

The Labour Market Participation and Employment of Disabled People in the UK

Report prepared for the Work Research Institute, Norway as part of the project 'Disabled, Working Life and Welfare State'

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Abstract

This paper represents the contribution by the Institute for Employment Studies to the first stage in a research project on disability and employment, supported by the Norwegian Work Research Institute through a contract from the Norwegian Research Council. The research involves a comparison of disability in three contrasting sectors – construction, ICT and health – in three countries – Britain, the Netherlands and Norway.

In this first work package, we analyse secondary data sources (particularly the Labour Force Survey) to present a statistical overview of the labour market participation and employment of disabled people in the UK, also drawing where appropriate on relevant evidence from previous literature in the UK. The main emphasis is on the overall national picture but, where data sources allow, we also present information on the position of disabled people in the three sectors.

The second work package, *UK National Public Policy Initiatives and Regulations Affecting Disabled People's Labour Market Participation*, has been published separately.

1 Introduction

This paper represents the contribution by the Institute for Employment Studies (IES) to the first stage in a research project on disability and employment, supported by the Norwegian Work Research Institute through a contract from the Norwegian Research Council. The research involves a comparison of disability in three contrasting sectors – construction, ICT and health – in three countries – Britain, the Netherlands and Norway.

In this first work package, we analyse secondary data sources (particularly the Labour Force Survey –LFS) to present a statistical overview of the labour market participation and employment of disabled people in the UK, also drawing where appropriate on relevant evidence from previous literature in the UK. The main emphasis is on the overall national picture but, where data sources allow this (subject, for example, to the constraints of sample size), we also present information on the position of disabled people in the three sectors.

The paper is structured as follows:

- in section 2 we discuss the different definitions of ‘disability’ in use in the UK for statistical purposes, and the ways in which the overall picture of disability in the labour market is affected by the definition used (this section also explores the size and characteristics of the disabled population of working age in the UK;)
- section 3 looks at the labour market circumstances of disabled people and the relationships between these circumstances and disabled people’ s persona characteristics
- in section 4 we analyse the characteristics of disabled people’s employment, the kinds of jobs they do and their working patterns (this section also contains an examination of the employment of disabled people in the ICT, construction and health sectors)
- section 5 takes a more dynamic perspective looking at changes in employment status over time (comparing disabled and non-disabled people)
- finally, section 6 examines patterns of disabled people’s employment at regional and local level and highlights some policy issues raised by these patterns.

These policy issues will be explored more fully in the second work package, which will be prepared in 2006, providing an overview of the UK national public policy initiatives and regulations which affect the participation of disabled people in the labour market (building on the earlier work of Thornton and Lunt, 1997).

2 The definitional problem: what is a disabled person, how many are there, and what are their characteristics?

2.1 Definitional issues

Any attempt to describe the labour market circumstances of disabled people in the UK (and especially any attempt to describe changes in these circumstances over time) is

bedevilled by the variety and inconsistency of the definitions available in different statistical sources. Definitions used in surveys and official data sources vary considerably eg, according to:

- whether they are based on a ‘medical’ or a ‘social’ model of disability. The so-called ‘medical model’ of disability, which is embodied in much of the earlier research and many of the official and statistical definitions of disability, incorporates the premise that people are ‘disabled’ primarily by their impairment or medical condition. By contrast, the ‘social model’ advanced in recent years by the disabled people’s movement is rooted in the notion that people are ‘disabled’ primarily by the physical, organisational and attitudinal barriers within society (Oliver 1990).
- according to whether they are derived from administrative or official sources (eg when the data are collected for some other purpose, such as administration of benefits for disabled people), or according to legislative definitions (eg prior to 1996, there was a registration scheme for disabled people, which was abolished under the Disability Discrimination Act 2005 (DDA), which also introduced a new definition of ‘disability’ for the purposes of tackling discrimination¹).
- according to whether they are purely UK-based definitions, or whether they attempt to adopt international standards — the most important of which is the International Classification of Impairments, Disabilities and Handicap (ICIDH)².

A further difficulty is the divergence between many of these definitions and popular perceptions (among disabled people, non-disabled people and employers) about what is a ‘disability’. It is not our intention in this report to review the various debates and the extensive literature on this question³; rather we just wish to note at this point that the definition of disability chosen for the analysis does make a considerable difference to the picture which is painted of the labour market circumstances of disabled people.

¹ The 1995 Act defines a disabled person as someone with ‘a physical or mental impairment which has a substantial and long-term adverse effect on his/her ability to carry out normal day-to-day activities.’ Further important aspects of the original definition were that: 1) ‘long-term’ was defined as lasting or being expected to last for at least 12 months; 2) someone who had, but no longer has, a disability covered by the definition, is still covered by the legislation; 3) mental health conditions must be ‘clinically well recognised’ to be covered; 4) someone with a progressive impairment such as multiple sclerosis, cancer or HIV does not have to show that the condition *currently* has a substantial effect. It must, however, have *some* effect on day-to-day activities. These last two features of the definition have subsequently been relaxed in the DDA 2005 (mental health conditions no longer need to be ‘clinically well-recognised’; and someone with a progressive impairment is covered from the date of diagnosis, irrespective of whether it currently has a substantial effect).

² World Health Organisation (1980)

³ This literature has been usefully summarised in Bajekal *et al.* 2004, which reviews the range of survey data on the prevalence of disability in the population as well as the characteristics of disabled people and their labour market and other experiences. The authors illustrate the huge variety of statistical estimates which emerge from the literature depending on the definition of disability adopted. Also of interest in this context is Purdon *et al.* 2005 which contains proposals for improvements in the statistical base for analysing the position of disabled people to feed into public policy decisions.

As Purdon *et al.* note, there are wide variations in survey estimates of the numbers of disabled adults in Great Britain⁴ ranging 6.2 million (14 per cent) in the 1985 OPCS Survey of Disability (Martin *et al.* 1988), to 8.6 million (20 per cent) in the 1996/7 Disability Survey (Grundy *et al.*, 1999), and 11 million (23 per cent) in recent surveys using DDA-based definitions (Grewal *et al.* 2002).

If we turn to workforce-based definitions of disability, and look at the prevalence of disability within the working age population, or in the economically active workforce, the same sources yield a similarly large variation in the estimates derived from different data sets and definitions (the prevalence of disability within the working age population is invariably less than that in the overall adult population, given that the prevalence of disability increases strongly with age, and increases particularly fast above normal working age).

Over time, within the UK, there has been a convergence in many statistical sources towards a definition based in some way upon that laid down in the Disability Discrimination Act. While this is leading to greater consistency in estimates, it also has a number of disadvantages, not least: a) the fact that the DDA definition itself is also changing over time, and has been subject to amendment, most recently in the Disability Discrimination Act 2005 (which has just passed into law and replaces and updates the 1995 Act); and b) the fact that the DDA definition is very broad and covers significant numbers of people who would not regard themselves as disabled⁵, in addition to (as we show further below) some groups who are not significantly disadvantaged in labour market terms.

In the analysis presented below, we draw mainly on the UK Labour Force Survey, which incorporates two definitions of disability (both of which are operationalised through the self-definition of the respondents to the survey):

1. A definition based on the DDA definition (ie people who currently have a long-term health problem or disability which has a substantial and long-term adverse effect on their ability to carry out normal day-to-day activities). Note that this definition does not completely correspond to the legislative definition in that it excludes people who have had such a health problem in the past but do not have it now, and it excludes people who have a progressive condition which is likely to have a substantial and long-term adverse effect in the future, but does not do so yet (both groups are covered by the DDA). For this reason the definition is known as 'current DDA disabled'.
2. A definition which is based not on 'normal day-to-day' activities, as in the case of the DDA, but relates specifically to working life (ie people who have a long-term health problem or disability which affects either the kind of paid work they might do, or the

⁴ A further complication in the UK context is that some data sources cover the whole of the United Kingdom, while others focus only on Great Britain (*ie* excluding Northern Ireland), or indeed on one or more of the three components

⁵ Evidence on the mismatch between individual perception and self-identity and the legal definition has been found in several in-depth studies of the implementation of the DDA. See, for example, Meager and Hurstfield 2005, Hurstfield *et al.* 2004 and Meager *et al.* 1999.

amount of paid work they might do). Clearly this is particularly relevant to the present study of disabled people's experience of working life.

We use both of these base definitions in different combinations to produce four alternative definitions of disability:

- **Long-term disabled:** this is the broadest definition, and the one that is currently used by the UK government in setting its 'Public Service Agreement' targets to increase the employment rate of disabled people (DWP 2005). This is defined as someone who is either current DDA disabled (definition 1 above), or work-limiting disabled (definition 2 above) or both.
- **Work-limiting disabled and current DDA disabled:** this includes only those people who meet both definitions 1 and 2 above, ie essentially those people whose disability affects both their working lives and their day-to-day activities.
- **Current DDA disabled only:** those people whose disability affects their day-to-day activities, but not the amount or kind of work they can do (ie they satisfy definition 1 above, but not definition 2 above).
- **Work-limiting disabled only:** those people whose disability affects only their working lives but not their day-to-day activities (ie they satisfy definition 2 above, but not definition 1).

