

## National Statistics feature

# Home-based working using communication technologies

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## Key points

- In spring 2005 there were around 3.1 million people in the UK who worked mainly in their own home, or in different places using home as a base (homeworkers). The number of homeworkers has risen from 2.3 million in spring 1997.
- Most homeworkers (2.4 million) used a telephone and computer to carry out their work (teleworkers). Of these, 2.1 million could not work from home without using both a telephone and a computer (TC teleworkers).
- Some 8 per cent of the workforce were teleworkers in spring 2005, compared with 4 per cent in spring 1997. This upward trend has been driven by those working in different places using home as a base. Relatively few teleworkers worked mainly in their own home (2 per cent of the workforce).
- Most teleworkers were self-employed (62 per cent). Some 41 per cent of self-employed people, but only 4 per cent of employees, were teleworkers in spring 2005.

## Introduction

With the development of communication technologies, such as mobile phones, personal computers and the Internet, it is becoming increasingly feasible for people to work from home or in other locations that are remote from centralised office, distribution or production facilities. Labour market analysts and policy makers are interested in this type of working arrangement (known as teleworking) since it potentially widens opportunities for people to participate and remain in employment. Teleworking also has the potential to change working patterns and to impact on the health, safety and welfare of the workers involved.

The Labour Force Survey (LFS) is the principal source of statistics on teleworking in the UK. This article looks at the concept of teleworking and explains how it is defined and measured in the LFS. It also describes recent trends in teleworking and the characteristics

of teleworkers, based on an analysis of LFS data.

## Concepts and definitions

When the concept of teleworking emerged about 20 years ago, it referred to the practice of working from home using telecommunication links to replace commuting, sometimes known as telecommuting (Di Martino, 2001). Since then, new telecommunication technologies have evolved and the concept of teleworking has expanded. Working from home has remained an important element of teleworking, but developments in electronic networking now make it possible for people to work in other remote locations, such as neighbourhood centres, internet cafes, hotel rooms, clients' premises, on trains and in cars.

There is no standard definition of teleworking, but it is generally taken to involve working in a location that is separate from a central workplace, using telecommunication technologies to enable this (see **Box 1**). There is also no agreement on

▶ what working practices should be covered by the concept. However, in an International Labour Organisation study, Di Martino (2001) lists the working practices that could be included (see **Box 2**). The increasing variety of practices that could be regarded as teleworking, and the fact that some people telework only occasionally, make teleworking a difficult concept to measure.

### Using the LFS to measure teleworking

In the LFS the concept of teleworking is intimately linked to the concept of homeworking. Since spring 1992, the LFS has asked respondents<sup>1</sup> who are employees, self-employed, or unpaid family workers whether they work mainly:

- in their own home,
- in the same grounds or building as their home,
- in different places using home as a base,
- somewhere quite separate from home.

People who work mainly from home (either in their own home, or in different places using home as a base) are classified as homeworkers. The LFS also asks respondents whether they ever do any paid or unpaid work at home, and whether they spent at least one full day during the week before the LFS interview (the reference week) working in the locations listed above. Since spring 1997 the LFS has asked homeworkers and those people who worked from home during the reference week:

- whether they use both a telephone and a computer to carry out their work at home; and
- whether it would be possible to work at home (or use home as a

## Box 1

### Definitions of teleworking

In 1990 the International Labour Organisation (ILO) proposed the following definition of telework: 'A form of work in which (a) work is performed in a location remote from central office or production facilities, thus separating the worker from personal contact with co-workers there; and (b) new technology enables this separation by facilitating communication' (ILO, 1990).

A consolidated report by the European Foundation for the Improvement of Living and Working Conditions states that 'Telework is the work performed by a teleworker (employee, self-employed, homeworker...), mainly or for an important part, at (a) location(s) other than the traditional workplace for an employer or a client, involving the use of telecommunications.' (Blanpain, 2001).

The Department for Trade and Industry (DTI), in conjunction with the CBI, TUC and CEEP UK, has published guidance on teleworking. This states that the essential feature of teleworking is 'the use of information and communications technologies to enable remote working from the office'. (DTI, 2003).

base) without using both a telephone and a computer.

The wording and routing of the LFS questions enables the following definitions of teleworking to be used when analysing the data:

Teleworkers – people who work mainly in their own home or mainly in different places using home as a base, who use both a telephone and a computer to carry out their work at home.

TC Teleworkers – a subgroup of teleworkers (as defined above) who could not work at home (or use home as a base) without using both a telephone and a computer.

