

ICT Strategy, Disabled People and Employment in the UK

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Abstract

This paper focuses on the application of ICT (Information and Communications Technology) in helping disabled people enter and remain in employment in the UK, and in particular on the nature and extent of any national ICT and/or disability strategies in this area. It is prepared as the UK component of the first stage of an internationally comparative project (covering, in addition to the UK, Norway, Denmark and the Netherlands). The paper is based on a review of the limited academic literature and relevant policy documents available in this area, together with semi-structured expert interviews with a small number of key informants in the ICT field, in disability organisations and government.

Introduction

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It is not the intention in the paper to summarise all of the measures the UK government has put in place to facilitate access to the labour market for people with disabilities. Relevant legislation and employment policy have been described in some detail by the present authors in a recent paper prepared for a related multi-country research study on *Disabled, Working Life and Welfare State* (Meager and Hill 2006), and we refer, where relevant, to that earlier paper in what follows. Rather the approach of this present paper is:

- To provide an account of the UK government's vision of ICT as a growth area and its implications for workers with disabilities.
- To describe the 'on-the-ground' provision of ICT for disabled people in the UK for employment purposes.
- To attempt a preliminary assessment of the overall 'strategy' in relation to ICT provision for disabled people in the UK. A key difficulty faced in preparing the paper, and a key provisional 'finding' of the paper, is the apparent lack of any coherent national strategy in this area. This incoherence has been acknowledged within government (Prime Minister's Strategy Unit, 2005) and the cause has been taken up by several disability action groups which are currently lobbying for change.

The paper has the following structure: first we provide a brief summary of national disability policy in the UK, and an overview of disabled people's position in the UK labour market. We then turn to look at ICT policy, and the extent to which it emphasises

¹ For the purposes of this paper, we defined ICT products as technological interventions which enable person-to person or person-to machine communication in the exchange of data, ideas, and information. This technology can deliver increased independence to people with mobility, sensory, cognitive and communication difficulties and enhance their employment opportunities. Examples of ICT used by disabled workers in the workplace include: voice recognition software which allows a visually impaired user to speak commands into the computer and dictate documents; speech synthesizers which can read out electronic documents; technology to enable hearing-impaired users to conduct telephone conversations; keyboards which allow control of a computer solely by eye/head movement (widely used by individuals with cerebral palsy); accessible website design. The sources referred to and cited in this paper refer to this type of equipment variously as Assistive Technology (AT), Communication Aids (CA) and in some cases Augmentative and Alternative Communication (AAC). Strictly speaking these terms are not interchangeable (for instance CA can refer to 'low-tech' solutions such as interpreters), but in order for this review to be inclusive of several key documents we have not restricted our search to sources that specifically refer to ICT.

the inclusion of disabled people in the labour market. Next we briefly discuss the approach of ‘universal design’ from a UK perspective, before going on to look in more detail at the role of ICT in supporting disabled people to enter and remain in the labour market, identifying the key legislation and public provision relevant to this area and the key actors and initiatives involved. We conclude with some brief remarks about future challenges for national policy.

1 National disability policy, and disabled people in the UK labour market

1.1 National disability policy: brief overview

As previously set out in Meager and Hill 2006, national disability policy in the UK, insofar as it impacts on disabled people’s employment and their participation in the labour market, is heavily influenced by two important policy trends. These trends have developed in parallel with different, and sometimes even contradictory, implications for disabled people’s labour market participation.

The first, described in Thornton and Lunt 1997, has been the growth of the disabled people’s movement and the pressure for a civil-rights approach to public policy for disabled people, based on the social model of disability rather than the traditional medical model. The implementation of anti-discrimination legislation in 1996 through the *Disability Discrimination Act 1995 (DDA)* marked an important step in this direction.

The second, is the emergence of a ‘welfare to work’ approach to active labour market policy (ALMP)² which has had, in its more recent developments major implications for policy towards disabled people and the labour market. Increasingly, welfare to work policy has focused on getting economically inactive groups, including disabled people, into the labour market. This policy emphasis has been driven by a number of factors, including:

- Government targets to **raise the overall employment rate** in the UK to 80 per cent.
- A concern at government level with **reducing the level of public expenditure on social benefits** for inactive groups (expenditure on disability-related benefits has grown by a factor of three since the early 1990s to a current level of around GBP 12 billion per annum.
- An **ideological preoccupation** encapsulated by the slogan ‘work first’ and heavily influenced by the American approach dominated by this notion that employment is the single most important mechanism for reducing welfare dependency and social exclusion.

In line, in particular, with the ‘welfare-to-work’ strategy, key developments in UK labour market policy which affect disabled people include the following::

² For a broader account of the recent developments in UK active labour market policy, see Meager 2006.

- An increasing emphasis on **supply side measures** (i.e. measures which focus on support or incentives for disabled people to enter work, rather than support or incentives for employers to recruit them).
- An emphasis on **'making work pay'**, through benefit reforms and tax credits.
- Increased level of **'activation'** in the implementation of policies, through a greater degree of compulsion and mandatory participation of disabled people and other workless groups in the various active labour market measures. Eligibility criteria for receipt of incapacity-related benefits have been progressively tightened, and under proposals produced in a recent welfare reform green paper (Department for Work and Pensions, 2006), the government plans to replace incapacity benefit with a new benefit (the *Employment Support Allowance*) and the rate of benefit, and the degree to which pressure will be exerted on the individual to seek work will depend on an assessment of the individual's capability to work.
- A greater degree of **individualisation** in support packages offered to disabled people through active measures, with services delivered by 'personal advisors' providing customised support, advice and guidance to the disabled job-seeker.
- A growing involvement of the **private and voluntary (NGO) sectors** in the delivery of active labour market measures for disabled people and other target groups. The latest welfare reform green paper (Department for Work and Pensions, 2006) envisages further extension of this trend in future initiatives.
- A growing emphasis on **early intervention and preventative measures**. Increasingly this concern is being translated into a policy focus on the 'inflow' into incapacity benefits, rather than the 'stock' of long-term benefit-dependent disabled people.