The use of the *long-term disabled* definition alone as the main UK official statistical indicator to measure disabled people's labour market participation, and trends in that participation, has been the subject of some debate. While there is some logic in linking the definition to the DDA (and also taking account of work-limiting activities), it has been pointed out (see Meager and Hurstfield 2005) that by including people who are *current DDA disabled only* (ie people who meet the DDA definition but who, by their own report, have no problems with regard to the amount and kind of work they can do), the official indicator:

- a) overstates the size of the group subject to labour market disadvantage. Around a fifth of *long-term disabled* people are *current DDA disabled only*, but this group has an employment rate which is actually slightly higher than the employment rate of non-disabled people (this can be seen from the LFS data in the current study in Table 9 below).
- b) understates the extent of labour market disadvantage faced by disabled people. Including people who are *current DDA disabled only* has the effect of boosting the recorded employment rate.
- c) overstates the extent of recent improvement in employment rates. As Meager and Hurstfield (2005) point out, over the period 1998-2003 the employment rate of *long-term disabled people* increased by around 4 percentage points, but that for *work-limiting disabled people* increased by less than two percentage points⁶. The difference was due to the

⁶ Note that the LFS data presented in Meager and Hurstfield 2005 are not strictly comparable with those presented in the present paper, as there has been a recent re-weighting of data from the LFS to take account of population estimates emerging from the Census of Population in 2001. In the present paper we use the re-weighted LFS data.

inclusion of *DDA disabled only* in the data, whose employment rate grew along with the overall rate of employment for non-disabled period during this period of economic growth in the UK, while the most disadvantaged groups of disabled people (those with *work-limiting* disabilities) benefited much less from the macroeconomic situation.

At the time of writing, we understand that the UK Department for Work and Pensions is reviewing the statistical definition in use for official monitoring purposes⁷.

2.2 The prevalence of disability and the characteristics of working age disabled people

Table 1 shows that, in Spring 2005, some 7 million out of the working age population of 36.4 million people were disabled under the broadest (*long-term disabled*) definition, ie 19 per cent. At a more detailed level, 16 per cent (4.8 million) meet the current DDA definition, and 15 per cent (4.4 million) meet the work limiting definition. A significant minority, ie four per cent (1.6 million) are people who, despite meeting the DDA definition, report that their condition does not affect the kind or amount of work they can do.

Table 1: Prevalence of disability amongst the UK working age population

	N	%
Not disabled	29,401,093	80.7
All long term disabled	7,021,263	19.3
<i>Of which</i>		
Current DDA and work-limiting disabled	4,253,300	11.7
Current DDA disabled only	1,575,831	4.3
Work-limiting disabled only	1,192,132	3.3
<i>Total</i>	36,422,356	100.0

Source: LFS Spring 2005 (All people of working age; men 16-64, women 16-59)

Men are slightly over-represented among all *long-term disabled* people compared with women (Table 2) – 52 per cent of disabled people of working age are male, compared with 51 per cent of non-disabled people of working age. Interestingly, however, while men are rather more over-represented among people with a *work-limiting disability* (55 per cent of this group are male), they are slightly under-represented among those who only have a *current DDA disability* (49 per cent).

⁷ We understand, moreover, that this is likely to involve a move from the current ‘DDA-plus’ definition, to a definition based solely on the DDA. While this would have advantages in terms of being able to monitor coverage of the Act, it fails to address the main problem with the current approach (the inclusion of a relatively ‘advantaged’ group of people who meet the DDA definition, because of a long-term health problem, but whose problem does not affect them in the labour market).

Table 2: Disability by gender (%)

	All long term disabled	Current DDA & work-limiting disabled	Current DDA disabled only	Work-limiting disabled only	Not disabled	Total
Male	51.7	52.0	48.6	54.7	51.3	51.3
Female	48.3	48.0	51.4	45.3	48.7	48.7
Base (=100%)	7,021,263	4,253,300	1,575,831	1,192,132	29,401,093	36,422,356

Source: LFS Spring 2005 (All people of working age; men 16-64, women 16-59)

Table 3 shows that disabled people of working age have an age distribution which is skewed towards the upper end of the age spectrum compared with non-disabled people. Thus 44 per cent of all *long-term disabled* people are aged 50-64 compared with only 20 per cent of non-disabled people.

Table 3: Disability by age (%)

Age group	All long term disabled	Current DDA & work-limiting disabled	Current DDA disabled only	Work-limiting disabled only	Not disabled	Total
16 to 24	8.9	7.3	8.7	15.0	20.7	18.5
25 to 34	13.3	11.8	12.9	19.0	22.8	21.0
35 to 49	34.3	34.3	34.6	33.7	36.1	35.7
50 to 64	43.5	46.6	43.8	32.2	20.4	24.8
Base (=100%)	7,021,263	4,253,300	1,575,831	1,192,132	29,401,093	36,422,356

Source: LFS Spring 2005 (All people of working age; men 16-64, women 16-59)

Members of black and minority ethnic groups (Table 4) are slightly under-represented among *long-term disabled* people (of whom 8 per cent are non-white, compared with 10 per cent in the non-disabled working age population). This under-representation probably reflects the younger age structure of the non-white population in the UK (see Twomey 2001). The under representation is particularly marked among people who only have a *current DDA disability* (only 5 per cent of whom are non-white).

Table 4: Disability by ethnic origin (%)

Ethnic group	All long term disabled	Current DDA & work-limiting disabled	Current DDA disabled only	Work-limiting disabled only	Not disabled	Total
White	92.3	91.5	94.7	92.0	90.2	90.6
Mixed	0.7	0.7	0.8	*	0.7	0.7
Asian or Asian British	4.0	4.5	2.9	3.8	4.6	4.5
Black or Black British	1.7	1.8	1.1	2.3	2.4	2.2
Chinese	0.2	0.3	*	*	0.6	0.5
Other	1.1	1.3	*	1.1	1.5	1.4
Base (=100%)	7,014,410	4,247,873	1,575,233	1,191,304	29,383,720	36,398,130

* = fewer than 10,000 cases in cell

Source: LFS Spring 2005 (All people of working age; men 16-64, women 16-59)

Finally, there is a very marked difference between disabled people and non-disabled people when it comes to their highest level of qualification (Table 5). Thus, among all *long-term disabled* people of working age, some 26 per cent have no qualifications, compared with only 11 per cent among the non-disabled working age population. At the other end of the spectrum, only 11 per cent of the *long-term disabled* working population have a university degree or equivalent, compared with 19 per cent of the non-disabled population. It is interesting to note that those who are *current DDA disabled* (but not *work-limiting disabled*) are much closer to the non-disabled working age population in terms of their qualifications profile, than is the case for disabled people as a whole, and it is notable that this group is also much less disadvantaged in labour market terms than disabled people as a whole (see section 33 below for further discussion of this point).

In part, the difference in qualification profiles between disabled and non-disabled people is simply a cohort effect, reflecting the older age distribution of working age disabled people compared with their non-disabled counterpart (it is well-documented elsewhere⁸, that average levels of qualification decrease with age within the working age population).

Table 5: Disability by highest qualification attained (%)

Highest qualification attained	All long term disabled	Current DDA and work-limiting disabled	Current DDA disabled only	Work-limiting disabled only	Not disabled	Total
Degree or equivalent	10.6	7.8	15.3	14.4	19.3	17.6
Higher educ, below degree level	7.5	6.0	10.5	9.3	8.7	8.4
GCE A Level or equiv	20.3	18.8	24.7	19.9	24.4	23.6
GCSE grades A-C or equiv	19.8	17.7	23.1	22.8	23.7	22.9
Other qualifications	14.9	15.4	14.2	13.9	12.0	12.5
No qualification	26.2	33.7	11.9	18.6	11.2	14.1
Don't know	0.7	0.7	*	1.1	0.8	0.7
<i>Base (=100%)</i>	7,020,202	4,252,920	1,575,399	1,191,883	29,375,255	36,395,457

* = fewer than 10,000 cases in cell

Source: LFS Spring 2005 (All people of working age; men 16-64, women 16-59)

As Table 6 shows, however, this is only part of the explanation, since disabled people appear to be 'under-qualified' compared with non-disabled people in each of the age groups (in each age category the proportion of long-term disabled people with no qualifications is around twice the proportion of unqualified non-disabled people in the same age group). Also of interest is the fact that the under-qualification is particularly marked among those with *work-limiting disabilities*, and the qualifications profile among those with *current DDA disabilities* only is very similar to that of the non-disabled working age population.

⁸ See Department for Education and Skills, 2005, for example.

Table 6: Proportion of disabled and non disabled people with no qualifications, by age group

Age group	All long-term disabled	Not disabled
	% with no qualifications	% with no qualifications
16 to 24	23.0	12.4
25 to 34	16.2	7.3
35 to 49	23.3	9.8
50 to 64	32.3	17.0
All	26.2	11.2

Source: LFS Spring 2005 (All people of working age; men 16-64, women 16-59)

It is notable that some of the demographic and personal characteristics of the disabled working age population (particularly the higher representation of older people and the lower representation of well-qualified people) are also characteristics associated more generally with labour market disadvantage and the chances of being in work, or of being in high quality work. While there are also characteristics of the disabled working age population which might be expected to work in the opposite direction (a slight under-representation of black and minority ethnic groups, and a slight over-representation of men) these latter effects are small, and overall it would seem that disabled people are likely to have other personal characteristics which may be associated with their disability⁹ and which reinforce any labour market disadvantage associated with that disability.

Table 7 shows how disabled people of working age in the UK (according to the various definitions of disability) are distributed by their (self-reported) 'main health problem' or impairment. Looking first at *all long-term disabled* people, It can be seen that around a third report that their main impairment is a musculo-skeletal or mobility problem (reported as problems with the arms, hands, legs, feet, back or neck); around one in ten in each case report chest problems, heart problems or mental illness, and the remaining third of disabled people have a range of other, less common impairments. There are marked differences in the distribution of impairments when we look at the alternative definitions of disability. Thus disabled people with *work-limiting disabilities* (in the second and fourth columns of Table 7) are more likely than average to have musculo-skeletal/mobility problems or mental illness. By contrast, those (in third column of the table) with a *current DDA disability only*, (ie one which does not affect the kind or amount of work they can do), are much less likely than average to report musculo-skeletal problems or mental illness, and much more likely to report impairments such as chest or heart problems or diabetes.