Teleworkers as a whole, and the TC teleworker subgroup, can be divided further into those who work mainly in their own home, and those who work mainly in different places using home as a base.

Some analysts have identified a further category, which they refer to as occasional teleworkers (see Hotopp, 2001, and pp540, *Labour Market Trends*, November 2003).

These are people who do not mainly work from home (but did so for at least one full day during the LFS reference week) who used both a telephone and a computer to carry out their work at home. However, it is not entirely accurate to classify these individuals as occasional teleworkers, because some people may have teleworked during the reference week but do not often do so, while others may occasionally telework but did not do so during the reference week. Previous analyses have included these 'occasional teleworkers' in estimates of the total number of teleworkers (see Hotopp, 2001). However, by doing this, the estimates are based on a mixture of what should be considered as two discrete measures of teleworking: the number of people who mainly work from home using both a telephone and a computer, and the number of people who did so during the reference week.

The following section describes recent trends in teleworking in the UK, and the characteristics of

**Box 2****Possible working practices to be included under teleworking**

1. At home: tele-homeworking.
2. At a location usually closer to home than to the traditional workplace:
  - Neighbourhood centres – these provide electronic facilities which are shared by different users and belong to local communities, various enterprises or independent entrepreneurs. They are located near workers' homes and can also be used for additional purposes, such as tele-education, teleshopping or leisure activities.
  - Telecottages/community telecentres – these are electronic centres (particularly in rural or semi-rural areas) which provide local communities with immediate access to ICTs, skill development, and the networking and socialisation aspects of work that may be missed by a home-based worker.
  - Satellite offices – these are separate units within an enterprise, geographically removed from the central organization but maintaining constant electronic communication. Usually closer to the home of the worker.
3. In any alternative workplace where telecommunications make telework possible and convenient, such as in the case of:
  - Telecentres – facilities electronically equipped for distant office work, not necessarily close to the teleworker's home.
  - 'Touchdown' centres – temporary work stations, typically in other premises owned by an enterprise, which can be used on a casual, short-term basis, for example by mobile and peripatetic workers.
4. In call centres – these are places where telephone operators make or take calls, using automated call distribution technology and often also computer/telephone integration. Call centres may provide different services including telemarketing, telebanking, customer services and enquiries, help hotlines, airline reservations, sales, marketing, and emergency services.
5. At various locations changing in time – mobile or nomadic work.
6. Across countries and continents:
  - Transborder teleworking – this generally applies to teleworking situations where the provider and the receiver parts are located in countries that share a common border.
  - Offshore teleworking – this usually refers to teleworking where work has been transferred to lower cost or less-regulated working environments, generally much more geographically distant.

Source: Di Martino (2001)

teleworkers. In this analysis, teleworkers are defined as those who work mainly in their own home, or in different places using home as a base, who use both a telephone and a computer to carry out work at home. People who do not mainly telework, but did so during the LFS reference week, are not included. (There were around one million people in this category in spring 2005.)

### Recent trends in teleworking

In spring 2005, around 3.1 million people worked mainly in their own home, or in different places using home as a base. Of these homeworkers, 2.4 million used both a telephone and computer to carry out their work at home (teleworkers). Of these, 2.1 million could not work at home (or use

home as a base) without using both a telephone and a computer (TC teleworkers). Most teleworkers (1.8 million) worked in different places using their home as a base. Relatively few people (0.6 million) worked mainly in their own home.

The number of teleworkers has increased by more than 150 per cent (1.5 million) since spring 1997 – the earliest year for which data are available (see **Table 1**). In 1997 teleworkers represented 40 per cent of homeworkers. By spring 2005 this had risen to 77 per cent. Although teleworkers represent a small proportion of the total workforce<sup>2</sup>, this proportion increased from 4 per cent in spring 1997 to 8 per cent in spring 2005 (see **Table 1** and **Figure 1**).

Over this period, there was a rise in the proportion of the workforce who said that they could not work from home without using both a telephone and computer. In spring 2005, some 7 per cent of the total workforce were TC teleworkers, compared with 3 per cent in spring 1997 (see **Table 1** and **Figure 1**). The proportion of teleworkers who were TC teleworkers also increased over the period, from 80 per cent to 87 per cent.