In line with the broad strategic trends described above, the current portfolio of national policy measures, initiatives and developments in the UK aimed increasing disabled people's labour market participation has been described in detail in Meager and Hill 2006, but the key elements of policy can be described as follows (and the key measures under each item are summarised in Table 1 below):

- **Mainstream active labour market measures.** These are employment or training programmes, not specifically targeted at disabled people, but in which disabled people can participate, often on different or advantageous terms, compared with non-disabled people)
- **Active labour market or support measures targeted at disabled people.** These include measures offering: job search support and advice and guidance; medical rehabilitation and 'condition management'; financial incentives; supported (sheltered) employment (as well as supported placements in mainstream employment settings), and a range of other initiatives.
- **Employer-focused measures.** These include financial support to employers in making adjustments and adaptations for disabled people (through Access to Work, discussed in more detail in section 4.1 below), as well as a small wage subsidy scheme for employers recruiting disabled people.

- **Tax and benefit reforms** and incentives. Key reforms here involve the introduction of tax credits (in-work benefits) which aim to address the benefit traps faced by many disabled people on entering employment, as well as reforms to benefit regulations which aim to make it easier for disabled people to enter the labour market while alleviating their fears regarding loss of benefit entitlement.
- **Anti-discrimination legislation** and institutions. The key features here are the Disability Discrimination Act 1995 (DDA), which protects disabled people from discrimination in the field of employment (as well as a number of other spheres of day-to-day life), and the Disability Rights Commission (DRC), an independent statutory body set up to support the implementation of the DDA. The DDA and the DRC are further discussed in subsequent sections of this paper.

Table 1: The main UK policy measures aimed at disabled people’s labour market participation

Mainstream active labour market measures	Active labour market or support measures targeted at disabled people	Employer-focused measures	Tax and benefit reforms and incentives	Anti-discrimination legislation and institutions
New Deal for Young People	New Deal for Disabled people	Access to Work	Working Tax Credit (with Disability Premium)	Disability Discrimination Act 1995
New Deal 25-plus	Pathways to Work	Job Introduction Scheme	Permitted Work Rules	Disability Rights Commission
New Deal 50-plus	WORKSTEP			
New Deal for Lone Parents	Disability Employment Advisers			
New Deal for Partners	Work Preparation			
Work-based training for Adults	Job Retention and Rehabilitation Pilot			
Work Trials				

1.2 The position of disabled people in the UK labour market

A paper prepared for the previous study *Disabled, Working Life and Welfare State* (Meager and Hill 2005) analysed the labour market situation of disabled people in the UK. In this section we briefly summarise some of the key features of that analysis.

While the degree of disadvantage depends very much on the definition of disability used, it is clear that disabled people are heavily disadvantaged in labour market terms. Under the definition of ‘long-term disabled’ used in official statistics, around 7 million working age people in the UK (or 19 per cent of the total) are disabled, but only just under half of these (49.6 per cent) are in work, and most of the remainder are outside the labour market (or ‘economically inactive’) altogether. Over a million inactive or unemployed disabled people would like to work, however. There has been little or no change in the proportion of disabled people in work in recent years, despite the implementation of the Disability Discrimination Act 1995, and the introduction of a number of active labour market measures aiming to (re-) integrate disabled people with the labour market.

In part, the labour market disadvantage of disabled people reflects the fact that they are much less well-qualified than non-disabled people. Thus 26 per cent of disabled people have no educational qualifications at all, compared with only 11 per cent of non-disabled people. At the other end of the spectrum non-disabled people are twice as likely to have a university degree or equivalent as are disabled people. In part, the disadvantage of disabled people also reflects the fact that disabled people are, on average much older than non-disabled people (43.5 per cent of disabled people are in the 50-64 age range, compared with only 20.4 per cent of non-disabled people). These differences in personal characteristics between disabled and non-disabled people only explain part of the labour market disadvantage, however, and this disadvantage persists once age, qualifications and other measurable characteristics are controlled for.

There is also a geographical dimension to the extent of disabled people's labour market disadvantage. Disabled people have worse employment chances than non-disabled people in all local labour markets in the UK, but the extent of difference (measured by the ratio of the employment rate of disabled people to that of non-disabled people) is much less in economically thriving local areas (this may reflect a greater willingness of employers in such areas, often faced with labour shortage, to be more flexible and inclusive in their recruitment strategies, than employers in more depressed local economies).

'Disabled people' are a very heterogeneous group, and the degree of labour market disadvantage they experience varies dramatically with the nature of their impairment. In particular people whose 'main impairment' is a learning disability or mental illness are much less likely than others to be in employment (25 per cent and 20 per cent respectively).

Disabled people who are in work, have a similar sectoral profile of employment as do non-disabled people (although they are slightly more likely to be employed in the public sector, than is true of non-disabled people). They are, however, much less likely than non-disabled people to be found in higher level managerial and professional occupations, they earn on average 10% less per hour than non-disabled workers, and they are less likely than average to receive work-related training. On the other hand they are somewhat more likely than average to be found in part-time work and in self-employment, and it is possible that these forms of work offer greater flexibility to some groups of disabled people than more conventional full-time employee jobs.

