

Conference conclusions

Teleworking may possibly contribute to:

- Increased decentralisation
- Environmental gains
- Cost savings and increased working efficiency
- An improved corporate culture and a family-friendly organisation of work

However, it clearly emerged from the conference that none of these benefits will be an automatic result of our introducing more teleworking. Or in other words:

It is illusory to believe that teleworking can be used as a lever to achieve a desired development whether in relation to traffic reduction, decentralisation, increased efficiency, or more family-friendly working conditions. If politicians and companies wish to achieve, for example, decentralisation with economic and social development in fringe areas, this will require deliberate planning based on trials with, among other things, teleworkingplaces. Similarly, if Denmark wishes to reduce the volume of traffic with perceptible environmental effect, we must not base this development on teleworking alone - but initiate planning which leads to changed traffic, occupational and settlement patterns, and use teleworking as a means in that connection.

The question of whether teleworking will contribute to more employment was not answered at the conference. Positive expectations in this regard relate primarily to increased investment, growth and employment in the computer and telecoms sector if teleworking really takes hold. A Ministry of Research forecast of 250,000 teleworking jobs in Denmark in 10 years' time (compared with 9,000 at present) was met with some scepticism at the conference.

None of the experts offered a prediction of what teleworking would mean for the overall employment situation. The lay panel, however, in its final document suggested that a growing freelance culture and an increasing internationalisation of the labour market could mean a burgeoning "grey" labour market with more moonlighting, and lost Danish competitiveness as a result.

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Where regulation of the labour market is concerned, there are apparently no major conflicts linked to the introduction of teleworking. Both the lay panel and the experts were agreed on this at the conference.

Many Danish companies are positive towards their employees' desire for teleworking, partly because satisfied employees mean increased production. However, expected reductions in costs are not the prime mover in this connection.

Many employees want teleworking in order to obtain more flexible working hours which suit the needs of their families. It should be noted, however, that the positive experience of teleworking in Denmark principally emanates from relatively highly qualified employees who

are used to organising their work themselves.

It cannot therefore be stated generally that teleworking will in all cases be beneficial to corporate culture and employee satisfaction. It is not certain that low-qualified employees with work of a more routine and monotonous nature will view teleworking as an improvement. Many studies show namely that for this group the social togetherness of the workplace is the most important positive quality of their work. Where this group of employees is concerned, it is therefore particularly important to follow the general conference recommendation that teleworking should not exceed between one and three days a week and that it should be voluntary.

The conference suggested that a handbook be prepared to give advice and guidance to companies wishing to introduce teleworking. Trials and experiences are currently in existence upon which such a handbook can be based.

Project goal

In the autumn of 1996 the Danish Board of Technology initiated a project on teleworking in the future. The extent of teleworking is widely expected to increase in the years ahead, and in line with this development a growing number of employees and companies will be affected. Through this project therefore the Board wished to identify the attitude of ordinary people to this form of work organisation. What can teleworking be used for, and how should teleworking be organised? How can the advantages of introducing teleworking be achieved while at the same time avoiding the disadvantages?

The project placed particular focus on four areas in which teleworking is expected to contribute:

- Increased decentralisation
- Environmental gains
- Cost savings and increased working efficiency
- An improved company culture and a family-friendly organisation of work.

Specific aims of the project were to formulate recommendations concerning the form of social regulation necessary to ensure a beneficial development process, and to assess which bodies are best suited to exercise this regulation; government, parliament, labour market organisations or local authorities.

Methodology

The project was implemented as a consensus conference. At consensus conferences organised by the Board of Technology a group of laymen is given the opportunity to question experts and to assess independently a particular technological development. A "consensus" in this context means that the laymen must reach agreement on the conference questions and conclusions, and this agreement must be created via discussion and not on the basis of a vote.

The 13 representatives of the lay panel were chosen from among 2000 individuals selected at random from the register of persons at the Ministry of the Interior. The individuals selected, who were all in the 20 to 65 age group, were then invited to participate in the Board of Technology's Consensus Conference on Teleworking.

A total of 115 expressed interest in taking part and sent letters containing personal details and their immediate thoughts on the subject. Against this background the lay panel was constituted on the basis of a broad representation of age, sex, occupation, residence, etc.

What is teleworking?