The upward trend in teleworking rates (the proportion of the workforce who are teleworkers) has been driven mainly by an increase in people teleworking in different places with home as a base. **Figure 2** illustrates that the proportion of the workforce who were teleworkers using home as a base increased from 2 per cent in spring 1997 to 6 per cent in spring 2005. However, the proportion who worked mainly in their own home remained relatively stable (increasing from 1 per cent in spring 1997 to 2 per cent in spring 2005). ▶

Table 1

**Number and proportion of workers who are homeworkers and teleworkers<sup>a</sup>; United Kingdom; spring 2005, not seasonally adjusted**

Thousands and per cent

	Homeworkers <sup>b</sup>			of which: teleworkers <sup>c</sup>			of which: TC teleworkers <sup>d</sup>		
	Works mainly in own home	Works in different places using home as a base	Total	Works mainly in own home	Works in different places using home as a base	Total	Works mainly in own home	Works in different places using home as a base	Total
<i>Per cent<sup>e,f</sup></i>									
1997	3	6	9	1	2	4	1	2	3
1998	3	7	9	1	3	4	1	2	3
1999	2	7	10	1	3	4	1	3	4
2000	3	7	10	1	4	5	1	3	4
2001	2	7	10	2	4	5	1	3	5
2002	3	8	10	2	5	7	2	4	6
2003	3	8	11	2	6	7	2	5	6
2004	3	8	11	2	6	8	2	5	7
2005	3	8	11	2	6	8	2	5	7
<i>Thousands<sup>f</sup></i>									
1997	682	1,600	2,283	302	618	921	238	499	737
1998	679	1,790	2,469	335	714	1,049	266	582	848
1999	640	1,937	2,577	336	851	1,187	264	685	949
2000	678	1,961	2,639	396	974	1,370	328	786	1,114
2001	673	1,916	2,590	433	1,051	1,484	364	870	1,234
2002	698	2,062	2,760	484	1,381	1,865	422	1,163	1,585
2003	707	2,207	2,915	516	1,553	2,069	437	1,329	1,767
2004	761	2,243	3,004	562	1,599	2,161	489	1,374	1,863
2005	768	2,324	3,092	603	1,774	2,377	524	1,538	2,062

Source: Labour Force Survey

a Excludes people on government employment and training schemes who, although classified as in employment, are not asked the LFS homeworking or teleworking questions.

b Homeworkers are people who work mainly in their own home, or in different places using home as a base, in their main job.

c Teleworkers are a subgroup of homeworkers who use both a telephone and a computer to work at home, or in different places using home as a base.

d TC teleworkers are a subgroup of teleworkers who could not work at home, or in different places using home as a base, without using both a telephone and a computer.

e Homeworkers/teleworkers as a percentage of all workers.

f Estimates have been adjusted for non-response to the homeworking and teleworking questions.

## The characteristics of teleworkers

This section describes the characteristics of teleworkers and examines how the prevalence and nature of teleworking varies between different subgroups of the workforce.

### Employment status

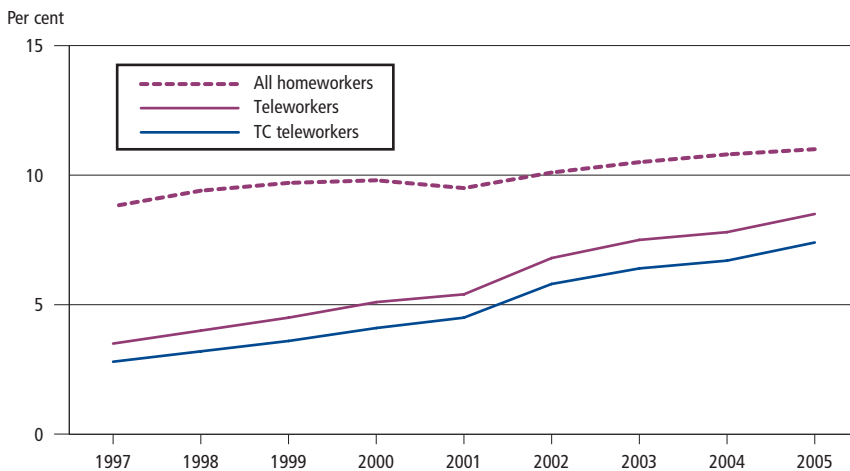
Although self-employed people account for a relatively small share of the workforce, the majority of teleworkers are self-employed. Some 62 per cent of teleworkers were self-employed in spring 2005, with employees and unpaid family

workers accounting for 36 per cent and 2 per cent of teleworkers respectively (see **Table 2**).