2 National ICT policy and its link to disabled people

2.1 National Technology Strategy and the Role of ICT

The Technology Strategy Board within the Department of Trade and Industry (DTI)³ has identified ICT as one of seven Key Technology Areas where the UK has the potential to generate significant added value in global markets (Department of Trade and Industry,

³ DTI is the UK Ministry for Industry

2006). However the potential of ICT to increase workforce participation of disabled people is only loosely embedded in this vision. Neither disability nor assistive technology is explicitly mentioned in the Department's strategy document on ICT (Department of Trade and Industry, 2006a). Nevertheless the document does acknowledge that access to ICT:

'... determines the ability of an individual to derive benefits from public services and to operate effectively in society.'

A recent UK government strategy document which focuses on digital telecommunications (Prime Minister's Strategy Unit, 2005a) lists:

'Improved accessibility for the digitally excluded and ease of use for the disabled.'

amongst its action points. Specific initiatives under this action include ensuring that disabled people can access all government websites and online services.

The government also sees a role for new technologies in addressing social exclusion, and helping socially excluded groups such as disabled people. The strategy document (Office of the Deputy Prime Minister, 2005) includes references to how technology can be used innovatively to gain access to the job market, claiming that:

'ICT changes the nature of a considerable number of jobs, in a way that allows the development of a more inclusive labour market. It introduces opportunities for home working, more flexible working patterns, better engagement in the workforce of disabled people and a range of new jobs.'

The document does not go into the detail, however, of how ICT technology can or should be utilised by disabled people to get, or progress in, work.

2.2 Internet and website accessibility

The government has promoted improved website access as a key technology for improving access to key aspects of 21st century life, including work, for disabled people. While it is hard to discern a clear strategy in this area, the e-government Unit (part of the Cabinet Office) has published guidelines on accessibility in their *Guidelines for UK Government Websites*⁴. More generally, and going beyond government websites, the Disability Discrimination Act (DDA), requires employers and service providers to make 'reasonable adjustments' for disabled people, and an accessible website is given as an example of a reasonable adjustment in DDA Code of Practice. Despite this, a recent investigation by the UK Disability Rights Commission that found that a 81 per cent of a representative sample of UK websites failed to satisfy the most basic of their web accessibility criteria (Disability Rights Commission, 2004)⁵.

⁴ <http://e-government.cabinetoffice.gov.uk/Resources/WebGuidelines/fs/en>

⁵ www.drc.gov.uk/PDF/2.pdf

2.3 Strategic initiatives in ‘telecare’ and related areas of ICT

On the general theme of health-related technological innovations, telecare is currently the subject of intense government interest. Here, the emphasis is on enabling home-based (as opposed to workplace) independence. This is principally targeted at an older age group who might otherwise be placed in care homes, or need hospitalisation and is at the heart of national concerns about an ageing population, cuts in health and social care provision, and a shortage of hospital beds. This has resulted in the formation of a 'Electronic Technologies Policy Collaborative (ETPC)', which is a multi-ministerial working group, led by the Department of Health⁶. While it is doubtful that this strategy and this type of technology will be of direct benefit to the employment prospects and social participation of working-age people with disabilities, it is possible that there may be some beneficial spill-over effects due to investment in user-friendly ITC.

3 Universal Design

While the concept of ‘universal design’ developed in the USA (see Preiser and Ostroff, 2002), and the related concept of ‘design for all’, developed in Europe (similar in emphasis to universal design, but with a greater emphasis on social inclusion within a context of cultural diversity – see Benktzon) have been influential in the UK, that influence has not extended to the development of a national government-led strategy for universal design⁷, and such progress as has been made has been driven largely by the disability movement itself, and by non-governmental organisations concerned with art and design, notably the Royal College of Art (RCA), The Royal Society for the Encouragement of Arts, Manufactures and Commerce (RSA), and the Centre for Accessible Environments – CAE (www.cae.org.uk), none of which have an exclusive or particular emphasis on ICT.

In its UK variant, the universal design movement is typically called ‘inclusive design’, which its proponents argue (see Coleman 1994) provides a less ‘prescriptive’ approach than universal design, with a focus on encouraging and supporting businesses in a rapidly changing market place to respond to needs highlighted by social and demographic change, including the needs of disabled and older people.

While it seems likely that the most recent provisions of the Disability Discrimination Act 1995 (which came into force in 2004, and place a legal requirement on the providers of goods, services and facilities to remove, alter or provide a reasonable means of avoiding a physical barrier which prevents disabled people accessing services) can be seen as providing a further indirect boost to the inclusive design movement, since they provide a strong legal incentive for manufacturers to incorporate inclusive design concepts into their products, the DDA itself does not stress the notion of inclusive design, and neither has it led to a national government strategy on inclusive design. In a good example of increasing official recognition of the concept, however, it is of interest to note that the

⁶See www.innovation.gov.uk/innovationreport/index.asp?lvl1=2&lvl2=2&lvl3=0&lvl4=0

⁷ Although the Department for Trade and Industry ‘Foresight’ programme did highlight the key role which could be played by universal design in increasing accessibility for **older people** (DTI, 2000)

Disabled Persons' Transport Advisory Committee (DPTAC) which is established to advise the government on transport access issues for disabled people, has recently been promoting inclusive/universal design (www.dptac.gov.uk/fi/01.htm).

Finally in this context, it is worth mentioning the Disability Rights Commission (DRC). The DRC⁸ operates as an independent statutory body serving to eliminate discrimination, promote equal opportunity and support the UK disability legislation. Relevant background on UK disability law and the role of the DRC is provided in Meager and Hill 2006 (from 2007 the DRC will be abolished and its role incorporated within a broader Commission for Equality and Human Rights which will also cover discrimination on grounds of gender, age, religion and sexual orientation, and eventually also race). The DRC is campaigning strongly on website accessibility, following the results of their investigation mentioned in section 2.2⁹ above.

