UK TELEWORKING

- Extent of Teleworking in the UK
- Advantages and Disadvantages
- Transport, energy and property effects.
- Policy issues.

Information and communications technologies (ICTs) are making the actual site of work less important, radically changing many working practices. Such 'teleworking' can take many forms - individuals can work from home or 'on the road', while companies can distribute their work and workforces throughout the world. These trends have major impacts on companies and workers alike.

POST has completed a study of the changes underway in the UK as a result of teleworking, and their policy implications; this note summarises the main findings of the full report¹.

BACKGROUND AND SCOPE OF REPORT

Telework has generated much interest among policymakers in local and national governments and in the European Commission. Indeed, telework is sometimes promoted as a technologically-supported panacea for many economic and social problems of contemporary societies, seen as addressing problems as diverse as:-

- The jobs crisis.
- Labour market inflexibility.
- · Remoteness of rural and peripheral areas.
- · Competition and cost pressures on firms.
- Providing employment for the disabled.
- Reducing traffic congestion in cities and related environmental pollution.

The recent report of the European Commission's High Level Group on the Information Society (the 'Bangemann Report') provides a good example of the enthusiasm amongst some policy-makers, since the report proposes that teleworking centres should be created in 20 European cities by the end of 1995 employing over 20,000 workers, and there should be 10 million teleworking jobs by 2000. Such proposals make it important to determine what are the real benefits and disbenefits of teleworking from the viewpoints of both organisations and individuals. The full POST report examines these questions and also develops issues and options which may be of interest to Parliament.

In terms of scope, the POST report focuses on four main categories of telework, described in **Table 1**, :-

- The home teleworker.
- · Telecottages and teleservice centres.
- The mobile or 'nomadic' worker.
- Distance offices.

1. The report (40 pages) "Working at a Distance - UK Teleworking and its Implications" is available from POST, House of Commons, 7, Millbank, London SW1P 3JA; (ext 2840). External price £12.



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REPORT SUMMARY **63**June

This is a summary of a 40-page report available from the PARLIAMENTARY OFFICE OF SCIENCE AND TECHNOLOGY (extension 2840).

Table 1 FORMS OF TELEWORK

Home Telework

The 'traditional' form of telework, where the worker undertakes paid employment from home by means of information and communication technologies (ICTs). Work could be undertaken full or part-time whether as a direct employee or self-employed.

Telecottages

These offices or workcentres are equipped with ICT facilities both for on-site work and for teleworking to remote locations. Such facilities may be shared by a number of commercially-oriented organisations, their employees, independent freelance professionals, small businesses etc.

Nomadic workers

Workers who are mobile, using portable equipment and telecommunications facilities to maximise their time 'on the road' or at customer's premises.

Distance (remote) offices

Firms reorganise across space. In some cases, they may centralise functions and use ICTs to site these offices at lower cost locations. In others they may redesign services around the use of ICTs - e.g. in call centres or telecentres.

CURRENT TRENDS

The full report examined to what extent teleworking is already happening in the above fields. As far as **home teleworking** is concerned, company employees teleworking from home make up at least 0.5% of the UK workforce, and it is likely that, when part-time and self-employed telework is included, 1-1.5% of the workforce (200-300,000) could be regarded as home teleworkers.

Neighbourhood centres and rural-based telecottages

have grown in the last ten years to over 110 throughout the UK. Even though such shared facilities involve only small numbers (a few hundred nationally) of direct employees, they do provide some degree of support and services to 8-9,000 people across the country. These centres have some advantages over the home as a base from which to work, both for the individual and for small companies or other groups, but face major challenges in gaining access to markets. Telecottages can bring benefits to rural communities through generating local training and employment opportunities, and can also act as a focus for helping disabled workers participate more fully. They have attracted significant local authority and development authority support and have a potential role in the longer-term economic development of remote areas.