There has been an upward trend in teleworking among each of these employment categories since 1997 but the increase has been greater among self-employed people and

Figure 1

### Homeworkers<sup>a</sup> and teleworkers<sup>b,c</sup> as a percentage of people in employment<sup>d,e</sup>; United Kingdom; spring 1997 to spring 2005, not seasonally adjusted

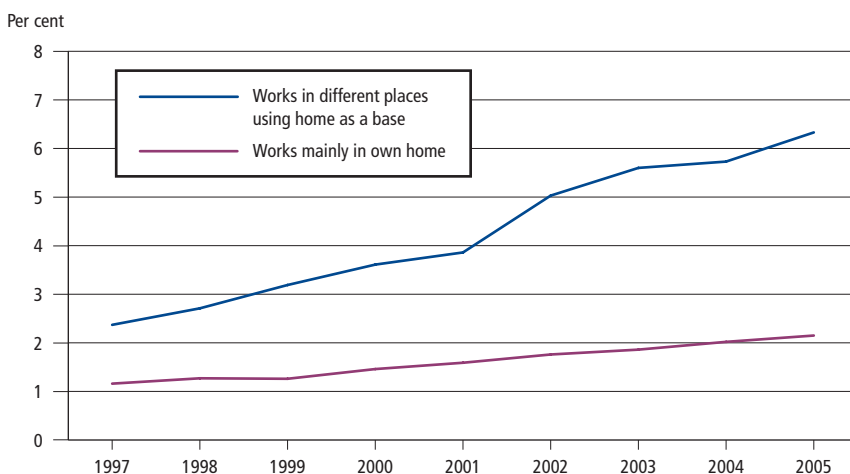


Source: Labour Force Survey

- a Homeworkers mainly work in their own home, or in different places using home as a base, in their main job.  
 b Teleworkers are a subgroup of homeworkers who use both a telephone and a computer to work at home, or in different places using home as a base.  
 c TC teleworkers are a subgroup of teleworkers who could not work at home, or in different places using home as a base, without using both a telephone and a computer.  
 d Excludes people on government employment and training schemes.  
 e Estimates have been adjusted for non-response to the homeworking and teleworking questions.

Figure 2

### Teleworker rates<sup>a,b</sup> by type of teleworker; United Kingdom; spring 1997 to spring 2005, not seasonally adjusted



Source: Labour Force Survey

- a Teleworkers as a percentage of all in employment, excluding people on government employment and training schemes.  
 b Estimates have been adjusted for non-response to the homeworking and teleworking questions.

unpaid family workers than among employees (see Figure 3). More than two-fifths (41 per cent) of self-employed people were teleworkers in spring 2005, compared with 39 per cent of unpaid family workers and only 4 per cent of employees. There appears to be a distinction between these categories, in terms of location of workplace. Employee and self-employed teleworkers are more likely to work in different places using home as a base, while unpaid family workers are more likely to work mainly in their own home (see Figure 4). This pattern has prevailed in each year since 1997.

### Sex

Around two-thirds (65 per cent) of teleworkers are men (see Table 2). This partly reflects the fact that men account for the larger share of the workforce overall, but it also seems that teleworking (and homeworking in general) is more prevalent among male workers than among female workers. In spring 2005, the teleworking rate for men was 11 per cent, compared with 6 per cent for women (see Figure 5).

There has been an upward trend in teleworking among both sexes since 1997, but the increase has been greater for men than for women (see Figure 5). A difference is evident between male and female teleworkers in terms of location of workplace. Men are more likely than women to telework in different places using their home as a base. In spring 2005, only 3 per cent of the female workforce were teleworkers using home as a base, compared with 9 per cent of male workers. The proportion of workers who teleworked in their own home was marginally higher for women than for men (3 per cent and 2 per cent respectively). This proportion was

► slightly higher for mothers with children under 16 years of age (4 per cent) than for women without school-age children (2 per cent).

The differences between men and women in terms of teleworking rates and types of teleworking may simply reflect the fact that teleworking is more common among self-employed people, most of whom are men.

### Age

According to the ILO, teleworking has been expected to promote the inclusion of older age groups, by enabling them to continue working when commuting to the office becomes too difficult. Teleworking has also been expected to provide a way for young people to gain work experience and enter the labour market (Di Martino, 2001).