⁹ The causal association between age and disability is clear; there is also likely to be a causal dimension to the link between qualification levels and disability. Thus, for example, people who have had disabilities in early life may well have had negative experiences within the education system or been more likely to drop out of formal education for reasons associated with their disability; similarly older disabled people may have found it harder than others to participate in learning activities.

Table 7: Disabled people by main impairment type (%)

Main Health Problem	All long term disabled	Current DDA and work-limiting disabled	Current DDA disabled only	Work-limiting disabled only
Problems with arms or hands	6.0	6.4	3.1	8.6
Problems with legs or feet	10.7	12.1	6.0	12.2
Problems with back or neck	16.3	18.6	5.6	22.0
Difficulty in seeing (while wearing spectacles or contact lenses)	1.6	1.5	*	3.2
Difficulty hearing	1.4	0.9	1.1	3.7
A speech impediment	*	*	*	*
Severe disfigurement, skin conditions, allergies	1.5	1.0	2.0	3.0
Chest or breathing problems, asthma, bronchitis	11.1	7.8	19.7	11.6
Heart, blood pressure, or blood circulation problems	11.7	9.6	20.7	7.3
Stomach, liver kidney or digestive problems	5.1	4.8	6.2	4.6
Diabetes	5.7	4.4	11.7	2.7
Mental illness	10.4	14.0	3.9	6.4
Epilepsy	2.1	2.2	2.3	1.4
Learning difficulties	2.7	3.0	*	4.9
Progressive illness	5.0	6.8	4.1	0.0
Other health problems or difficulties	8.3	6.9	12.6	7.9
<i>Base (=100%)</i>	<i>6,977,097</i>	<i>4,224,364</i>	<i>1,570,376</i>	<i>1,182,357</i>

Source: LFS Spring 2005 (All those of working age, with a long-term disability)

It can be seen from Table 8 that there is some regional variation in the prevalence of disability. As noted above, for the UK as a whole, some 19 per cent of the working age population fall within the broad definition of *long-term disabled*. At a regional level this varies from a high of 24.4 per cent (in the North East) to a low of 16.2 per cent in the Eastern region. Clearly many factors interact to influence the regional prevalence of disability¹⁰, including: the age structure of the population in the region; levels of deprivation and social exclusion; and the levels of work-related injuries and illness which are historically related to the industrial structure of a region. It is, however, notable that the regions with the highest prevalence rates of disability (the North East, Wales, Scotland and the North West) are all regions with historical traditions of heavy industry, and (relative to the national average) higher levels of unemployment and deprivation. The table also shows that this is associated, in particular, with a higher than average rate of *work-limiting disability* in these regions (this can be seen by combining the estimates in the second and fourth columns in the table).

¹⁰ See the discussion of these issues in McVicar 2005.

Table 8: Prevalence of disability by region (row per cent)

	All long-term disabled (as % of working age population)	of which		
		Current DDA & work-limiting disabled	Current DDA disabled only	Work-limiting disabled only
North East	24.4	16.6	4.9	3.0
North West	21.2	13.8	4.3	3.1
Yorkshire & Humberside	20.5	12.4	4.7	3.4
East Midlands	19.9	11.3	5.1	3.5
West Midlands	19.5	11.8	4.5	3.2
Eastern	16.2	8.8	4.2	3.2
London	16.3	10.4	2.8	3.0
South East	17.0	8.8	4.9	3.4
South West	18.7	10.6	4.4	3.7
Wales	23.2	14.8	5.0	3.4
Scotland	21.7	13.9	4.7	3.1
Northern Ireland	20.4	14.7	2.3	3.3
<i>All UK</i>	<i>19.3</i>	<i>11.7</i>	<i>4.3</i>	<i>3.3</i>

Source: LFS Spring 2005 (All people of working age; men 16-64, women 16-59)

3 The labour market circumstances of disabled people

3.1 Patterns of economic activity among disabled people

Whatever definition is used, it is clear from all of the data sources, that disabled people are seriously disadvantaged in labour market terms. The most notable dimension of that disadvantage is reflected in their lower chances of being in work at all, but if in work, they are also less likely to be found in stable, well-paid or high level occupations than their non-disabled counterparts. This is well-documented in the previous literature. Thus, for example, Grundy *et al.* 1999 estimated that in 1997, 37 per cent of disabled men aged under 50 and 22 per cent of disabled men aged 50-64 were in employment (the corresponding figures for women were 33 per cent and 25 per cent – the latter referring to women aged 50-59). These correspond with figures of 78 per cent for all (disabled and non-disabled) men and 67 per cent for all women.

Our recent analysis from the Labour Force Survey provides further evidence of the extent and nature of the labour market disadvantage experienced by disabled people in the UK.

Table 9: Economic activity by disability (%)

	All long-term disabled	Current DDA and work-limiting disabled	Current DDA disabled	Work-limiting disabled only	Not disabled	Total
In employment	49.6	32.5	82.9	66.7	80.3	74.4
ILO unemployed	4.1	4.0	2.7	6.2	3.6	3.7
Economically inactive	46.3	63.5	14.4	27.1	16.1	21.9
<i>Base (=100%)</i>	7,021,263	4,253,300	1,575,831	1,192,132	29,401,093	36,422,356

Source: LFS Spring 2005 (All people of working age; men 16-64, women 16-59)

First, as Table 9 shows, using the broadest indicator of disability (those who are *long-term disabled*), only 50 per cent of the working age population in this category are in employment, compared with 80 per cent of non-disabled people. It is also clear that among disabled people, worklessness is a problem of economic inactivity rather than a problem of unemployment. Indeed the proportion of the working age population who are unemployed is the same as for the non-disabled working age population at around four per cent¹¹, and the vast majority of non-working disabled people are inactive and not seeking work, or not available for work according the normal ILO definition of unemployment. What is also notable from Table 9 is the extent to which the employment rate (and hence the interpretation of labour market disadvantage) varies according to the definition of disability adopted. Among those who are *current DDA disabled* only, the employment rate at 83 per cent exceeds that of non-disabled people (at 80 per cent) and that of the overall working age population (74 per cent). In a sense, this is not surprising, since these are people who say that their health problem or impairment does not affect the type or amount of work they might do, but it does underline the extent to which the official estimate of the employment rate of disabled people is boosted by the inclusion of this group. Indeed, if we look only at people who are *work-limiting disabled*¹², the employment rate is a mere 40 per cent.

Official published estimates using re-weighted LFS data (Disability Rights Commission, 2004), for the period spring 1998 to spring 2004, show that there has been a significant increase over the six year period in the employment rate of disabled people (on the *long-term disabled* definition) from 43.4 to 50.1 per cent¹³. As noted above, however, the increase in the employment rate of people with *work-limiting disabilities* has been less marked over this period.

¹¹ Note that the conventionally-defined 'unemployment rate' is, of course, higher for disabled than non-disabled people, because the unemployment rate is normally expressed as a percentage of the economically active workforce, rather than the working population

¹² This is not shown in directly in the table, but can be calculated by combining the data from the *current DDA and work-limiting disabled* column with those from the *work limiting disabled only* column

¹³ Note that these data relate to *Great Britain* only, and are not directly comparable with the more recent UK data for 2005 presented in Table 9 above.

3.2 Personal characteristics and employment rates

Table 10 shows how employment rates among disabled people vary with the main type of impairment. Looking at *all long-term disabled people*, it is clear that the type of impairment makes a major difference to employment chances. In particular it is notable that learning disabilities and mental ill health are associated with extremely low employment rates (25 per cent and 20 per cent respectively) while, at the other end of the spectrum, diabetes, skin problems, chest and breathing problems and hearing impairments are all associated with employment rates of over 60 per cent. The other major impairment groups including mobility-related impairments and visual impairments are associated with employment rates closer to the average for all disabled people.

Table 10: Employment rate by main type of impairment

Impairment type	All long-term disabled	Employment rate (%)		
		Current DDA & work-limiting disabled	Current DDA disabled	Work-limiting disabled only
Diabetes	66.8	47.7	86.6	65.4
Severe disfigurement, skin conditions, allergies	64.8	57.0	73.9	65.9
Chest or breathing problems, asthma, bronchitis	63.7	43.0	83.6	68.1
Difficulty hearing	61.8	47.2	79.1	67.1
Heart, blood pressure, or blood circulation problems	56.7	33.5	84.7	60.5
Stomach, liver kidney or digestive problems	56.3	39.5	85.5	67.4
Other health problems or difficulties	54.0	32.4	82.4	60.3
Problems with arms or hands	52.8	40.7	77.0	73.5
Epilepsy	51.8	32.7	89.5	80.1
Difficulty in seeing (while wearing spectacles or contact lenses)	49.6	32.8	*	66.9
Problems with legs or feet	47.9	33.1	85.6	75.6
Problems with back or neck	47.6	33.5	83.5	77.8
Progressive illness	43.0	32.7	88.1	—
A speech impediment	*	*	*	*
Learning difficulties	24.9	17.1	*	41.8
Mental illness	20.0	14.3	55.5	36.6
<i>All</i>	<i>49.7</i>	<i>32.6</i>	<i>82.9</i>	<i>66.9</i>

* = fewer than 10,000 cases in cell

Source: LFS Spring 2005 (All people of working age [men 16-64, women 16-59] with a long-term disability)