There are also significant trends in **mobile teleworking**, where ICTs are enabling more people to carry out work away from their traditional offices, 'on the road' or on

clients' or customers' premises. It is believed this type of teleworking is growing substantially, supported by technological developments that enable organisations to improve customer service and, in tandem with such concepts as 'hot-desking', to maximise the time workers spend away, producing substantial space and cost savings. But ICTs may be having an equal or greater impact via **distance offices**, and such employment is already substantial in some areas and growing rapidly (e.g. in Tyne and Wear, the numbers employed in teleservices are growing at 25% p.a.).

The full report looks at the advantages and disadvantages of teleworking from both organisational and individual points of view. From the employers' point of view, the potential advantages include cost reduction, worker flexibility and increases in productivity. The potential disadvantages are the possible loss of control in the broad sense:- over how to maintain discipline and motivation, and how to integrate workers into the firm and promote commitment to organisational goals and culture. Some managers may also see the issue in more selfish terms, and be more concerned that they may lose control over 'their' workers and that their 'empire' may diminish.

Turning to the viewpoint of **the employee**, advantages include working hours appropriate to the individuals' situation, an opportunity to bridge the 'career gap' or improve employment opportunities, to avoid commuting, to provide greater freedom and control, to release entrepreneurial flair, or just because the home is preferred to the workplace. In some domestic circumstances (e.g. where someone can only work part-time from home because of family constraints), telework may be the only viable option. In others, part-time 'consultancy' and self-employment are the only options for those made redundant and unable to find a full-time job. The debate over disabled workers' rights has also brought into focus the potential of teleworking to assist **disabled workers**.

An often-cited disadvantage of teleworking is **social isolation**, since the office or factory represents a social milieu as well as a workplace. Of more potential concern may be the possible loss of **pay and benefits**, particularly for self-employed teleworkers, since free-lance teleworking can be a precarious activity. Workers considering telework will thus want to know whether they remain employees of the company or are to become the company's external 'contractors'. Where they do remain employees, unions and others may seek to establish **minimum conditions for teleworking**. Another area of potential concern is the tension between the need for the employer to be able to measure work output and productivity remotely, and the natural wish of the worker to feel that their **privacy** is fully respected.

Under current UK policies, teleworking is developing in several areas as a response to business competitive pressures, peoples' individual circumstances and other factors. In terms of future trends, the evidence is that the use of ICTs in nomadic teleworking and in reorganising around distance offices and telecentres is already well underway, driven by market forces. Without public policy encouragement, however, home teleworking and telecottages appear less likely to enjoy rapid growth. For the reasons itemised in **Box 1**, social and organisational barriers remain, and middle management may be reluctant to manage a sizeable dispersed workforce when changes in employment patterns are making flexibility easier to achieve through other means. There are thus opportunities for public policy initiatives in several areas to facilitate teleworking and increase the benefits which flow from it, short of encouraging it for its own sake.

ISSUES

Is Teleworking always a 'Good Thing'?

As mentioned earlier, advocates of public policy initiatives to encourage teleworking see it creating new jobs, reducing unemployment, contributing to competitiveness and reducing car use with beneficial consequences on congestion, energy use and air quality. The scale of any such benefits will be important in deciding its priority in public policy terms.

On **new employment opportunities**, the full report suggests that claims that teleworking creates **new** jobs are based upon a misunderstanding of the nature of telework; a telework job is not a new type of job, but rather an existing type of job - whether an architect, designer, secretary, or computer programmer - which is carried out in a new way. With distance offices, call centres and out-sourcing centres, however, these clearly represent new jobs to **the locality hosting the facility**. However, in most cases, the work concerned involves some diversion from the traditional means of delivering the service. Thus the growth in telebanking employment exacerbates pressures on employment in conventional branch banking, and such developments are unlikely to create **net** new jobs on a national basis.