The work of the lay panel took its point of departure in the following definition of teleworking:

"Work in which an individual is for considerable periods of time physically distanced from, and in electronic communication with, the place, the customer or the organisation to which their work effort is directed".

Assessments of the experts

At the consensus conference on 2 - 5 May the experts were fundamentally agreed that teleworking was not only attributable to new technological possibilities, but strongly linked to a more general development of the labour market; a development which, among other things, is moving in the direction of increased use of project organisation, less hierarchical structures, and contract remuneration - and hence more fluid boundaries between work and leisure.

Several of the experts indicated that the labour market of the future would be characterised by flexibility both in the organisation of work and in the actual conditions of employment. These experts also indicated that they considered such a development of the labour market to be inevitable. Particularly as the international development in business administration is moving in that direction and it will be difficult for Danish companies to isolate themselves from these trends.

However, the experts were disagreed on how quickly this development will come to pass. It is estimated that at present there are around 9,000 teleworkers in Denmark. The Ministry of Research and Information Technology believes that it is realistic to envisage the existence of around 250,000 teleworkers in Denmark within 10 years. However, this figure was described by researcher Lars Qvortrup as being some way above other existing estimates, which indicate between 60,000 and 210,000 potential teleworkers.

The invited labour market organisations, companies and ministries were agreed that in conjunction with the growth in teleworking new regulations will only be required in a few areas, principally those of taxation, working environment, and industrial injuries. The framework for the teleworker's conditions of employment on the other hand would best be drafted by the parties in the labour market, whereafter this framework could be fleshed out locally at the individual company. This uncomplicated introduction of teleworking is possible

by virtue of the Danish tradition for a fully regulated labour market and for peaceful co-operation between the labour market parties. The labour market organisations anticipate the continued survival of "the Danish model" since the impetus in the present development is the desire of employees for between one and three days' teleworking a week, and not a requirement or pressure from the enterprise. However, neither employer organisations nor enterprises could exclude the possibility that teleworking might in time become a requirement from the employer at the time of recruitment.

However, the experts were less united on who will be the teleworkers of tomorrow. Several experts in the field of social sciences pointed out that a difference exists between the teleworking of highly qualified and low-qualified employees. For the highly qualified employee accustomed to independent and self-developmental work the possibility of teleworking can be used to give a more flexible working life with increased self-determination. For the low-qualified individual with work of a more routine nature it is to a greater extent the social togetherness of the workplace which provides the work motivation, but it is precisely this social togetherness which will be reduced as a result of teleworking. The experts therefore warned against individuals being pressurised into teleworking against their will.

Motives for teleworking also differ between men and women. The men often use the flexibility gained from teleworking to work more, while the women to a greater extent spend more time on family life. The problem is that at present, discussion of the potential of teleworking mostly revolves around the highly qualified group. This may be attributable to a shortage of feedback relating to teleworkers engaged in more routine jobs. Anthropologist Bodil Bjerring therefore dubbed the current picture of the teleworker as "the vision of the highly qualified male" , a vision which cannot be applied directly to the rest of the work force.

The clearest message from the experts was that introduction of teleworking would not immediately have any environmental benefit in the form of reduced transport to and from work. The Danish Transport Council pointed out that teleworking could at most contribute to a reduction in the overall transport to and from work of between 0.5 and 3.5%. Conversely, teleworking could lead to increased transport if it results in the teleworker moving further away from the employing enterprise, or if the teleworker increases his transport in connection with shopping and recreational activities.

Final document of the lay panel

In its final document the lay panel shares the belief of the experts that "the Danish labour-market model", combined with local strategies within enterprises will be able to solve many of the problems arising in conjunction with the introduction of teleworking. Among other things, this model will enable the extent of teleworking to be regulated, and also ensure clear job definitions and to some extent supplementary training of teleworkers. The lay panel also concurs with the recommendation of the experts that employees should be limited to a maximum of between one and three days' teleworking a week. In the assessment of the panel,

however, teleworking will encourage a trend towards increased change of status from employment to freelancing. The panel found the experts unable to elucidate whether and how pay and working hours might be regulated in this situation. The panel points out that a growing number of freelance teleworkers with loose and/or changing workplace affiliations might mean a weakening of the trade union organisations as we know them today. At the end of the day this could lead to a collapse of the Danish model.