Table 11 shows employment rates of disabled and non-disabled people broken down by age group. In both cases, the lowest employment rate is in the 16-24 age group (largely due to the higher rates of participation in full-time education among this group); employment rates then rise with age, peaking in the 35-49 age group, before falling again

in the oldest (50+) category. If, however, we compare the employment rates by age group for *all long-term disabled* people, with those of non-disabled people (the first and last columns) of the table, it is clear that the relative employment disadvantage of disabled people increases steadily with age. Thus among the youngest age group the employment rate of all *long-term disabled* people is 70 per cent of the non-disabled rate, but among the oldest (50-plus) age group it falls to only just over half (54 per cent) the non-disabled rate for the same age group. It is not possible, directly from these data to explain this pattern, but it is likely to reflect a variety of factors. Possible examples include:

- differences in the types and severity of impairments among older disabled people compared with their younger counterparts;
- possible differences in the relative attractiveness of (or ease of claiming of) disability-related benefits among older compared with younger disabled people. It has often been argued that the rapid growth in the numbers of recipients of incapacity-related benefits in the high-unemployment era of the 1980s was partly due to the deliberate use of such benefits as a form of 'disguised unemployment' or effective early retirement, particularly among older men having lost their jobs in depressed industrial areas (see Thornton 2005, for a discussion of this).
- a higher level of discrimination by employers against older disabled people. Until the advent of age discrimination legislation in 2006, it has been legal to discriminate against older workers, whereas disability discrimination has been outlawed since 1996, and it is possible that employers have used their ability to discriminate on age grounds effectively to exclude some older disabled workers from employment

Table 11: Employment rates of disabled and non-disabled people by age group (%)

Age group	All long term disabled	Current DDA & work-limiting disabled	Current DDA disabled only	Work-limiting disabled only	Not disabled
16 to 24	42.1	28.3	62.3	50.4	59.8
25 to 34	54.1	37.7	81.8	65.9	83.7
35 to 49	55.6	38.1	88.2	75.2	88.3
50 to 64	45.0	27.7	83.2	66.0	83.4
All ages	49.6	32.5	82.9	66.7	80.3

Source: LFS Spring 2005 (All people of working age; men 16-64, women 16-59)

Turning to qualifications, Table 12 shows that at every level of qualification, disabled people have lower employment rates than non-disabled people of the same qualification level, but the degree of relative disadvantage is greater the lower the qualification level. Thus among those educated to degree level or equivalent, the employment rate of disabled people is 84 per cent of the non-disabled rate (at 76 and 90 per cent respectively), whilst among those with no qualifications at all, the disabled employment rate falls to a mere 37 per cent of the non-disabled rate (the former is 23 per cent and the latter 62 per cent). This highlights very starkly the extent to which the labour market chances of disabled people are further impaired by their lower than average qualification levels.

Table 12: Employment rates of disabled and non-disabled people by highest qualification (%)

Highest qualification attained	All long-term disabled %	Not disabled
Degree or equivalent	75.5	89.8
Higher educ, below degree level	70.8	88.3
GCE A Level or equiv	59.1	82.1
GCSE grades A-C or equiv	55.3	78.5
Other qualifications	47.0	77.7
No qualification	23.1	61.8
Don't know	43.0	77.6
All	49.6	80.4

Source: LFS Spring 2005 (All people of working age; men 16-64, women 16-59)

3.3 The labour market orientation of disabled people

As noted above (Table 9), some 46 per cent of disabled people of working age (on the broadest definition of disability) are economically inactive. A key question for policy purposes, and the subject of some controversy and debate in the UK (to which we will return in Work Package 2) relates to what proportion of this group (amounting to some three and a quarter million people) wishes to, or would be able to participate in the labour market, and under what circumstances. Unfortunately hard evidence on this question is scarce, although the figure of a million is commonly bandied about in the policy debate (Stanley and Regan 2003). The LFS does, however, contain limited relevant information, summarised in Table 13, which asks, for people who are economically inactive, whether they would like a paid job. It shows that just over a quarter (27 per cent) of *all long-term disabled* people say that they would like a paid job, representing just under 870,000 people, a figure which, if correct, represents a considerable potential for labour market entry among this group. It is interesting that the proportion of inactive disabled people indicating a desire to work is actually higher than the proportion of inactive non-disabled people who would like a paid job (21 per cent), suggesting perhaps that, to a significant extent, lack of jobsearch activity among this group of disabled people reflects a belief that suitable jobs would not be available (or that employers would be likely to discriminate against them), rather than any unwillingness or lack of capacity to work. Such beliefs are well-documented from earlier surveys of disabled people; thus, for example, Meager *et al.* 1999 found significantly different attitudes between economically inactive and economically active disabled people in this respect, with the inactive much more likely to believe that: employers are less likely to employ them than a similar non-disabled person; and that having a health problem or disability has limited their employment opportunities.

Table 13: Relationship between economic inactivity, disability & desire to participate in labour mkt

	All long term disabled	Current DDA & work-limiting disabled	Current DDA disabled only	Work-limiting disabled only	Not disabled	Total
Yes - would like paid job	27.4	27.6	25.6	27.0	21.1	23.7
Base	3,209,028	2,677,005	219,338	312,685	4,512,557	7,721,585

Source: LFS Spring 2005 (People of working age not in work, not waiting to start a job, and not looking for work; men 16-64, women 16-59)

4 The characteristics of disabled people’s employment

4.1 Working patterns

Table 14 compares the self-employment rates¹⁴ of disabled and non-disabled people. It is interesting to note that disabled people have a slightly higher self-employment rate than non-disabled people, and that disabled people with *work-limiting disabilities* have an even higher self-employment rate. This, as other analysts have pointed out (Jones and Latreille 2005) raises the possibility that self-employment may provide an important mechanism through which people with work-limiting disabilities can enter the labour market. It is unclear how far this reflects a response to employer discrimination (eg faced with difficulties in obtaining or retaining employee status work in the ‘regular’ labour market, some disabled people prefer to set up in business on their own), or how far it reflects possible intrinsic advantages in self-employment for people with particular impairments or needs (eg self-employment may offer considerable flexibility in terms of working from home, or varying working hours in line with variations in a health condition *etc.*). Jones and Latreille present some evidence that the latter factors may be important.

Table 14: Self-employment rate by disability status (%)

	All long term disabled	Current DDA & work-limiting disabled	Current DDA disabled only	Work-limiting disabled only	Not disabled	Total
Self-employment rate	13.7	16.1	11.0	14.1	12.1	12.3
Base (=100%)	3,446,013	1,356,384	1,300,868	788,761	23,470,176	26,916,189

Source: LFS Spring 2005 (Self-employed and employees of working age in employment; men 16-64, women 16-59)

From Table 15 it can be seen that it is not only self-employment which may play this role for disabled people. It is also notable that disabled people in work (and again, especially disabled people with a *work-limiting disability*) are rather more likely than non-disabled people to be in part-time work. As other authors have argued, this may also reflect the opportunities which part-time work may offer some disabled people to accommodate their impairments. As Jones 2005 notes:

‘Evidence from the Labour Force Survey suggests that part-time employment provides an important way of accommodating a work-limiting disability rather than reflecting marginalisation of the disabled by employers.’

Jones 2005 (p.1)

¹⁴ The self-employment rate is calculated here as the percentage of all people in employment (*ie* employees plus the self-employed), who are self-employed.

Table 15: Part-time work by disability status

	All long term disabled	Current DDA and work-limiting disabled	Current DDA disabled only	Work-limiting disabled only	Not disabled	Total
Part-time (as % of all in employment)	28.7	33.7	24.1	27.4	23.4	24.1
Base (=100%)	3,474,959	1,375,708	1,304,947	794,304	23,593,260	27,068,219

Source: LFS Spring 2005 (All people of working age in employment; men 16-64, women 16-59)

Further evidence in favour of this argument is shown in Table 16 which looks at the main reasons given for part-time working, and it is clear that the level of ‘involuntary’ part-time work among disabled people is relatively low, and no higher than among non-disabled people. Thus only 8 per cent of *all long-term disabled* people are working part-time because they cannot find a full-time job (the comparable figure among non-disabled people is 9 per cent). The vast majority of both disabled and non-disabled part-timers say that their part-time work is undertaken because they did not want a full time job. The main difference between disabled and non-disabled people is that a significant minority of disabled people (especially those with a *work-limiting* disability) are doing part-time work *for a reason related to their disability*, ie presumably because the part-time work made it easier for them to accommodate their disability in a working environment than full-time work would have done.

Of course, employer discrimination and the opportunities offered to accommodate specific needs may not be the only factors influencing disabled people’s choice of specific working patterns such as part-time work. In particular we also need to consider the incentive structure presented by wage-benefit replacement ratios and the regulations associated with the benefit regime. In particular the ‘permitted work rules’ (see Dewson *et al.* 2005) which enable disabled recipients of Incapacity Benefits to undertake limited amounts of work (up to a weekly limit of 16 hours) for a period of up to a year, are likely to provide a clear incentive for part-time work.

Table 16: Reasons for working part-time (%)

	All long term disabled	Current DDA disabled and work-limiting disabled	Current DDA disabled only	Work-limiting disabled only	Not disabled	Total
Student or at school	7.3	4.5	8.0	12.1	19.8	17.9
Ill or disabled	14.1	25.1	1.3	9.0	0.4	2.5
Could not find full-time job	8.2	7.3	8.8	9.2	8.7	8.6
Did not want full-time job	70.4	63.1	81.9	69.8	71.1	71.0
Base (=100%)	988,429	461,079	310,995	216,355	5,500,839	6,489,268

Source: LFS Spring 2005 (All part-time workers in employment of working age; men 16-64, women 16-59)

In the light of the other dimensions of labour market and employment disadvantage faced by disabled people and recorded in the LFS data presented here, it might be expected that the jobs taken by disabled people might be, in some sense, more unstable or insecure on average than those taken by non-disabled people. It is only possible to scratch the surface of this question with the LFS data, but it is interesting to note that Table 17 (which looks at the incidence of temporary work) does not confirm this hypothesis. If anything, disabled people's jobs are slightly *less likely* than average to be temporary in nature.