The main benefits of teleworking are likely to be the flexibility it offers from both the employer and employee viewpoints. While not the only option for managers wishing to introduce labour flexibility, home teleworking can reduce costs and increase productivity, improve motivation, and offer potential office space savings (particularly when aligned with 'hot desking'). All these can contribute to **improved competitiveness**. Encouraging teleworking also may have a role in regional policy since local initiatives such as telecottages may play an important role in training, in raising awareness of technology and in building confidence in

Box 1 BARRIERS TO GROWTH IN HOME TELEWORKING

The full report finds that the main barriers to electronic homeworking are not technical, but of a human or organisational nature. They include:-

- The conservative nature of many organisations.
- The cost of information and communications technology purchase and upgrade.
- Overcoming social isolation and detaching oneself from 'household' problems.
- Providing adequate space for telework in the home.
- Planning regulations regarding the use of domestic properties for commercial purposes.
- Health and safety regulations applied in the home.
- Taxation e.g. whether the teleworker is self-employed, etc.
- Insurance may need arranging.

the local community. Without such initiatives, peripheral communities may be further marginalised.

Turning to the **environmental aspects**, the claim that telework will have a significant impact in reducing car travel demand and thereby lowering fuel consumption, traffic congestion and emissions appears too simplistic, and the contribution of teleworking is tempered by telework substituting for travel by public transport trips rather than cars, non-commute trips increasing, and the danger that latent demand for more travel might be released if congestion is reduced. Furthermore, mobile teleworking is leading to new travel patterns replacing, at least in part, not only the hometo-office commute but also the office-to-client journey. It is unclear whether such a reorganisation of tripmaking behaviour will lead to a reduction in total travel, or whether it will stimulate travel by enabling field staff to spend yet more time on the road.

Given the uncertainties over the travel and environmental benefits of teleworking, the full report concludes that a policy to encourage it for environmental reasons alone could be too simplistic, a view shared by the Department of Transport (DoT). Clearly, having the most impact on urban air pollution and energy demand would require teleworking to be taken up **preferentially by the longer distance car commuter**, but there is little information on what factors influence people's choices in this area and which could inform policy choices. One option where Government could help reduce current uncertainties would be by promoting teleworking pilot schemes within Government departments to build up a fuller understanding of travel and environmental implications.

Another consequence of current trends discussed in earlier Sections was on office space, where **significant reduction in city centre demands can be foreseen**, not just from home teleworking but from business reorganisation, including 'hot-desking' and distance offices. Whether such trends are seen as beneficial depends on the viewpoint of the commentator. Some

would see benefits in reduced costs of office overheads, reduced congestion and the options of converting surplus space to residential or open space, enhancing the quality of life in city centres. Others see such trends as reducing further the central role of cities and the movement of work to the home and office parks on the edge of cities or close to motorway access, contributing to urban sprawl. Under some scenarios, radial commuting journeys could be replaced by less frequent but more diffuse business trips only readily made by car, reducing the viability of public transport and increasing the pressure for car journeys.

Thus while there are undoubtedly many potential advantages of teleworking to the company and individual, it is doubtful whether they are of such an all-embracing nature that they can support an 'all teleworking is good' philosophy. This undermines the argument for quantitative targets such as those under discussion in the EU.

Possible Measures to Encourage Teleworking

There are nevertheless, several policy options short of those based on indiscriminate support for teleworking. However, developing policy in this area is hindered by the paucity of good statistics on new forms of working, and one priority would be to **improve the statistical basis upon which reliable forecasts could be made, and informed decisions based**. In this context, the DoT in collaboration with other departments (Employment, Environment, and Trade and Industry) has recently awarded a contract for a feasibility study to define a teleworking study to answer such questions as current and future numbers teleworking, types of teleworking, effects on urban and rural areas, effects on office use and energy consumption, management issues, and effects on travel patterns.

Policy actions underway are reviewed in the full report. For instance, the Department of Employment (DE) has just issued updated guidance to employers on the ways in which teleworking can help in business, how it can be managed and which staff are most likely to be suitable for remote working. The guide also covers the application of health and safety and employment legislation to home workers and the types of contractual arrangements which work best in practice.

Options for further action remain. The issue of whether teleworking should be subject to more specific provisions under employment law is an active one; some unions favour a legal approach to cover terms of employment and issues such as the role of remote workplace surveillance, but others argue that the development of model contracts is a preferred approach in view of the rapidity of developments in both technology and the labour market.