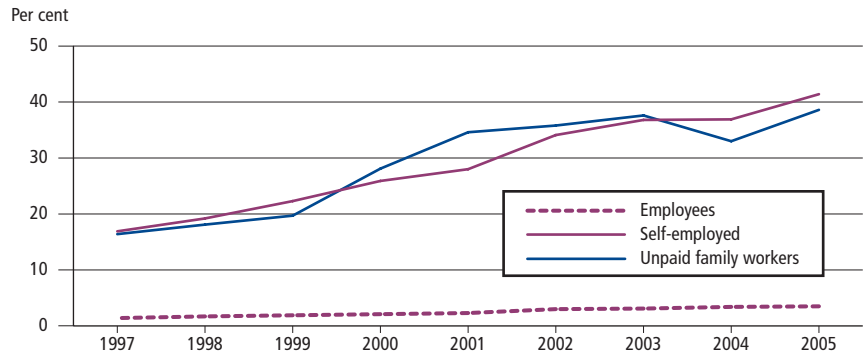
Figure 6 shows that teleworking is more common, and is growing at a faster rate, among older workers than among younger age groups. The teleworking rate among workers aged 50 or over increased from 5 per cent in spring 1997 to 12 per cent in spring 2005. Teleworking is much less common in the youngest age group; only 2 per cent of workers aged 16-24 are teleworkers. Across all age groups, the majority of teleworkers work in different places using home as a base, as opposed to working mainly in their own home.

### Occupation

Although there are teleworkers in each occupation group, teleworking is more common in some groups than others. Some 90 per cent of teleworkers work in managerial, professional, associate professional and technical, and skilled trades occupations (see Table 2). Teleworking rates are highest in skilled trades occupations, at 17 per cent in spring 2005 (see Figure 7).

Figure 3

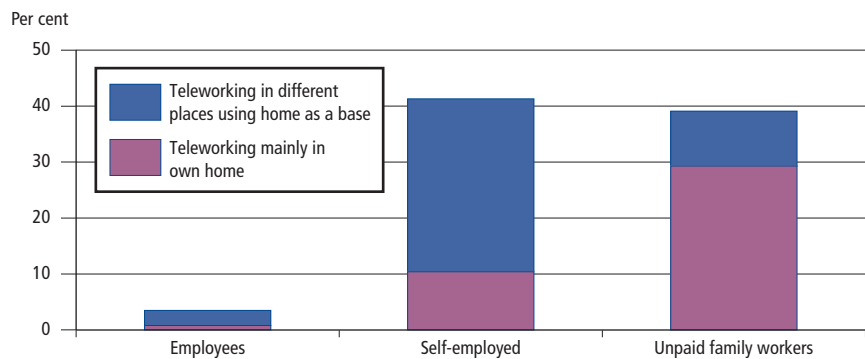
Teleworker rates<sup>a,b</sup> by employment status; United Kingdom; spring 1997 to spring 2005, not seasonally adjusted



Source: Labour Force Survey

Figure 4

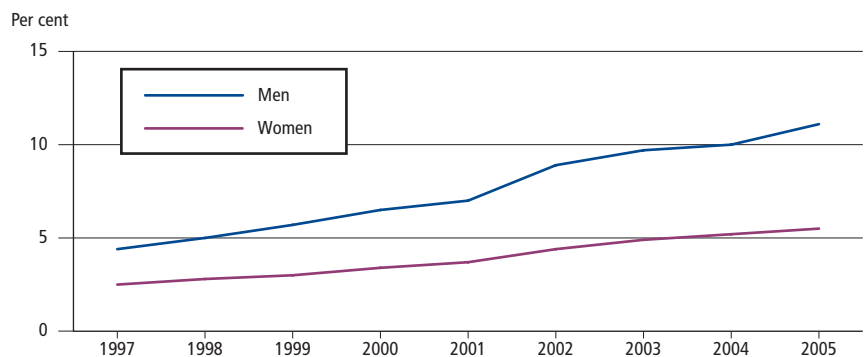
Teleworking rates<sup>a,b</sup> by employment status and location of workplace; United Kingdom; spring 2005, not seasonally adjusted



Source: Labour Force Survey

Figure 5

Teleworking rates<sup>a,b</sup> by sex; United Kingdom; spring 1997 to spring 2005, not seasonally adjusted



Source: Labour Force Survey

a Teleworkers as a percentage of total in each category.  
 b Estimates have been adjusted for non-response to the homeworking and teleworking questions.