Table 17: Temporary work by disability status

	All long term disabled	Current DDA and work-limiting disabled	Current DDA disabled only	Work-limiting disabled only	Not disabled	Total
Temporary work (as % of all employees)	4.8	5.1	4.2	5.4	5.5	5.4
Base (=100%)	2,973,484	1,138,391	1,157,738	677,355	20,634,035	23,607,519

Source: LFS Spring 2005 (All employees of working age; men 16-64, women 16-59)

4.2 Broad occupational and sectoral patterns of disabled people's employment

What kinds of jobs are disabled people employed in? Table 18 shows the occupational distribution of disabled people in employment (employees and self-employed) and how that compares with the distribution of non-disabled people in employment. As might be expected from the qualification profile of disabled people (Table 5), they are generally under-represented in higher level occupations. Thus, among all *long-term disabled* people in employment, just over a third (36 per cent) are found in managerial, professional and associate professional occupations, compared with 42 per cent of non-disabled people.

This suggests that not only does the relative under-qualification of disabled people affect their likelihood of obtaining employment in the first place (Table 12), but it also affects to some extent, for those who do get work, their chances of higher level employment. Once again, however, it is notable from Table 18 that those who are *current DDA disabled only* (ie who meet the DDA definition of disability, but do not have a work-limiting disability) are much less disadvantaged in this respect than those with a *work-limiting disability*.

Table 18: Disability by occupation (%)

Occupational group	All long term disabled	Current DDA & work-limiting disabled	Current DDA disabled only	Work-limiting disabled only	Not disabled	Total
Managers and senior officials	13.3	12.0	15.6	11.7	15.1	14.9
Professional occupations	10.6	9.1	12.4	10.1	13.0	12.7
Associate professional and technical	12.6	12.4	13.1	12.1	14.3	14.0
Administrative and secretarial	13.4	13.6	13.9	12.2	12.2	12.4

Occupational group	All long term disabled	Current DDA & work-limiting disabled	Current DDA disabled only	Work-limiting disabled only	Not disabled	Total
Skilled trades occupations	11.6	12.4	10.1	12.5	11.5	11.5
Personal service occupations	8.7	9.3	7.7	9.3	7.6	7.7
Sales & customer service	7.5	7.0	7.5	8.5	8.0	7.9
Process, plant and machine operatives	9.3	9.2	9.0	10.0	7.4	7.6
Elementary occupations	13.0	15.0	10.7	13.6	11.0	11.2
<i>Base (=100%)</i>	<i>3,470,723</i>	<i>1,371,919</i>	<i>1,305,027</i>	<i>793,777</i>	<i>23,573,406</i>	<i>27,044,129</i>

Source: LFS Spring 2005, All people of working age in employment (men 16-64, women 16-59)

Turning to the sectoral structure of employment Table 19 show that there is little difference between the sectors in which disabled people work and those in which non-disabled people work, although there is a slight over-representation of disabled people in the public sector (public administration, education and health).

Table 19: Disabled people in employment by sector (%)

Sector	All long term disabled	Current DDA & work-limiting disabled	Current DDA disabled only	Work-limiting disabled only	Not disabled	Total
Agriculture & fishing	1.4	1.4	1.1	1.8	1.3	1.3
Energy & water	0.8	0.8	0.9	0.6	1.1	1.0
Manufacturing	13.4	12.6	14.2	13.3	13.5	13.5
Construction	8.2	8.7	7.4	8.6	7.9	8.0
Distribution, hotels & restaurants	18.5	19.2	16.5	20.6	19.6	19.5
Transport & communication	7.4	7.1	7.6	7.6	6.9	7.0
Banking, finance & insurance etc	14.1	13.6	14.9	13.7	15.9	15.7
Public admin, educ & health	30.5	30.0	32.7	27.8	28.0	28.3
Other services	5.8	6.8	4.7	6.0	5.8	5.8
<i>Base (100%)</i>	<i>3,470,249</i>	<i>1,371,379</i>	<i>1,305,537</i>	<i>793,333</i>	<i>23,574,827</i>	<i>27,045,076</i>

Source: LFS Spring 2005, All people of working age in employment (men 16-64, women 16-59)

Finally, it is interesting to note that, despite evidence from many studies (see, for example, Roberts *et al.* 2004) that proactive policies towards the recruitment of disabled people are more prevalent in the public than in the private sector, there is no evidence from the LFS that this translates into a significantly larger representation of disabled people in the public sector (13.6 per cent of public sector employees are disabled, compared with 12.6 per cent of private sector employees).

Table 20: Disabled people's employment in the public and private sectors (%)

	All long term disabled	Current DDA & work-limiting disabled	Current DDA disabled only	Work-limiting disabled only	Not disabled
Private	12.6	5.0	4.6	3.0	87.4
Public	13.6	5.2	5.6	2.8	86.4
<i>Total</i>	<i>12.8</i>	<i>5.1</i>	<i>4.8</i>	<i>2.9</i>	<i>87.2</i>

Source: LFS Spring 2005 (All employees of working age in employment; men 16-64, women 16-59)

4.3 Disabled people employed in ICT, construction and health sectors

In this section we focus, in a little more detail, on the employment circumstances of disabled people employed in the three sectors being used as the basis of international comparison in the comparative study of which this paper forms part: ICT, construction and health¹⁵.

Table 21 shows the overall employment of disabled people within these three sectors, compared with the pattern for employment in all sectors. The data suggests that the representation of disabled workers in the construction sector is very similar to that of disabled workers in overall employment, with around 13 per cent of workers being *long-term disabled*. By contrast the health sector has a slightly higher than average representation of disabled people at 15 per cent (although it should be noted that this is mainly due to a higher than average representation of people who are *DDA disabled* rather than people who have a *work-limiting disability*). The ICT sector, on the other hand, has a lower than average representation of disabled people (with only 11 per cent of the workforce in this sector falling into the *long-term disabled* category).

Table 21: Employment of disabled people in ICT, construction and health (%)

	ICT	Construction	Health and Social Work	Total (all sectors)
All long term disabled	10.6	13.1	14.8	12.8
<i>Of which:</i>				
Current DDA and work-limiting disabled	4.0	5.5	5.8	5.1
Current DDA disabled only	4.1	4.5	5.9	4.8
Work-limiting disabled only	2.5	3.2	3.1	2.9
Not disabled	89.4	86.9	85.2	87.2
<i>Base (=100%)</i>	<i>1,018,399</i>	<i>2,157,099</i>	<i>3,275,291</i>	<i>27,106,411</i>

Source: LFS Spring 2005 (People of working age in employment; men 16-64, women 16-59)

¹⁵ The definitions of the three sectors using ISIC codes are given in the Annex to this paper. In the case of ICT, it should be noted that, in contrast to the sectoral definitions used by our Norwegian partners in this project, we have been unable to include ICT activities in the wholesale and retail sectors (as these cannot be separated from other wholesale and retail activities in the LFS data used here). In the case of the health sector, it should also be noted that veterinary activities and social work are also included in the sectoral definition used in the LFS.

Table 22 looks at the age distribution of employment (for both disabled and non-disabled people) in each of the three sectors, and compares it with the corresponding age distributions for the economy as a whole (all sectors). Looking first at overall employment, compared with the economy as a whole, construction has a very similar age distribution, while ICT and health have more compressed age distributions, with a smaller share of workers in both the youngest (16-24) age range, and the oldest (50-59/64) age range. In all three sectors, however, as well as in the economy as a whole, the age distribution of disabled people is heavily skewed towards the upper end. The ICT sector records the biggest difference between the disabled and non-disabled age distributions in this respect and, although this sector (in line with its image as a 'young person's industry') has the lowest share of non-disabled people in the 50+ age range (at 14 per cent), the share of disabled people in this age range is more than twice as high at 33 per cent. This is, nevertheless, considerably lower than the share of older disabled people in the other sectors. The relatively low representation of disabled people in the ICT sector (as recorded in Table 21 above) is in some ways surprising, given that this sector, offers in principle (certainly in comparison with construction and health) a working environment which might more easily be adapted to the needs of some disabled people. It is possible, however, that this relative under-representation of disabled people in ICT is an age effect, and stems from the emphasis on the recruitment of young people in this sector, a bias which tends to disadvantage disabled people who are, as we have seen, older on average than non-disabled people.