4 ICT and accessibility for disabled people.

The overall UK government strategy for increasing the participation of disabled people in the labour market, and its evolution over time, were described in some detail in Meager and Hill 2006, and summarised in section 11 above of the current paper. Neither of the two key strands of that strategy (the extension of civil rights and anti-discrimination legislation on the one hand, and welfare-to-work initiatives on the other) place any significant or explicit emphasis on the development of ICT as a key mechanism for enhancing the inclusion of disabled people in the labour market (although, as noted above in our discussion of inclusive design it is arguable that some of the recently-implemented provisions of the DDA which concentrate on goods and services may provide an indirect boost to the development of inclusive technologies in general, if not ICT in particular).

To exemplify this lack of emphasis on ICT, we can note two key strategy documents with implications for disabled people's employment, which have recently been published by the UK government, neither of which mention the potential of ICT to improve access to the labour market: Prime Minister's Strategy Unit (2005), and Cabinet Office (2006). Although it makes no explicit reference to ICT, however, the latter of these documents discusses the:

'fragmentation of disabled peoples' needs across different systems'

and concludes that there is:

'no integration in the support or equipment needed both in and out of the workplace, because of different budgets and delivery systems.'

A conclusion which applies to assistive technologies in general as well as to ICT in particular.

⁸ See 'Access to Assistive Technology in the EU'

⁹ www.drc-gb.org/Search_Results.aspx?txtSearchTerms=technology&butGo.x=15&butGo.y=17&

Similarly, the most recent welfare reform green paper (Department for Work and Pensions, 2006) which sets out a range of benefit and other reforms aiming to increase the employment rate of disabled people (as well as other groups, such as lone parents, with high rates of benefit dependency) is notable for its lack of references to assistive technologies as a key part of the overall strategy.

4.1 Legal regulations and government provision

A key legal framework which affects all aspects of disabled people's lives in the UK is the Disability Discrimination Act, 1995, which outlaws discrimination against disabled people in employment, the provision of goods and services and other areas of life. The DDA does not provide an entitlement to disabled people to specific aids and support, but it does place an obligation on employers and services providers to make 'reasonable adjustments' to ensure that disabled people are not at a disadvantage in employment or in access to goods and services. Depending on the circumstances, reasonable adjustments might include the provision of assistive technology including ICT. As noted above (section 3), the recent (2004) extension of the DDA to require service providers to remove physical barriers preventing access to services may provide an indirect boost to the universal design movement in the UK. Another recent development of the DDA (2006) has been the introduction of a new duty in the DDA, which goes beyond the duty not to discriminate and places positive obligation on all public bodies to 'promote equality of opportunity for disabled people'; again while this does not specify what kinds of aid and support might need to be provided to disabled people, it may also provide, over time, a further pressure for more widespread provision of adjustments for disabled people (ironically, however, the new obligations on the public sector may indirectly have a short-term impact in the opposite direction, due to the removal of Access to Work funding from parts of the public sector – see section 5 below).

Apart from the DDA, our review of the documentary evidence available suggests that the overall legislative framework and approach to state provision of ICT and other assistive technologies to improve disabled people's labour market position is fragmented in the extreme, a conclusion which is perhaps unsurprising given the lack of a coherent overall national strategy noted in the previous sections. The fragmentation of provision of assistance for disabled people (in the labour market sphere as in other areas of social and economic life), the spread of responsibility across a large number of national and local government departments and agencies, and the diversity of legislative instruments which bear on this area are all noted in the chapter on the UK in an EU-wide review of access to assistive technology (Deloitte and Touche, 2003).

In practice, however, (and at the risk of some simplification of the complex maze of state institutions involved in this area), legal regulation and provision of assistive technologies (including ICT) relevant or potentially relevant to disabled people's labour market access falls into at least three broad streams:

- Technologies provided as part of an 'independent living' strategy, mainly through the Department of Health (DH) and local authorities.

- Provision through the Department for Work and Pensions¹⁰ (DWP) and the public employment service (*Jobcentre Plus*) explicitly focused on entry to and retention in employment.
- Provision through the Department for Education and Skills (DfES) for disabled people in the education and vocational training systems, which may indirectly be relevant to subsequent labour market entry.

We consider each of these areas briefly in turn.

Department of Health (and local authority) provision for independent living

The National Health Service, and local authorities (municipalities) are required under a range of long-standing legislation (including the National Assistance Act 1948, the Chronically Sick and Disabled Persons Act 1970, the Disabled Persons (Services Consultation and Representation Act) 1986, and the NHS and Community Care Act 1990 and the Health Act 1999), to make assessments of need and provide services to meet the needs of disabled people (which may include the provision of special equipment or technology).

In 2000 the Audit Commission (Audit Commission, 2000), and in a follow-up report (Audit Commission, 2002) criticised community equipment services supplied through the NHS or local authorities to older or disabled people, for being badly organised in many areas of the country and concluded:

'It is clear that the UK lacks a national focus on services which are designed to assist independence, such as is available in Scandinavia and the USA the way that equipment services are organised remains fragmented rather than being a modern integrated service fit for the 21st century.'

In similar vein, and with a specific focus on assistive technologies, Deloitte and Touche (2003) pointed out that financial cutbacks within the UK National Health Service (NHS) have impacted on provision of all types of equipment which assist independent living, and noted that:

'The market for supply of Assistive Technology in the United Kingdom is generally qualified as being in a poor state. Profitability is low, therefore expenditures in research and development are almost negligible, leading to very little innovation The National Health Service's forceful cost reduction strategy is often mentioned as the underlying cause. Hence choice for people with disabilities is almost inexistent, and they are supplied essentially with basic and standardised equipment.'