Table 2

## Characteristics of homeworkers and teleworkers; United Kingdom; spring 2005, not seasonally adjusted

Per cent

	All in employment <sup>1</sup>	Homeworkers <sup>2</sup>			of which: teleworkers <sup>3</sup>			of which: TC teleworkers <sup>4</sup>		
		Works mainly in own home	Works in different places using home as a base	Total	Works mainly in own home	Works in different places using home as a base	Total	Works mainly in own home	Works in different places using home as a base	Total
Men	53	36	79	68	41	78	65	44	78	66
Women	47	64	21	32	59	22	35	56	22	34
Employment status										
Employee	87	32	35	34	34	37	36	36	39	38
Self-employed	13	62	64	64	62	63	62	60	60	60
Unpaid family worker	0	6	1	2	5	1	2	5	1	2
Full-time	72	49	79	72	53	81	72	54	82	73
Part-time	28	51	21	28	47	19	28	46	18	27
Occupation (SOC 2000)										
1 Managers and Senior Officials	16	19	14	16	23	22	23	25	23	24
2 Professional occupations	13	14	12	13	16	19	18	17	20	19
3 Associate Professional and Technical	17	23	15	17	26	21	23	27	22	24
4 Administrative and Secretarial	7	22	2	7	22	3	10	21	3	9
5 Skilled Trades Occupations	27	5	34	27	3	25	17	3	23	16
6 Personal Service Occupations	7	12	5	7	7	2	4	4	1	2
7 Sales and Customer Service Occupations	3	2	3	3	2	3	2	2	3	2
8 Process Plant and Machine Operatives	6	2	8	6	1*	3	2	1*	3	2
9 Elementary Occupations	5	1	7	5	0*	2	1	0*	2	1
<b>Total<sup>5</sup> (thousands) = 100%</b>	<b>28,049</b>	<b>768</b>	<b>2,324</b>	<b>3,092</b>	<b>603</b>	<b>1,774</b>	<b>2,377</b>	<b>524</b>	<b>1,538</b>	<b>2,062</b>

Source: Labour Force Survey

a Excludes people on government employment and training schemes who, although classified as in employment, are not asked the LFS homeworking or teleworking questions.

b Homeworkers work mainly in their own home, or in different places using home as a base, in their main job.

c Teleworkers are a subgroup of homeworkers who use both a telephone and a computer to work at home, or in different places using home as a base.

d TC teleworkers are a subgroup of teleworkers who could not work at home, or in different places using home as a base, without using both a telephone and a computer.

e Totals have been adjusted for non-response to the homeworking and teleworking questions. Percentages are based on those who gave a valid response.

\* Estimates are based on a small sample and may be subject to a high degree of sampling variability.

Across most occupation groups, and particularly in skilled trades occupations, the majority of teleworkers work in different places using home as a base. The

administrative and secretarial group is an exception to this pattern: teleworkers in this occupation group are more likely to work in their own home (see Figure 7). This pattern of

differences between occupation groups is apparent in each year since 2001 (the first year in which the Standard Occupation Classification 2000 was used in the LFS).

► Teleworking rates have increased across all occupation groups since spring 2001. The biggest increase (8 percentage points) occurred within skilled trades occupations. This is largely due to an increase in teleworking in the building and construction trades. In spring 2005, a third of those employed in the building trade were teleworkers; an increase of 15 percentage points since spring 2001. Twenty-eight per cent of people employed in the construction trade were teleworkers; an increase of 11 percentage points since spring 2001.

### Industry

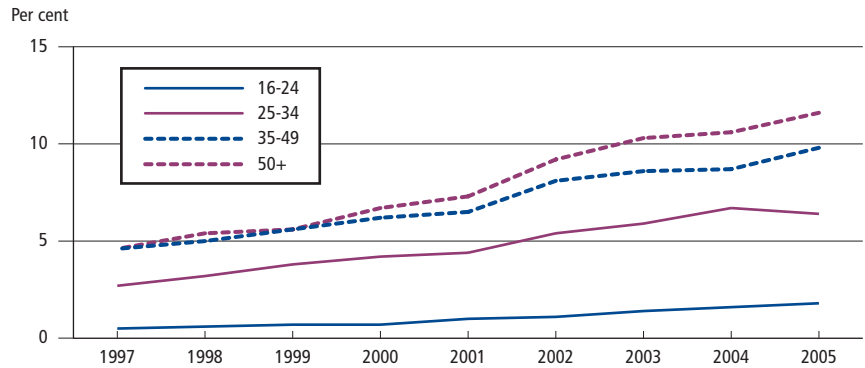
Given that teleworking is most prevalent among workers in building and construction trades occupations, it is not surprising to find that teleworking is also most prevalent in the construction industry. Over a fifth of those employed in the construction industry were teleworkers in spring 2005, the vast majority of whom (91 per cent) worked mainly in different places using home as a base. This sector has also experienced the biggest increase in teleworking rates, increasing from 8 per cent in spring 1997 to 23 per cent in spring 2005 (see **Figure 8**). Across all industry groups, teleworking in different places using home as base is more common than teleworking at home. The proportion of workers who teleworked in their own home was highest in the banking, finance and insurance industry, at 5 per cent in spring 2005.