Other possible options could include updating the Treasury's 1991 guidelines under which departments can employ teleworking, and encouraging departments to develop a strategic view on how telework might contribute to their work and organisational efficiency. More progress may also be possible on overcoming the remaining obstacles exemplified in Box 1. More fundamentally, the uncertainty and fluctuations inherent in many forms of flexible work (of which teleworking is one) make it increasingly important to mesh the realities of such work with the benefits system.

Other options to assist teleworking include:-

- Research into forms of teleworking and widespread dissemination to encourage best-practice.
- Since all forms of teleworking will be stimulated by the development of telecommunications networks with greater speed of transmission and lower costs, rapid deployment of a National Information Infrastructure will assist (see a recent POST report²).

A particular issue is over the role of teleworking for the disabled. The full report described some of the initiatives already under-way, and one option would be for the DE to raise the profile of teleworking as a means of enabling disabled people with exploitable skills to make a positive contribution to the economy and the community, as well as to gain access to training and education opportunities. There are a number of options here. The recently-released Manager's Guide to Teleworking could cover the special needs of disabled workers, the DE (and DTI) could build on experience gathered under the COMBAT programme (see full report) in involving disabled workers in local telecentres. Eligibility for grants for the necessary technologies under existing schemes (e.g. via Access to Work and the Placing Assessment Counselling Team- PACT) could be clarified and where appropriate extended.

Teleworking is often seen as having a role in aiding a more even geographical distribution of job opportunities. Under market forces alone, the majority of home-based teleworking will take place within, or on the fringes of, metropolitan regions, because of market accessibility, the existing location of potential teleworkers (professionals) and, in the case of current employees, the need to maintain physical contact with an existing workplace. Home-based teleworking is thus unlikely in itself to help with rural development or diversification strategies, unless the subject of specific policy action - at the minimum, it would be necessary to ensure that improved telecommunications infrastructure is not limited to urban areas, further disadvantaging people wishing to work from remote areas.

Telecottages already play a role in ensuring that remote or rural areas do not get 'left behind' as society enters the information age and are mainly supported in the context of regional policy. This analysis suggests that while significant numbers are becoming self-sufficient, many will remain dependent on Local Authority and Development Agency support. Also relevant is the extension of the telecottage concept to the 'televillage', which makes it easier for local people to work from home and is thus relevant to the objectives of the recent DoE/DoT Policy Planning Guidance Note (PPG13).

One major problem telecottages face however, is access to remote (i.e. metropolitan) markets. In addition to helping provide this access, the other most **significant Government action could be out-sourcing blocks of work** currently undertaken in government offices to groups of telecottages. Many also see it as urgent for the **Inland Revenue to provide a general ruling on the tax status of people working via telecottages**, since the current uncertainties are impeding the growth of telecottage business and may even be leading to some work being awarded off-shore to avoid complications caused by IR rulings.

The ability to establish distance offices and teleservice employment does provide significant opportunities for lower cost areas to attract mobile investment. Functions such as call centres can be internationally mobile and the better cost/quality ratios of labour in particular areas means that dispersal of such services is likely to continue. Given the dominance of the English language in international business, there may be considerable scope for attracting such activities to the UK. One option would be to raise the profile of teleservices in the portfolio of inward investment and development agencies.

Finally, although the emphasis of this report is on the policy issues from a national perspective, it is the local authorities which are at the forefront in taking decisions relevant to new forms of employment, training, strategic planning, transport management etc., all of which may be affected by the way in which ICTs are deployed in work. Some local authorities are accumulating experience of various schemes, while other local initiatives are looking at the future local policy options raised by ICTs. National guidance and regulations need to remain abreast of such work in setting the framework for future local initiatives.

In conclusion, teleworking is but one of several phenomena which are transforming the modern workplace into a more diverse, flexible (and uncertain) working environment. The full report finds that teleworking may not, as suggested by some, be a universal panacea, but it is likely to remain an important feature of modern employment; moreover one that can be influenced by national and local policy. It is hoped therefore that Parliamentarians will find this analysis helpful in that policy context.