Partly in response to critiques of this kind, the Department of Health set up the Integrating Community Equipment Services (ICES) initiative to modernise services and overcome fragmentation in provision¹¹. This appears to date, to have had limited impact

¹⁰ The combined UK ministry of labour and social security.

¹¹ www.icesdoh.org/about.asp

on overall provision of ICT; thus when surveyed in 2004, 81 per cent of ICES had not integrated the provision of communication aids and support into their service¹².

In addition to ICES there is a range of provision through the Department of Health and local authorities, aimed at supporting, in different ways, the independent living of disabled people (and also the Independent Living Funds funded by the Department for Work and Pensions – described further below). This provision and the associated funding is, however, of relatively little relevance to the current study as it tends not to focus on workplace issues, and it is not generally oriented to supporting assistive technologies and related interventions (indeed in some cases, such support is explicitly excluded). For completeness, however, it is worth briefly mentioning the main mechanisms:

- **Local authority-provided social care services**, insofar as they make provision for disabled people are not focused on assistive technologies, rather they tend to fund home visits and provide financial support to disability information centres¹³. Some local information centres loan equipment or sell it to disabled people, but such items tend to be 'low-tech' and not specifically employment-oriented. It is possible, nevertheless, that some local centres will be providing or funding ICT support to disabled people (and it is possible that some of this might be of labour market relevance). There is no central source of information on the range of services provided in this way at local level, however, so it has not been able to confirm this during the present study¹⁴.
- the *Disabled Facilities Grant*¹⁵ is a funding mechanism administered by local authorities, to finance adaptations in disabled people's homes in order to enable them to continue living in the community rather than in residential care. The grants (up to a maximum of £25,000) are means-tested (and available only to people with low levels of income and savings), and tend to be focused mainly on physical adaptations to houses, (e.g. wider doors, ramps, lifts) although some adaptations which might involve an ICT component might also be funded (e.g. adaptations to heating or lighting controls). Such grants are given by local councils under Part I of the Housing Grants, Construction and Regeneration Act 1996.

¹² www.fastuk.org/fastdocuments/Options%20review%20v4.doc

¹³ As an example of the support provided by local authorities see Leeds City Council www.leeds.gov.uk/Health_and_social_care/Disabilities/page.aspx

¹⁴ Again, taking Leeds as an example, the Leeds Centre for Deaf and Blind People is a voluntary organisation (NGO) largely funded by the social services department of Leeds City Council. It provides, for example, equipment for daily living to people with hearing impairment. This includes amplified and flashing light doorbells and telephones, vibrating clocks and loop systems for use within the home to amplify conversation, TV etc. Advice can also be given on other equipment such as smoke alarms, Text TVs and video caption recorders.

¹⁵ www.direct.gov.uk/en/DisabledPeople/HomeAndHousingOptions/YourHome/DG_4000642

- *Supporting People*¹⁶ (funded by a number of government departments and co-ordinated by the Department for Communities and Local Government, the national government ministry with responsibility for local government) provides 'housing-related support' through local authorities and other social housing providers to a range of 'vulnerable' groups, including disabled people, aimed at supporting 'independent living'. The services funded seem to relate to personal assistance and help rather than ICT solutions.

Department of Work and Pensions provision

Access to Work

Disabled workers are, in principle, able to access the necessary and appropriate assistive technology for their jobs via Access to Work (AtW)¹⁷, under the administration of *Jobcentre Plus*, an agency of the Department of Work and Pensions (DWP), formed by the merger of the public employment service and agency responsible for the delivery of social security benefits. As described in Meager and Hill 2006, AtW is for disabled people who need extra practical support to do a job. It covers both people taking up a new job, as well as people in existing jobs (as a job-retention measure). It helps employers and self-employed people, through a system of financial grants, with the costs of special aids and workplace equipment, as well as adaptations to workplace premises and equipment. *Jobcentre Plus* subsidises the full cost of the adaptations in cases where the disabled person is newly entering work; in cases where the disabled person is already employed, the employer must also make a contribution. The range of support which is funded can include alteration to work equipment, adaptations to premises, payment for travel-to-work costs, payments for a support worker, or the provision of a communicator or interpreter.

In the financial year 2003/04, some 34,800 disabled people were supported through *Access to Work*, at a total programme cost (excluding administration costs) of £55.8 million (National Audit Office, 2005). Although there has been no controlled impact study of access to work, surveys of users' views (Thornton et al. 2001) and qualitative evaluations (Thornton and Corden 2002) suggest that the main impact of the programme has been to support the continued employment of disabled people already in a job when they applied for assistance – over 90 per cent of *Access to Work* users were already established in work, rather than being new recruits or job applicants, which suggests that the impact of the programme on the inflow into work of disabled people is likely to be small. There is some evidence of deadweight, although the scheme attracts generally positive views from users (both individuals and employers), and it is clear that in many cases it does make a difference to the chances of individuals remaining in work. Disproportionately, participants are in professional occupations, and people with sensory impairments are significantly over-represented among beneficiaries of the scheme.

¹⁶ See: www.spkweb.org.uk/NR/rdonlyres/06E6FD41-4804-4B78-BDD9-343EC58117A2/4165/WhatisSuppPeopleLP.pdf

¹⁷ For further details of Access to Work, and evidence from a qualitative evaluation of the service, see Thornton et al. 2001, and Thornton and Corden 2002.