### Government Office Regions

The prevalence of teleworking varies by region of residence. **Table 3** shows that in spring 2005 teleworking rates were highest in the South East, South West, London and

**Figure 6**

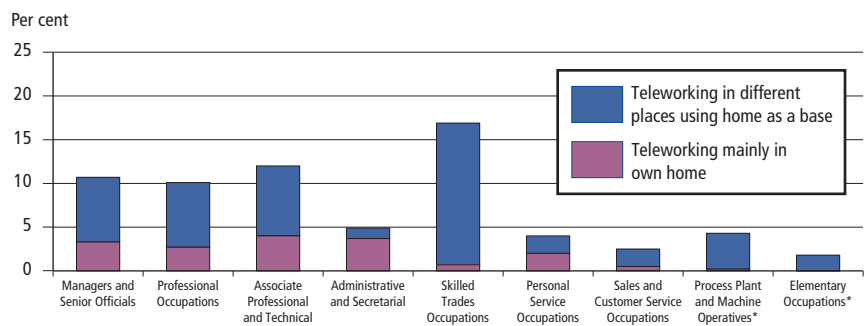
**Teleworking rates<sup>a,b</sup> by age; United Kingdom; spring 1997 to spring 2005, not seasonally adjusted**



Source: Labour Force Survey

**Figure 7**

**Teleworking rates<sup>a,b</sup> by occupation and location of workplace; United Kingdom; spring 2005, not seasonally adjusted**

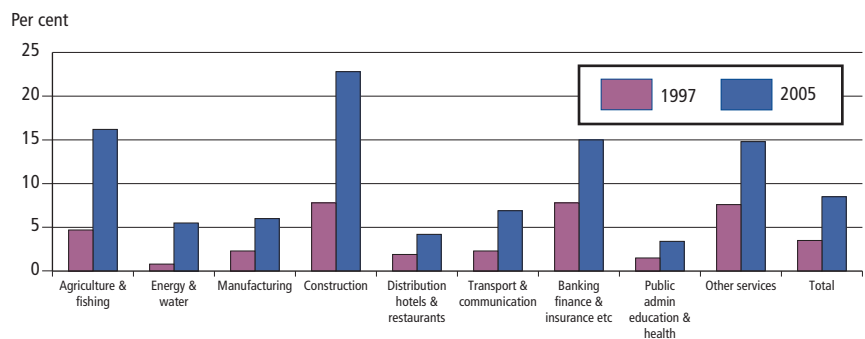


Source: Labour Force Survey

\* Estimates of teleworkers who work in their own home are based on small samples and may be subject to a high degree of sampling variability.

**Figure 8**

**Teleworking rates<sup>a,b</sup> by industry; United Kingdom; spring 1997 to spring 2005, not seasonally adjusted**



Source: Labour Force Survey

a Teleworkers as a percentage of total in each category.  
b Estimates have been adjusted for non-response to the homeworking and teleworking questions.

Table 3

Homeworkers and teleworkers by region<sup>a,b</sup>; United Kingdom; spring 2005, not seasonally adjusted

Thousands and per cent

	Homeworkers <sup>c</sup>		of which: teleworkers <sup>d</sup>		of which: TC teleworkers <sup>e</sup>	
	Thousands	% of all in employment <sup>b</sup>	Thousands	% of all in employment <sup>b</sup>	Thousands	% of all in employment <sup>b</sup>
North East	85	8	62	6	54	5
North West	279	9	210	7	185	6
Yorkshire and Humberside	218	9	165	7	149	6
East Midlands	232	11	178	9	151	7
West Midlands	259	10	193	8	166	7
East	339	12	270	10	239	9
London	413	12	335	10	294	9
South East	565	14	443	11	386	9
South West	330	13	256	10	213	9
Wales	129	10	93	7	83	6
Scotland	194	8	144	6	121	5
Northern Ireland	49	7	27	4	20	3
<b>United Kingdom</b>	<b>3,092</b>	<b>11</b>	<b>2,377</b>	<b>8</b>	<b>2,062</b>	<b>7</b>

Source: Labour Force Survey

a Excludes people on government employment and training schemes.

b Estimates have been adjusted for non-response to the homeworking and teleworking questions.

c Homeworkers work mainly in their own home, or in different places using home as a base, in their main job.

d Teleworkers are a sub-group of homeworkers who use both a telephone and a computer to work at home, or in different places using home as a base.

e TC teleworkers are a sub-group of teleworkers who could not work at home, or in different places using home as a base without using both a telephone and a computer.