Table 22: Employment of disabled people in ICT, construction and health, by age (%)

	Age group	All long term disabled	Not disabled	All
ICT	16 to 24	6.1	9.8	9.4
	25 to 34	25.3	31.1	30.5
	35 to 49	35.3	45.1	44.1
	50 to 59/64	33.3	14.0	16.0
	<i>Base (=100%)</i>	<i>107,609</i>	<i>910,790</i>	<i>1,018,399</i>
Construction	16 to 24	7.4	15.0	14.0
	25 to 34	10.9	22.6	21.1
	35 to 49	35.9	39.8	39.3
	50 to 59/64	45.9	22.5	25.6
	<i>Base (=100%)</i>	<i>283,189</i>	<i>1,873,415</i>	<i>2,156,604</i>
Health and Social Work	16 to 24	5.1	9.2	8.6
	25 to 34	13.3	23.2	21.7
	35 to 49	42.5	44.3	44.1
	50 to 59/64	39.1	23.3	25.6
	<i>Base (=100%)</i>	<i>485,911</i>	<i>2,788,375</i>	<i>3,274,286</i>
All sectors	16 to 24	7.6	15.4	14.4
	25 to 34	14.5	23.8	22.6
	35 to 49	38.4	39.6	39.5
	50 to 59/64	39.5	21.2	23.5
	<i>Base (=100%)</i>	<i>3,483,147</i>	<i>23,623,264</i>	<i>27,106,411</i>

Source: LFS Spring 2005 (All people of working age in employment; men 16-64, women 16-59)

A similar story emerges from the analysis by qualifications levels (Table 23). Looking first at all employees, there are big differences between the sectors:

- Construction has a qualification profile with a very low representation of higher level qualifications (a factor likely to militate in favour of the recruitment of disabled people).
- ICT, on the other hand has a profile with a very high representation of university graduates and other highly-qualified people (which is likely to reinforce the effect of the age profile and operate to the disadvantage of disabled people who are, in general, less well-qualified than average, as we have seen).
- Finally, the qualification profile in the health sector is rather similar to that in the economy as a whole, the main difference being the very large representation of people with higher education qualifications below degree level (this mainly reflects the qualifications structure of nursing and some other professions allied to medicine). As Table 5 above showed, disabled people are not as seriously under-represented in this group of high level qualifications as they are in degree level qualifications, and it is possible, therefore that the qualifications profile of the health sector operates somewhat more to the benefit of disabled people because of this.

As far as the qualifications profiles of disabled people within the sectors are concerned, there are no surprises: in each of the three sectors, as in the economy as a whole, disabled people in employment are rather less well-qualified than their non-disabled counterparts in the same sector.

Table 23: Employment of disabled people in ICT, construction and health, by highest qualification attained (%)

	Highest qualification attained	All long term disabled	Not disabled	All
ICT	Degree or equivalent	25.8	34.8	33.9
	Higher education below degree	11.0	13.8	13.5
	GCE A Level or equivalent	29.5	23.6	24.2
	GCSE grades A-C or equivalent	20.8	16.2	16.7
	Other qualifications	*	8.0	7.9
	No qualification	*	2.8	3.1
	Don't know		*	0.7
	<i>Base (=100%)</i>		<i>107,609</i>	<i>910,790</i>
Construction	Degree or equivalent	4.6	8.2	7.7
	Higher education below degree	5.6	6.4	6.3
	GCE A Level or equivalent	47.0	42.6	43.1
	GCSE grades A-C or equivalent	14.1	19.7	19.0
	Other qualifications	14.6	11.8	12.2
	No qualification	13.5	10.4	10.8
	Don't know	*	0.9	0.8
	<i>Base (=100%)</i>		<i>283,189</i>	<i>1,873,415</i>

Health and Social Work	Degree or equivalent	17.9	24.6	23.6
	Higher education below degree	23.0	20.0	20.4
	GCE A Level or equivalent	17.2	17.4	17.4
	GCSE grades A-C or equivalent	22.2	21.0	21.2
	Other qualifications	12.0	10.8	10.9
	No qualification	7.1	5.8	6.0
	Don't know	*	0.4	0.4
	<i>Base (=100%)</i>	<i>485,911</i>	<i>2,788,375</i>	<i>3,274,286</i>
All sectors	Degree or equivalent	16.1	21.6	20.9
	Higher education below degree	10.8	9.5	9.7
	GCE A Level or equivalent	24.2	24.9	24.8
	GCSE grades A-C or equivalent	22.1	23.1	23.0
	Other qualifications	14.1	11.6	11.9
	No qualification	12.2	8.6	9.1
	Don't know	0.6	0.7	0.7
	<i>Base (=100%)</i>	<i>3,483,147</i>	<i>23,623,264</i>	<i>27,106,411</i>

* = fewer than 10,000 cases in cell

Source: LFS Spring 2005 (All people of working age in employment; men 16-64, women 16-59)

Despite the relative 'under-qualification' of disabled people (compared with their non-disabled counterparts) in all three of the sectors under examination, it is interesting to note (Table 24) that this under-qualification does not show up in major differences in the occupational distributions of disabled and non-disabled people. In all three sectors, there are broad similarities in the share of disabled and non-disabled people in professional and other high level occupations (the main exception being the under-representation of disabled people in managerial occupations in the ICT sector). This suggests that the under-qualification tends to occur more *within* rather than *between* broad occupational groups, and that disabled people are probably employed, on average, in lower level posts within each of the broad occupations. If true, we would expect this to be reflected in the pay levels of disabled and non-disabled people in each sector and, as Table 25 shows, these differences are quite marked (note that we go on, in section 4.5 below to consider disabled and non-disabled people's pay levels more generally).

Of particular interest from Table 25, however, is the big difference between sectors in the disabled-non disabled pay gap. The gap is quite small in the health sector and construction sectors (only around six to seven per cent), whereas it is three times as large (19 per cent) in the ICT sector, perhaps reflecting this under-representation of disabled people in managerial positions in that sector, as well as the under-qualification effect discussed above.

Table 24: Employment of disabled people in ICT, construction and health, by occupation (%)

	Occupational group	All long term disabled	Not disabled	Total
ICT	Managers and Senior Officials	21.2	27.6	27.0
	Professional occupations	27.2	27.8	27.8
	Associate Professional & Technical	14.0	16.2	16.0
	Administrative and Secretarial	9.8	8.4	8.5
	Skilled Trades Occupations	11.2	9.7	9.9
	Personal Service Occupations	*	*	*
	Sales and Customer Service Occupations	*	5.6	5.7
	Process, Plant and Machine Operatives	*	3.1	3.5
	Elementary Occupations	*	1.5	1.6
		<i>Base (=100%)</i>	<i>107,099</i>	<i>909,539</i>
Construction	Managers and Senior Officials	10.3	12.1	11.8
	Professional occupations	5.2	6.1	6.0
	Associate Professional & Technical	3.6	4.5	4.4
	Administrative and Secretarial	7.0	7.1	7.1
	Skilled Trades Occupations	53.0	52.7	52.7
	Personal Service Occupations	*	*	*
	Sales & Customer Service Occupations	*	0.8	1.0
	Process, Plant and Machine Operatives	9.1	8.0	8.2
	Elementary Occupations	9.6	8.6	8.7
		<i>Base (=100%)</i>	<i>283,189</i>	<i>1,872,391</i>
Health and Social Work	Managers and Senior Officials	9.8	9.3	9.4
	Professional occupations	7.7	12.0	11.3
	Associate Professional & Technical	25.8	27.7	27.4
	Administrative and Secretarial	15.2	12.3	12.7
	Skilled Trades Occupations	*	1.4	1.5
	Personal Service Occupations	31.6	30.9	31.0
	Sales and Customer Service Occupations	*	0.5	0.5
	Process, Plant and Machine Operatives	*	0.8	0.9
	Elementary Occupations	6.2	5.1	5.3
		<i>Base (=100%)</i>	<i>485,385</i>	<i>2,787,881</i>

* = fewer than 10,000 cases in cell

Source: LFS Spring 2005 (All people of working age in employment; men 16-64, women 16-59)

Table 25: Average gross hourly pay in ICT, construction and health, by disability status

	All long term disabled	Not disabled	All	Disabled average pay as % of non disabled
ICT	£13.11	£16.18	£15.84	81.0
Construction	10.05	£10.75	£10.65	93.5
Health and Social Work	£9.53	£10.20	£10.09	93.4
All sectors	£9.84	£10.81	£10.54	91.0

Source: LFS Spring 2005 (All people of working age in employment; men 16-64, women 16-59)

From Table 26 it can be seen that the three sectors vary considerably in their use of part-time workers. The health sector has a much higher incidence of part-time work (reflecting the high proportion of women workers in this sector) and it is interesting to note that the incidence of part-time work is almost as high among disabled as non-disabled people in this sector. In ICT and construction, however, which are both male-dominated sectors with much lower than average use of part-time workers, the incidence of part-time work among disabled people is much lower than it is among non-disabled people. It is also likely that the greater incidence of part-time work by disabled people in the ICT sector contributes to the relative under-representation of disabled people in higher level jobs in this sector.

Table 26: Prevalence of part-time work in ICT, construction and health, by disability status

		Part-time (%)
ICT	All long term disabled	12.5
	Not disabled	7.7
Construction	All long term disabled	11.6
	Not disabled	5.9
Health and Social Work	All long term disabled	38.8
	Not disabled	35.1
All sectors	All long term disabled	28.7
	Not disabled	23.4

Source: LFS Spring 2005 (All people of working age in employment; men 16-64, women 16-59)

Finally, Table 27 shows self-employment rates, again recording much divergence between the three sectors. We have seen above (Table 14) that disabled people exhibit higher than average self-employment rates, and hypothesised that self-employment may, under certain circumstances, offer particular advantages to some disabled people in providing opportunities to accommodate their impairments. From Table 27 we can see that whereas, in construction (a sector with a very high incidence of self-employment), the self-employment rate of disabled people is similar to that among non-disabled people, in ICT disabled people have a higher self-employment rate than their non-disabled counterparts (13 per cent compared with 9 per cent respectively). It is possible that the difference between construction and ICT in this respect reflects the nature of the work in the two sectors. Self-employment is traditionally found in the construction sector in the skilled manual occupations, whereas it is likely that a high proportion of self-employed people in ICT are professional and technical contractors, and self-employment may be particularly

attractive to disabled people in these occupations. Lastly, the health sector, by contrast, is dominated by large public sector employers, in which employee status is the normal contractual arrangement and, in this sector, both disabled and non-disabled employees are much less likely than average to be self-employed.