The lay panel believes that the possibility of teleworking could have an unfortunate influence, also with regard to the extent of moonlighting. The panel points out that it might be difficult for the tax authorities to check who does teleworking. Among other things, the panel envisages that persons on transfer incomes, children and illegal immigrants might do office work as moonlight teleworking with no possibility for checking by the Danish authorities. Furthermore, the panel believes that the international nature of teleworking might mean the loss abroad of certain types of Danish jobs. The panel therefore recommends that the effect of teleworking on these areas be investigated and that both Danish and international regulations be studied with a view to finding means to combat such a development.

The lay panel considers that teleworking would be advantageous for a number of groups in the labour market. In the case of elderly employees, for example, teleworking would facilitate a more gradual withdrawal from the labour market. And teleworking would give families with children an opportunity of more flexible working hours, which would enable parents to spend more time together with their children. However, the panel fears that a flexible teleworker will also be a stressed teleworker, as responsibility for the interaction between work and family life will lie solely with the individual concerned. If the possibility for teleworking is to be utilised to give families with children a wider choice of options, the flexibility of the teleworker must be mirrored by a flexibility on the part of the community at large. Among other things, the panel believes that teleworking should be possible in conjunction with pregnancy and maternity, and that day-care institutions should arrange their opening times in such a way as to give the teleworker access to child care outside normal office hours.

At the end of the day more teleworkers will, in the assessment of the panel, also mean more life in local residential areas. Among other things, the panel believes that this development could lead to a "reversed urbanisation" in which employees, companies and government bodies would all find it easier to locate outside urban areas. The panel finds that such a development holds out a number of possibilities, including decentralisation of political decision-making processes so that decisions are to a greater extent taken closer to those affected. The panel strongly recommends that ways of realising these possibilities be examined in practice. The panel also believes that consideration should be given in regional development to an increased number of teleworkers, including many freelancers, and their need to have the necessary technical equipment within reach. The panel therefore finds that regional and local authorities might usefully establish local "tele-rooms", for example in conjunction with libraries, where some of the service needs of teleworkers might be provided.

The lay panel also suggests that the Danish education system should give increased focus to

teleworking qualifications. However, the panel considers it essential that such qualifications should not be purely of a technical nature. Where the teleworker is concerned it is important not only to be able to handle the new information technology, but equally important to be able to find and process information and to work independently. The type of teleworking should therefore be integrated to a greater extent in the training process. At the same time the competence development of the fully-trained teleworker should be safeguarded to ensure that the qualifications acquired do not become "degraded". This should be achieved partly through free access to supplementary training, and partly through establishment of a fixed meeting structure in the workplace, which will ensure that the teleworker shares in the exchange and accumulation of knowledge which takes place at work.

The lay panel was agreed with the experts that the development towards a more flexible labour market is already under way. Accordingly, in its final document the panel stressed the need for a handbook to be prepared as soon as possible for private and public enterprises wishing to introduce teleworking. This handbook should first and foremost combine existing experience of teleworking and provide guidance on potential pitfalls in conjunction with its introduction. The panel recommends that the preparation of such a handbook be undertaken by the Ministry of Research and Information Technology.

Further information

The report of the Danish Board of Technology on the teleworking project contain, among other things, the statements of all the experts present at the conference together with the final document of the lay panel. The report is only available in danish, but the final document of the lay panel is published in english.

The Board has also published a guide containing, among other things, a list of possible lecturers on teleworking (in danish). The final document can be obtained from the Danish Board of Technology by phoning (+45) 33 32 05 03.

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- Tine Laursen, 26 years, legal secretary, Odense
- Morten Toft, 38 years, sales manager, Randers
- Betina Thomsen, 26 years, physiotherapist, Aalborg
- Christen Filskov, 63 years, retired deputy inspector of customs, Holstebro
- Allan Troels-Smith, manager, M.Sc. (Political Science), Fredensborg
- Poul Erik Bjerg, farmer, Brønderslev
- Krister Stærk Larsen, 25 years, student at teacher training college

- Barbara Rovsing Olsen, 41 years, librarian, Frederiksberg
- Anders Buch, 34 years, chief consultant, Roskilde
- Inge-Lise Erland, 59 years, personnel secretary, Ebeltoft
- Kirsten Bøge Pedersen, 60 years, senior assistant, Ballerup

Expert panel

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- Eva Bjerrum, project manager, Tele Danmark Development Section
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