Special Aids and Equipment (SAE) Support is the element of AtW which can be used to provide people with an in-work disability need with ICT for employment purposes. No published information is available on the share of the total AtW budget which goes to SAE support. However, we have been provided, by *Jobcentre Plus* officials with internal data which shows that the total expenditure on SAE support under AtW, which shows that, for the last three financial years, the expenditure was as follows: 2003/04 £14.72m; 2004/05 £13.19m; 2005/06 £12.05m. It is noticeable that this suggests a slight downwards trend in expenditure over time, and it indicates, when combined with the overall data on AtW expenditure that just over a quarter of AtW expenditure is devoted to Special Aids and Equipment. To date, we have been unable to secure precise data on the number of individuals supported through the SAE element of Access to Work, but if we assume that the average expenditure per individual is similar for SAE support as for other kinds of SAE support (and this may be a strong assumption), then this would suggest that around 8-9000 individuals per year receive such support. Clearly this support also includes some which is not ICT-related support and unfortunately, according to expert interviews with *Jobcentre Plus* officials undertaken for the present study, no data is collected on the type of assistive technologies that are supplied or used via SAE support, which effectively makes it impossible to assess the proportion of SAE funding which is devoted to ICT support, or the number of individuals who receive such support in a given year.

Drawing on information provided in expert interviews and official documentation for the current study it seems that, typically a disabled employee (or potential employee) with an ICT requirement would contact an AtW call centre and complete a form setting out their requirements. Subsequently an AtW advisor would contact them directly, or a technical consultant would be called in to make an assessment. ICT assessments are provided by agreed contractors, of which AbilityNet (described further in section 4.3 below) is one.¹⁸.

In practice, evaluations suggest there is relatively low awareness of AtW amongst the target population (both disabled people and employers). This view was reinforced by the expert interviewees contacted for the present study, who suggested that those obtaining ICT through Special Aids and Equipment Support tend to be workers who are IT literate, more assertive and know how to '*work the system*'. Note that major changes in the coverage of AtW are currently being implemented, which may have significant implications for provision of assistive technology within the public sector in particular (see section 5 below).

Other DWP/Jobcentre Plus programmes

While Access to Work discussed above is the main route through which ICT and other assistive technologies relevant to the workplace are channeled to disabled people, there are (as noted in Meager and Hill 2006) a number of other mechanisms and initiatives through which DWP and *Jobcentre Plus* provide support for disabled employees and potential employees, and which may occasionally involve some workplace adjustments or assistive technologies. Thus, a key element of the frontline services for disabled people, provided by the *Jobcentre Plus* is the network of *Disability Employment Advisers (DEAs)*

¹⁸ www.abilitynet.org.uk/

based in local areas, who provide a range of support, advice and information to disabled job-seekers, including the provision of information and referrals to other government programmes and schemes, the arrangement of assessment and employment rehabilitation. In particular, in the case of people with severe disabilities, they can offer a route to the *WORKSTEP* programme of supported employment. This programme (see Purvis et al. 2006) is a development of the previous *Supported Employment Programme*, targeted at people with more severe impairments or facing more complex barriers to entering employment. While the main mechanisms through which *WORKSTEP* provides a transition to mainstream employment for severely disabled people, involve supported work placements and there is no specific focus on workplace adaptations, we were informed by DWP officials in expert interviews for the current study that *WORKSTEP* funding is also sometimes used for workplace adaptations including assistive technologies.

Independent Living Funds (ILF)

The Independent Living Funds are discretionary trusts created and funded by the Department for Work and Pensions, operating at arms length from Government. They are financed by cash limited grants-in-aid and managed by a Board of Trustees appointed by the Secretary of State for Work and Pensions. The Trustees have discretion about whom they help within the framework of the Trust Deeds. The Funds were set up as a national resource dedicated to the financial support of disabled people to enable them to choose to live in the community rather than in residential care. awards are in the form of regular four-weekly payments to individuals, which are used to buy personal care in the community. Recipients may use care agencies or employ personal assistants, but it is not permitted to use the funds to pay for items of equipment or adaptation.

Department for Education and Skills (DfES) provision

At present, it is argued by disability organisations in the field in the UK¹⁹, that school-age provision for individuals with disability-related ICT requirements is significantly better than that for adults. This can largely be attributed to the £21 million (Euro 30 million) provided by the DfES to fund the Communication Aids Project (CAP) which ran between 2002 and the early part of 2006²⁰. This has had a significant impact on the supply of ICT equipment, assessment and training in schools in England.

The subsequent curtailment of CAP is a contentious topical issue and has provoked a vigorous campaigning from disability action groups, and fierce debate within both Houses of Parliament ²¹²². The government has argued that CAP funding was never

¹⁹ See: www.fastuk.org/fastdocuments/Options%20review%20v4.doc

²⁰ <http://cap.becta.org.uk/about.php>

²¹ www.theyworkforyou.com/lords/?id=2006-03-27a.537.0&s=speaker%3A13368

²² <http://news.bbc.co.uk/1/hi/education/4701230.stm>

intended to replace local authority and school funding for equipment and resources, and that local provision will remain.

Irrespective of the level of provision for school-age disabled people, however, there is a long-standing set of problems (also well-documented and highlighted by disability organisations) which relate to the point of transition between the education system (schools and colleges) and the labour market. In many cases, equipment is retained by the educational establishment, and not by the disabled user who thereby loses not only the equipment, but associated IT support and assessment (this issue of transition was heavily emphasised in expert interviews for the current study).

