer attitudes to IT in the home is substantial.

Informed observers also report a significant and longer term socio-cultural shift in individual attitudes to society in general and work in particular: telework exemplifies this change - ten years ago it was regarded as something imposed by employers and to be resisted, today its widely regarded as a symptom of greater delegation, flexibility for the person as well as the firm, self-management and self-determination. The emphasis has shifted from a collective focus on rights, equality, hierarchy and bureaucracy to a more personal emphasis on possibilities, alternatives, decentralisation and greater independence. Relatively low unemployment, high levels of participation and a high level of part time working appear to support this change of emphasis.

At a more detailed level, Denmark is experiencing the same issues and barriers as in other countries where there is general acceptance of telework: management misunderstanding and lack of confidence, together with a short term focus on terms and conditions and immediate management issues rather than a strategic focus on the transformation of enterprises.

### *Telework background and take-up of ICTs*

#### General background:

- Denmark vies with Sweden for top position as Europe's most intensive and highly invested use of IT, but until 1996 had relatively low take up of Internet:

	IT % of GDP	IT per capita (ECUs)	PCs/100 white collars	PCs per 100 population	Internet user/100 population
Denmark	2.87	751	64	33	2.3
Sweden	3.36	745	75	29	7.6
USA	4.08	870	103	46	10.2

- However, Internet use is thought to have accelerated sharply during 1996-1997 and continuing to grow rapidly in 1998. Recent estimates suggest some 700,000 users have access, over 13 users per 100 inhabitants. PC use is also further intensifying, bringing up overall IT investment. There are thought to be PCs in more than half of all Danish households, which would put Denmark ahead of the USA.
- Employment participation is high, as is part time working, while unemployment is low. Employment in services is among Europe's highest levels. Denmark has Europe's highest per capita GDP, other than the exceptional case of Luxembourg:

	Pop'n	GDP per capita (\$)	Labour force participation (%)	Part time working % of employment	Services as % of total employment	Un-employment (%)
Denmark	5.2	29,873	80	22	69	6
Germany	81.1	27,604	70	16	59	9
Netherlands	15.4	23,966	71	37	73	6

- High prosperity plus low unemployment mean that skills development, retention of experienced people, and productivity are the key driving factors for industry.

#### Driving factors:

- Denmark is rapidly becoming "Information Society prepared", with high and accelerating investment in ICTs, accelerating Internet take up, a high level of Government and public awareness, and appropriate pressures on industry to address innovate.
- The removal of tax on home PCs provided by employers for personal as well as work purposes has sent a clear message to industry and consumers that the Government wants people to buy, learn about and use IT on a widespread basis. Between 20-30,000 PCs were acquired on this basis in 1997, with an expectation of around 150,000 in 1998. Many companies are stipulating that in order to qualify for a home PC, employees must agree to study for and acquire the "European PC Drivers' Licence", thereby delivering basic IT skills training on a voluntary basis.
- Trade unions are now largely positive about teleworking, subject to acceptable (to the unions) terms and conditions based on framework agreements, which are already in place in some sectors. A common position on telework, providing guidance for collective bargaining, has been drawn up between the Trades Union Congress and Employers Organisation - perhaps the first such agreement in Europe and an indicator of Denmark's rapid progress.
- A flurry of surveys and reports have produced largely positive conclusions (see examples below), and there has been a sharp increase in media coverage, events etc.
- Local and regional authorities are starting to take an interest in telework as a contributor to local economic and social development.

#### Constraints:

- The main barrier to progress is lack of understanding and confidence among managers, confirmed by both private and public sector studies. There is too much emphasis on immediate, short term issues and insufficient awareness of strategic opportunities and overall organisational implications.
- Public discussion (and apparently most local managerial thinking) is narrowly focused on specifics such as terms and conditions for individual teleworkers working at home, and almost the only model being considered is that of partial home-based teleworking (ie part of week at home, part in the office). This misses the much more significant (from the enterprise, economic and general social standpoints) issues and opportunities of the transformation in enterprise organisation and working methods/locations that is being enabled by information society technologies and applications and driven by globalisation and de-localisation.
- There remain some legal and regulatory issues and uncertainties.

#### Telework activities and results

An explosion of activity has occurred in Denmark, with far too many interesting developments to report in this summary, which can only select some highlights and aspects of wider interest.

- **Surveys and reports.** Particularly noteworthy are studies undertaken for the Ministry of Research, the Trades Union Congress, the Business Development Council, the Danish Data Society (with PLS Consult), the Danish Transport Council and IDC. The usual lack of a consistent definition leads to wide variations in the reported results. A conservative estimate is that at least 5% of the Danish workforce already does some teleworking. Some reports using looser definitions put it as high as 15%.

- **Socio-economic analysis.** In a 1997 paper Lars Qvortrup, a leading European researcher in telework and related fields, concludes that Denmark along with some other countries has seen a decisive social-cultural shift in recent years, with radical changes in individual attitudes to society in general and work in particular. Low cost, high performance technology enables new methods such as telework, but the extent and pace of take-up are determined by attitudes. The earlier (and quite recent) approach to work was typified by an emphasis on hierarchical authority, rights, equality, parity of treatment and bureaucratic, rule-following procedures. The new attitudes focus on delegated authority or autonomy, decentralisation, empowerment, flexibility, self-determination and local/individual decisions based on circumstances and possibilities rather than on preordained rules. These changes are conducive to the relative autonomy of location-independent teleworking, as opposed to more closely managed work in centralised offices.
- The TUC study found that teleworking is much more prevalent among non-union members compared with members. 80% of respondents were positive about the idea of teleworking and 53% would telework if the opportunity arose. 80% of those already teleworking were very positive about it, citing the freedom of choice about work location and work pattern as the biggest single benefit, followed by cost and time saved from commuting.
- An important background study by the Danish Business Development Council found that 20-25% of the 1900 enterprises studied have undergone organisational transformation in recent years, introducing such changes as flatter management structures, self-directed interdisciplinary teams, networking and value-based management styles. These companies were, on average, 30% more productive, developed two to three times as many new products, and created two to three times as many new jobs.
- Telework and organisational transformation is being led by larger, more profitable enterprises. Small firms are being much slower to respond.
- Since teleworking has only recently become widely accepted in Denmark there is a shortage of well established exemplars. The case presented is, however, typical of the Danish concern for work and the family.

The FARIN project stands for family, work and information technology, and is a project launched at the end of 1995 in the southern, peripheral part of the Danish island of Zealand and nearby smaller islands, as part of the region's business development programme. Its main goals are to support regional development by attracting settlement from Danish core areas, especially Copenhagen which is an hour or more commuting distance away, to strengthen the local society and economy and to achieve these goals through family-centred policies. Thus, the main areas of interest are to see how telework can assist in decreasing the amount of commuting and in improving the quality of life for families with children.

FARIN has shown that this can be achieved by integrating the organisation's need for Total Quality Management with the family's need for Total Life Quality Management. The basis for this is to ensure that employees have greater control over their own work situation, that management and leadership is designed to support telework, that the relevant technology is provided and that communication is maximised between all concerned (between employer and employee, between employees, and with employees' families).

## Conclusions

From a late start (by Northern European standards), Denmark looks set to become a leading exemplar of rapid deployment of telework, particularly if the Danish Government continues to develop innovative approaches to stimulating technology take-up. The issues of management understanding and a narrow public perspective on the opportunities presented by telework are common to all countries. As a small but highly prosperous country Denmark can play a key role in furthering the understanding of telework in its wider and deeper sense.