Table 27: Prevalence of self-employment in ICT, construction and health, by disability status

		Self-employed (%)
ICT	All long term disabled	12.9
	Not disabled	8.8
Construction	All long term disabled	37.1
	Not disabled	37.8
Health and Social Work	All long term disabled	5.7
	Not disabled	6.7
All sectors	All long term disabled	13.7
	Not disabled	12.1

Source: LFS Spring 2005 (All people of working age in employment; men 16-64, women 16-59)

4.4 Work-related training

We have already noted the extent to which disabled people are relatively under-qualified in comparison with their non-disabled counterparts. Table 28 shows that this disadvantage in skill/qualifications terms is further compounded by the fact that disabled people (and particularly disabled people with a *work-limiting* disability) are less likely to receive work-related training in connection with their job. This is not a surprise; it is well-documented in the literature on vocational further training, that employees who are already well-qualified are the most likely to be given training associated with their work (this is the so-called ‘Matthew effect’)¹⁶.

Table 28: Work-related training by disability status

	All long term disabled	Current DDA and work-limiting disabled	Current DDA disabled only	Work-limiting disabled only	Not disabled	Total
% of those in employment receiving work-related training in last 3 months	26.3	23.3	29.9	25.6	29.6	29.2
Base (=100%)	3,455,218	1,365,510	1,299,383	790,325	23,268,683	26,723,901

Source: LFS Spring 2005 (All people of working age in employment; men 16-64, women 16-59)

4.5 Pay levels

Table 29 illustrates another, related, dimension of the disadvantaged position of disabled people in the workplace, showing the average gross hourly pay of disabled and non

¹⁶ Schömann and Siarov (2005) show, with EU-wide data, that the already highly-skilled receive more than six times the amount of further vocational training, than do their low skilled counterparts.

disabled employees¹⁷. Both male and female disabled employees earn on average less than their non-disabled employee counterparts. For disabled men, the 'disability pay gap' is 8.9 per cent, while for disabled women the gap is slightly smaller at 8.4 per cent.

Table 29: Average gross hourly pay (£) for disabled and non disabled employees

	All long term disabled	Current DDA & work-limiting disabled	Current DDA disabled only	Work-limiting disabled only	Not disabled	Total
Male	£10.93	£10.12	£12.18	£10.35	£12.00	£11.86
Female	£8.74	£8.72	£8.83	£8.63	£9.54	£9.42
All	£9.84	£9.41	£10.48	£9.55	£10.81	£10.68

Source: LFS Spring 2005, (All employees of working age; men 16-64, women 16-59)

Once again, it is clear that the disadvantage experienced by *current DDA disabled* people is less than that experienced by those with a work-limiting disability (indeed men with a *current DDA disability* only have a slightly higher average hourly pay level than do non-disabled people), and this is consistent with the patterns observed above with regard to the qualification and occupational profiles of disabled people. This raises, of course (as in the case of the gender pay gap), the broader question of how far the observed pay gap for disabled people reflects factors such as their skill, qualifications, work experience and any occupational or sectoral segregation which exists, and how far it reflects discriminatory behaviour on the part of employers.

The literature on this question is much less well-developed in the UK than is the parallel literature on the gender pay gap. However, the few rigorous econometric studies which do exist (Blackaby *et al.* 1999; Kidd *et al.* 2000, and Jones *et al.* 2005), and which look at the influence of personal characteristics on both the employment disadvantage and the wage disadvantage of disabled people, confirm in both cases significant unexplained residuals which the respective authors attribute to the possible role of employer discrimination (affecting both employment entry, and the pay levels on offer to disabled people). Thus Blackaby *et al.* 1999 find that disabled people have higher unemployment probabilities and lower earnings than non-disabled people, and that differences in personal characteristics account for a maximum of around half of these differences. Similarly, Kidd *et al.* 2000 find (using data for men only) that differences in personal characteristics between disabled and non-disabled people explain about half of the wage and participation rate differentials between the two groups, and argue that there is a presumption that some or all of the residual unexplained difference in wages is associated with employer discrimination. Finally, Jones *et al.* 2005 also find evidence of wage discrimination against disabled people, but their data suggests that for disabled men (but not for disabled women) the degree of wage discrimination may have fallen in recent years, and they speculate that the implementation of the Disability Discrimination Act may have contributed to this development.

¹⁷ Note that pay information for self-employed people is not available from the LFS data used here.

5 Labour market dynamics

The Labour Force Survey enables us to look at changes in labour market status over a 12 month period, and Table 30 presents transition matrices for disabled and non-disabled people. The table indicates, for each of the three main labour market statuses (employed, unemployed, economically inactive) what proportion of people remained in that status over the 12 month period and what proportions moved into one of the other two states.

Considerable differences are apparent between disabled and non-disabled people in this respect:

- Disabled people in work 12 months ago are slightly less likely still to be in work currently than are their non-disabled counterparts (92 per cent and 96 per cent of the two groups respectively remained in work after 12 months) and correspondingly more likely to have become unemployed or inactive over the period.
- Disabled people who were unemployed and seeking work 12 months previously are considerably more likely still to be unemployed 12 months later than non-disabled unemployed people (45 per cent and 32 per cent). Moreover, those disabled people who have left unemployment over the 12 month period are more likely to have withdrawn from the labour market entirely and entered inactivity than their non-disabled counterparts (25 per cent and 15 per cent respectively). Crucially, unemployed disabled people are much less likely to have found a job over the period – under a third (30 per cent) of those who were unemployed and actively seeking work were in a job 12 months later (compared with 54 per cent of non-disabled people in the same situation).
- A similar picture of extremely poor labour market prospects among disabled people emerges when we look at transitions among those who were economically inactive 12 months ago. Thus only 6 per cent of inactive disabled people moved into work over the period, compared with nearly a quarter (23 per cent) of inactive non-disabled people (and it is important to remember that, as Table 13 above showed, inactive disabled people are actually more likely to want to work than inactive non-disabled people).

Table 30: Changes in labour market status over 12 months

Status 12 months previously		Current status (%)			Total
		In employment	ILO unemployed	Inactive	
All long term disabled	In employment	92.0	2.4	5.6	3,181,206
	ILO unemployed	30.1	44.6	25.3	203,201
	Inactive	6.3	2.9	90.8	2,982,741
	Other	27.2	*	67.1	89,938
	<i>Total</i>	<i>49.6</i>	<i>4.0</i>	<i>46.4</i>	<i>6,457,086</i>
Not disabled	In employment	95.8	1.8	2.4	20,202,664
	ILO unemployed	53.8	31.5	14.7	672,418
	Inactive	23.4	6.1	70.4	4,914,332
	Other	54.7	6.8	38.6	527,041
	<i>Total</i>	<i>80.4</i>	<i>3.4</i>	<i>16.1</i>	<i>26,316,455</i>

Source: LFS Spring 2005 (All people of working age; men 16-64, women 16-59)

6 The local labour market dimension

The UK policy response to the disadvantage faced by disabled people in the labour market will be discussed in detail in Work Package 2. It is, however, worth noting in passing that the bulk of that policy response is oriented towards addressing barriers on the supply side of the labour market. That is, it focuses on: barriers associated with personal characteristics (eg health problems, impairments, skill deficiencies); barriers associated with motivation and attitudes (eg lack of pressure to seek work or lack of understanding of how to look for and secure work); barriers associated with the environment (eg lack of childcare availability, or lack of access to the workplace for people with impairments); or barriers associated with the incentive structure (eg benefits too high relative to low paid jobs).

Our analysis above does indeed suggest that the disadvantage experienced by disabled people may indeed be partly associated with supply side barriers, including those related to personal characteristics. It is, however, important to note that this is by no means the whole story. There is strong evidence from one strand of the UK literature¹⁸ that the regional/local incidence of disability-related inactivity is strongly related to the tightness of regional/local labour markets. In the tightest labour markets of the south of England the incidence of disability-related inactivity is much lower than in the depressed markets of the north, and the difference between the employment rates of disabled people and non-disabled people is much lower in the south than the north. These differences are far greater than can be explained by any regional/local variation in the prevalence of disability itself, and reflect labour market demand; the 'disabled people' (a significant proportion of whom, according to our analysis from the LFS, want to work) are further down the 'labour queue'¹⁹ in the demand-deficient regions (wage replacement ratios are also, of course, likely to be relevant, since benefit levels are set nationally, but wages vary regionally – regional variations in replacement ratios are not, however, addressed by the current portfolio of policy reform). Put simply, if all regions were run at the level of macro-economic buoyancy of the south east, a high proportion of the disability-related inactive would find work with no need for active labour market policy.

Table 31, at a regional level, confirms as might be expected that, in general, regions with a higher employment rate for non-disabled people tend also to have a higher employment rate for disabled people. Of more interest, however, it confirms that the divergence between disabled and non-disabled employment rates (the relative disadvantage of non-disabled people in employment terms) is less in the regions with higher employment rates. The final column of the table shows the employment rate of disabled people expressed as a percentage of that of non-disabled people, and it can be seen that the ratio is higher (the relative disadvantage is less) in regions with higher overall employment rates. The only region which falls outside this pattern is the London region, which is an unusual region in many other respects, containing as it does both local labour markets with very high levels of unemployment and some with very low levels (it is also the case that, due to commuting, many jobs in London are taken by non-London residents).