4.2 Financial arrangements (who pays?)

As can be seen from the discussion of legislation and government provision in section 14.1 above, there is a wide range of mechanisms through which national and local government may fund support of various kinds for disabled people. Some of these funding mechanisms come from particular ministries/departments directly, some are 'cross-departmental' funds which draw on several ministries/departments, and some are delivered through local authorities (municipality). For the individual disabled person looking to obtain funding for support to assist them in daily life or in the workplace, the picture is a very complex and fragmented one (an important experiment with 'individualised budgets' is, however, attempting to simplify this fragmentation and this is discussed further in section 5 below). The picture is further complicated by the fact that the different funding streams have different and sometimes overlapping uses to which they can be put. In particular;

- Several of the funding sources focus at a very general level on providing support to disabled people for 'independent living', and do not have a particular workplace emphasis
- Some funding sources emphasise personal support or housing support, and cannot or cannot easily be used to provide support for equipment or assistive technology.
- Even where funding sources can be used for equipment/assistive technology, and where they can be used for support in the workplace, there is no specific government funding source specifically focused on providing *ICT support* in the workplace, although Access to Work in particular may be used for these purposes.

Table 2 summarises the main funding streams and initiatives for supporting disabled people in daily life and in the workplace, and it can be seen that despite the overall complexity and fragmented nature of the funding arrangements, there is only one key funding stream, Access to Work, which is both specifically focused on the workplace, and which includes funding which is designed to support workplace adjustments and assistive technology (ICT).

Table 2: Key government funding streams for support for disabled people in daily life/employment

Initiative/funding stream	Source of funding	general/personal support for independent living/housing etc	can be used for equipment/assistive technology (incl ICT)	can be used for workplace support
Local authority social care services	Local authority	✓	?	
Disabled Facilities Grant	Local authority		?	
Supporting People	Cross-departmental fund (co-ordinated by DCLG)	✓		
Independent Living Fund	Department for Work & Pensions	✓		
Integrated Community Equipment Services	Department of Health + Local authorities		✓	?
Communications Aids Project (<i>stopped in 2006</i>)	Department for Education & Skills		✓	?
Access to Work	Department for Work & Pensions (Jobcentre Plus)		✓	✓
Disability Employment Advisers/WORKSTEP	Department for Work & Pensions (Jobcentre Plus)		?	✓

4.3 Non-government provision - the role of NGOs and employers

As can be seen from this document, access to ICT for workers with disabilities is hampered by fragmentation of provision, funding issues and low awareness. On the positive side, and partly reflecting the widespread critique of state provision, there is significant activity at grass roots level to raise the profile of these issues and campaign for change. A plethora of voluntary organisations and multi-organisation and multi-sector partnerships also serves to help users navigate government systems of provision (mainly through their websites) and raise awareness of the various types of statutory funding and support within the current system.

Foundation for Assistive Technology

The Foundation for Assistive Technology²³ (FAST) exists to promote research into ICT and other assistive technologies, to ensure that product development reflects user needs, and to build partnerships between users, manufacturers and service providers. The FAST website reports that a number of factors limit the uptake of new assistive technologies in the UK. These include:

²³ www.fastuk.org/aboutus.php

- A lack of collaboration and information sharing amongst researchers and developers.
- Limited consultation with users of assistive technology, manufacturers and service providers during the development process.

The FAST website argues that:

'There is anecdotal evidence that, due to the lack of clear funding routes within many local areas, a proportion of funding currently being spent on Augmentative and Alternative Communication (AAC) services and communication aid provision is 'unofficial' or unaccounted for. Planning and commissioning services is made difficult due to the lack of evidence of the cost-effectiveness of providing equipment or the level of need. Funding lacks strategic planning with higher levels of funding targeted at people in Higher Education with little available in many local areas.'

At present FAST resources are primarily focused on the:

'lack of education and training for all practitioners working with AT across sectors and disciplines.'

and are working in collaboration with skills bodies to promote professional development in assistive technology and develop a nationally recognised competency framework²⁴.

AbilityNet

AbilityNet²⁵ is a charity providing free information and advice, individual assessment of technology needs, and consultancy for employers on system and workstation adaptations and web accessibility. Some income is generated from assessments they complete as a contractor for private clients and statutory bodies. This income used to assess the needs of individual ICT users with disabilities, to deliver free IT support, and source value-for-money equipment.

Mainstream disability NGOs

In addition to those NGOs discussed above which specifically focus on issues related to assistive technology, there are many hundreds of charities and voluntary organisations of and for disabled people in the UK, many of which are specialised to work with people with a specific type of impairment, and many of which offer services and support, including assistive technologies. It would not be possible to summarise adequately the activities of these organisations in a paper of this length, so we simply give a few examples, to illustrate the kind and range of provision offered by such NGOs

²⁴ www.fastuk.org/atforum-education.php

²⁵ www.abilitynet.org.uk/

Royal National Institution for the Blind (RNIB)²⁶

RNIB is the UK's leading charity dedicated to helping anyone with a sight problem. The organisation exists to help remove the barriers blind and partially sighted individuals face through campaign work and provision of expertise and support services. They offer a range of ICT-related services which include:

- The RNIB Technology Information Service²⁷ provides advice and information sheets about the types of technology that are used in the workplace.
- RNIB Regional Centres²⁸: These provide local support to help people with sight problems get the best education and employment opportunities. Some ICT training is available at the centres but it is not provided for free.
- RNIB have recently updated their 'See it Right' guidelines document²⁹. This includes guidance on creating accessible websites for people with sight problems. It also provides information about the use of braille and audio information in technology and how common software packages, such as Word and Excel can be used by the visually impaired.
- RNIB also runs the Web Access Centre³⁰, a commercial consultancy service, which carries out website accessibility audits for organisations.
- RNIB and Net-Guide³¹, a search engine for the visually disabled, have recently joined forces in promoting awareness of web accessibility issues.