Eastern regions, at around 10 per cent, compared with the UK average of 8 per cent. Northern Ireland, Scotland and the North East had the lowest proportions of teleworkers. This pattern is likely to reflect regional variations in the distribution of occupations and industries.

## Conclusions

Telecommunication technologies offer the potential to increase participation in the labour market and to change various aspects of working life. It is likely that further technological developments, changing attitudes among workers and employers, and policy interventions will make teleworking more feasible and widespread in the future.

The ILO has identified a number of positive and negative features of teleworking for workers, employers, and society as a whole (Di Martino, 2001). They note that public policies and changes in the attitudes of individuals and employers are important if the advantages of teleworking are to be maximised and the potential risks are to be minimised. In the UK, opportunities for teleworking are being enhanced by laws that require employers to give serious consideration to requests for flexible working arrangements. The DTI has produced guidelines that are designed to tackle the potential disadvantages of teleworking, including the potential health and safety risks (DTI, 2003).

Against this background, it is important to be able to monitor the prevalence and nature of teleworking and the characteristics of those involved in it. However, since teleworking is an evolving concept covering an increasingly wide range of technologies and working practices, it is becoming more difficult to measure.

The LFS measure of teleworking is intimately linked with the concept of homeworking. Therefore, the LFS measure of teleworking includes only people who work mainly in their own home or in different places using their home as a base.

It does not include, for example, people who telework in the same grounds or building as their home; mobile or nomadic teleworkers ►

▶ who do not regard their home as a base for their work; or people who mainly telework in Internet cafes, neighbourhood centres, telecottages or community telecentres. Moreover, the LFS measures the number of people who mainly work from home using both a telephone and computer, but it does not adequately measure the number of people who do this on an occasional basis.

According to the LFS measure, the number and proportion of workers who are teleworkers are increasing, particularly among self-employed

people and those in the building and construction trades. This could simply reflect a more widespread use of mobile 'phones and personal computers among people who would previously have managed to operate from home without them. If people increasingly perceive that they could not work from home without using these technologies this could, in itself, produce an upward trend in the number of people who are classified as TC teleworkers.

The analysis presented in this article has shown that the growth in

teleworking has been driven mainly by the subgroup of teleworkers who work in different places using their home as a base. The subgroup of teleworkers who work mainly in their own home is much smaller and is growing at a slower rate. Whereas previous analyses have combined these two subgroups of teleworkers together, it is now apparent that there are significant benefits from treating these groups as distinct categories and analysing them separately.

## Notes

- 1 People on government employment and training schemes, although classified as in employment, are not asked the LFS questions about homeworking and teleworking.
- 2 In this analysis, the 'workforce' (or 'all workers') includes employees, self-employed people and unpaid family workers. People on government employment and training schemes, although classified as in employment, are not included since they are not asked the LFS questions about homeworking and teleworking.

## References

- Blanpain R., *The Legal and Contractual Situations of Teleworkers in the European Union, Consolidated report, European Foundation for the Improvement of Living and Working Conditions* (2001), see <http://www.eurofound.eu.int/publications/files/WP9728EN.pdf>
- Di Martino V., *The high road to teleworking*, International Labour Organisation (2001), see <http://www.ilo.org/public/english/protection/safework/telework/hrdptl.pdf>
- Di Martino V. and Wirth, L., *Telework*, Conditions of Work Digest, Vol. 9, No. 1 (special issue), International Labour Organisation (1990), see <http://www.ilo.org/public/english/protection/safework/publicat/iloshcat/newtech.htm>
- DTI, *Telework guidance*, (September 2003), see <http://www.dti.gov.uk/er/individual/telework.pdf>
- Hotopp U., 'Teleworking in the UK', pp311-318, *Labour Market Trends* (June 2002), see [http://www.statistics.gov.uk/articles/labour\\_market\\_trends/Teleworking\\_jun2002.pdf](http://www.statistics.gov.uk/articles/labour_market_trends/Teleworking_jun2002.pdf)
- Labour Market Spotlight, p540, *Labour Market Trends* (November 2003), see [http://www.statistics.gov.uk/downloads/theme\\_labour/LMT\\_Nov03.pdf](http://www.statistics.gov.uk/downloads/theme_labour/LMT_Nov03.pdf)

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