18 See Beatty et al. (2000), Beatty & Fothergill (2004), McVicar (2005), Fothergill S & Grieve-Smith J (2005).

19 In the sense of Thurow (1975), and Reskin and Roos (2000)

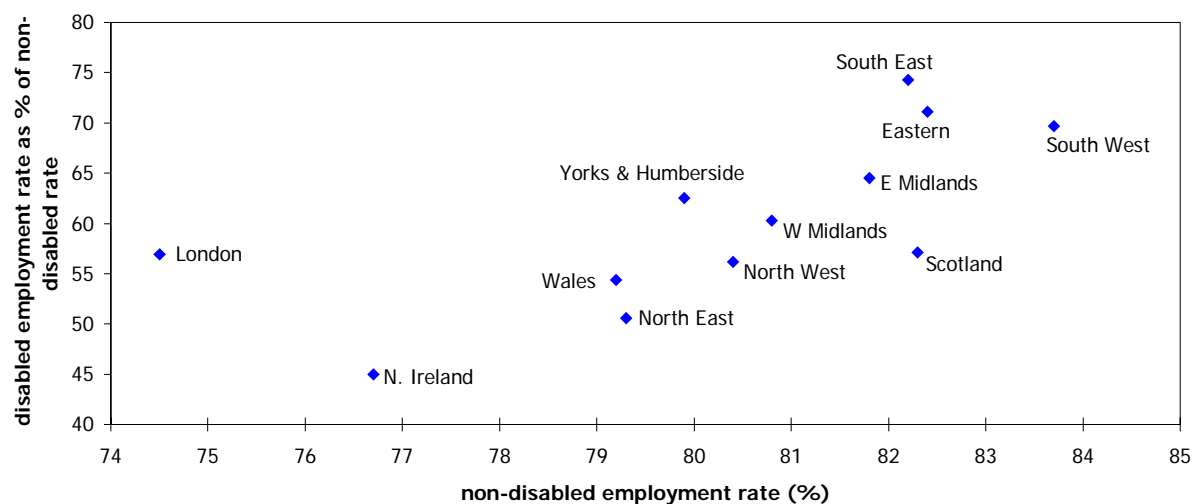
Table 31: Employment rate of disabled and non-disabled people by region (%)

	Employment rate (all long-term disabled)	Employment rate (non-disabled)	Disabled employment rate as % of non-disabled
South West	58.3	83.7	69.7
Eastern	58.6	82.4	71.1
Scotland	47.0	82.3	57.1
South East	61.1	82.2	74.3
East Midlands	52.8	81.8	64.5
West Midlands	48.7	80.8	60.3
North West	45.2	80.4	56.2
Yorkshire & Humberside	49.9	79.9	62.5
North East	40.1	79.3	50.6
Wales	43.1	79.2	54.4
Northern Ireland	34.5	76.7	45.0
London	42.4	74.5	56.9
<i>Total</i>	<i>49.6</i>	<i>80.3</i>	<i>61.8</i>

Source: LFS Spring 2005 (All people of working age; men 16-64, women 16-59)

Figure 1 shows the same data graphically and the clear linear relationship (with London as an outlier) can be seen.

Figure 1: Relative employment disadvantage of disabled people at regional level



Source: LFS Spring 2005 (All people of working age; men 16-64, women 16-59)

One possible concern with this analysis, however, is that the regional level is too broad to pick up real local labour market variations. It is well-documented that, in the UK, differences in labour market conditions *within* regions are typically larger than labour market differences *between* regions. Unfortunately we cannot examine this issue adequately with the LFS data set, but in Figure 2 below, we use local level data²⁰ from the

²⁰ The data are at local authority level and cover the the 376 'unitary and district authorities' in England and Wales.

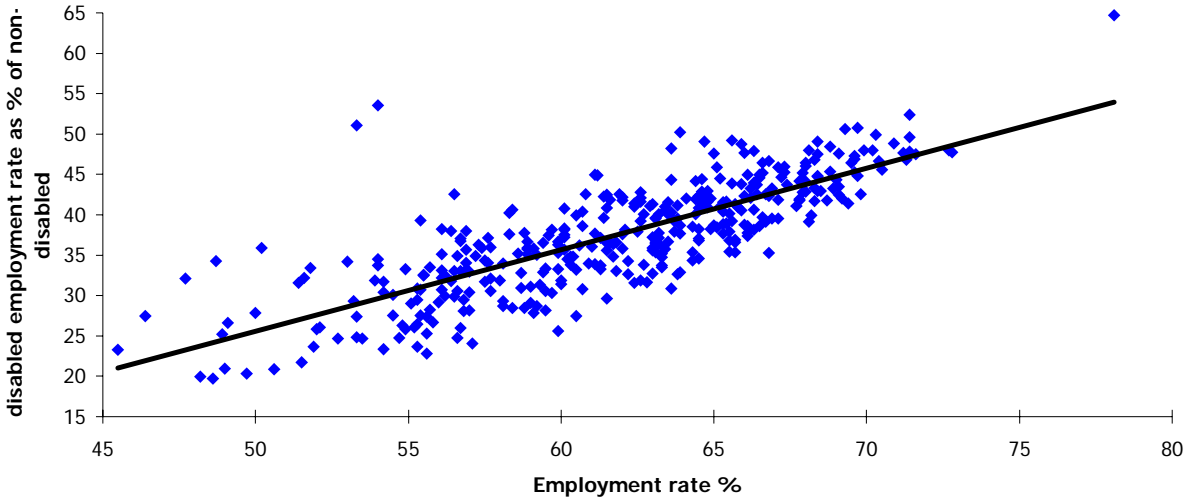
2001 Census of population to look at this question (using a different definition of disability²¹ than that found in the LFS). Again, we use these data to construct a simple index of the 'relative employment disadvantage' of disabled people, expressed as the employment rate of disabled people in the local area as a percentage of the employment rate of non-disabled people in the area. The higher the value of the index, the less disadvantaged in employment terms are disabled people compared with their non-disabled counterparts.

Figure 2 shows that, to an even greater extent than was observed at the regional level, there is a striking positive relationship between the overall employment rate²² in the local area, and the measure of the relative disadvantage of disabled people. It is clear from the chart that, the higher is the overall employment rate, the closer the disabled employment rate comes to the non-disabled rate, whereas in the areas with the lowest employment rates, the relative disadvantage of disabled people is extreme, with employment rates at only a quarter of the non-disabled rate. Ordinary Least Squares regression analysis shows that there is a strong and highly significant correlation between the two variables with an R-squared of 0.637 and a coefficient on the overall employment rate of 1.01. For every percentage point increase in the overall employment rate, there is a corresponding percentage point increase in the ratio of the disabled to the non-disabled employment rate. In simple terms, the tighter the local labour market, the more the employment chances of disabled people approach those of non-disabled people. This does not remove the need for supply-side policies (because it is notable that even in the most buoyant local labour markets there remains a difference between the employment chances of disabled and non-disabled people). Rather it suggests that a policy regime which focuses *only* on the supply-side, and does not look at a) the behaviour, policy and practices of employers; and b) the overall level of economic demand within local labour markets, is unlikely to be sufficient in addressing the labour market disadvantage of disabled people. This is a theme to which we will return in Work Package 2.

²¹ Note that the definition used in the Census is not related to the DDA definition, but is based on the notion of 'limiting long-standing illness' (LLSI), which is defined as 'an illness, disability or infirmity that is long-standing (has troubled someone over a long time or is likely to) and limits their activities in any way'.

²² The construction of the local data from the Census requires us to define employment rates for the age group 16-74 years, rather than the more usual 16-/5964 years.

Figure 2: Relative employment disadvantage of disabled people at local authority level



Source: 2001 Census: census area statistics, ONS

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Annex: sector codes

The tables below show how the three sectors (ICT, construction and health) have been defined in the LFS analysis in the paper, using ISIC (International Standard Industrial Classification) codes.

Table 32: Definition of ICT sector

	ICT	ISIC
Manufacturing	Manufacture of office machinery	30.01
	Manufacture of computer and other information processing equipment	30.02
	Manufacture of insulated wire and cable	31.30
	Manufacture of electronic valves and tubes and other electronic components	32.10
	Manufacture of television and radio transmitters <i>etc.</i>	32.20
	Manufacture of television and radio receivers <i>etc.</i>	32.30
	Manufacture of instruments and appliances for measuring, checking, testing, navigating and other purposes, except industrial process control equipment	33.20
	Manufacture of industrial process control equipment	33.30
Telecommunications	Telecommunications	64.20
Computer & related activities	Hardware consultancy	72.10
	Software consultancy and supply	72.20
	Data processing	72.30
	Database activities	72.40
	Maintenance and repair of office, accounting and computing machinery	72.50
	Other computer-related activities	72.60
	Renting of office machinery <i>etc.</i>	71.33

Table 33: Definition of construction sector

Construction	ISIC
Demolition and wrecking of buildings, earth moving	45.11
Test drilling and boring	45.12
Construction of commercial, domestic, and civil engineering buildings	45.21
Erection of roof coverings and frames	45.22
Construction of motorways, roads, railways, airfields and sport facilities	45.23
Construction of water projects	45.24
Other construction work involving special trades	45.25
Installation of electrical wiring and fittings	45.31
Insulation work activities	45.32
Plumbing	45.33
Other building installation	45.34
Plastering	45.41
Joinery installation	45.42
Floor and wall covering	45.43
Painting and glazing	45.44
Other building completion	45.45
Renting of construction or demolition equipment with operator	45.50

Table 34: Definition of health sector

Health	ISIC	
Human health activities	Public and private sector hospital activities, including NHS Trusts, medical nursing home activities	85.11
	Medical practice activities	85.12
	Dental practice activities	85.13
	Other human health activities	85.14
Veterinary activities	Veterinary activities	85.2
Social Work	Charitable and non-charitable social work activities with accommodation	85.31
	Charitable and non-charitable social work activities without accommodation	85.32