On-going financial problems since 2001 have led RNIB to make significant budget reductions over three consecutive years and they are increasingly reliant on their commercial services for income³².

Royal National Institution for Deaf People (RNID)

RNID is the largest charity representing the nine million deaf and hard of hearing people in the UK. As well as raising awareness of hearing disability issues through campaigning and lobbying, they provide information on many aspects of living with deafness, hearing loss and tinnitus.

²⁶ www.rnib.org.uk/xpedio/groups/public/documents/code/InternetHome.hcsp

²⁷ www.rnib.org.uk/xpedio/groups/public/documents/publicwebsite/public_rnib003084.hcsp

²⁸ www.rnib.org.uk/xpedio/groups/public/documents/PublicWebsite/public_eecentres.hcsp#P2_301

²⁹ www.rnib.org.uk/xpedio/groups/public/documents/publicwebsite/public_seeitright.hcsp

³⁰ www.rnib.org.uk/xpedio/groups/public/documents/code/public_rnib008789.hcsp

³¹ www.net-guide.co.uk/content/about.htm

³² www.rnib.org.uk/xpedio/groups/public/documents/PublicWebsite/public_stratdir.hcsp

RNID actively seeks to ensure that the needs of deaf and hard of hearing people are included in the development process for new products and technologies. They aim to facilitate technology transfer and have worked with business and public-sector partners, such as Vodafone, T-mobile, the BBC, Carphone Warehouse, the Department of Trade and Industry and a wide range of manufacturers³³. The RNID Product Evaluation Centre³⁴ houses a team of dedicated experts who can review and carry out detailed tests on products that may offer benefits to people with a hearing loss. The Centre has expertise in electronics, IT, consumer ergonomics and product design and offers input and advice to help companies develop products that can be used by deaf and hard of hearing people. In general these R&D partnerships do not appear to distinguish between work and home-based applications of technology.

Like RNIB, RNID also provides advice and guidance in relation to employment and workplace access.

- The Employment Training and Skills Service³⁵ helps employers make their business more accessible to deaf and hard of hearing people. RNID can provide accessibility audits³⁶ for organisations but these are not specifically focused on ICT provision or training.
- The Employment Service for Deaf People³⁷ provides employment programmes to help deaf people into work delivered through a national network of employment advisers. Again this service is not specifically ICT focused.

SCOPE

SCOPE, the UK charity which represents children and adults with cerebral palsy, is a vociferous critic of government policy on communication aids. A survey carried out by the organisation in 2000 showed that fewer than half of all respondents had been able to obtain equipment through statutory sources³⁸. SCOPE manages a long-running '*Speak for Yourself*' campaign which aims to establish a statutory right to communication aids and support services across all age groups. The campaign is widely supported by other disability organisations and pressure groups.³⁹

³³ www.rnid.org.uk/howwehelp/research_and_technology/research_and_technology_partners/

³⁴ www.rnid.org.uk/information_resources/productsandequipment/evaluationcentre/

³⁵ www.rnid.org.uk/information_resources/employment/

³⁶ www.rnid.org.uk/howwehelp/our_services/employment_advice_deaf_awareness_training_courses/advice_for_employers/our_consultancy_service/what_we_can_offer/

³⁷ www.rnid.org.uk/howwehelp/our_services/employment_advice_deaf_awareness_training_courses/advice_for_individuals/1_to_1/

³⁸ www.scope.org.uk/issues/communication.shtml

³⁹ www.timetogetequal.org.uk/downloads/sfy_briefing_170706.doc

Voluntary sector and public sector partnership

The AAC Task Force⁴⁰ comprises representatives from a number of charities and public sector organisations (including FAST, SCOPE, the DRC, DH and DfES) which are working together to address the general consensus that

'current AAC services across the UK are inadequate particularly with regard to the provision of communication aids and technology to support communication'⁴¹.

Within recent months meetings have been held to discuss shortfalls in ICT provision and services and to examine models of service provision which can be taken forward by government stakeholders.

Voluntary sector and industry partnership

An e-Inclusion Charter⁴² backed by disability charities and large UK companies such as BT (the former state telecommunications provider, and the dominant telecommunications company in the UK) was launched in June 2006, a new initiative which encourages high-technology firms to take usability more seriously. It features a strategy for inclusion and provides practical recommendations for overcoming barriers that prevent disabled people accessing technology. Companies which have signed up to the Charter include, BT, Cisco Systems UK, IBM UK, Intel UK & Ireland, Microsoft UK and T-Mobile.

Margaret Hodge, Minister of State for Industry and the Regions also backed the Charter, in a recent speech, referring to the EU as a whole, in which the Minister acknowledged:

'... a current inability to integrate excluded groups into the ICT revolution E-accessibility will enable groups like disabled people to access goods and services they cannot access at present thus supporting their inclusion ... and ... enable those who have previously been locked into economic inactivity to take part in work.'⁴³

5 The future: challenges facing UK policy in this area

As noted above, the limited available evidence on this question in the UK suggests that there is clearly a need for ICT provision for disabled people in the UK to be more co-ordinated across the health, social care, education and employment services. The dominant impression is one of fragmentation, inadequacy and inaccessibility, and the requirements embodied in the Disability Discrimination Act on the providers of goods, facilities and services appear yet to have made a major impact on the provision of ICT and

⁴⁰ www.fastuk.org/Meeting%2022-06-06%20minutes.doc

⁴¹ www.fastuk.org/fastdocuments/Options%20review%20v4.doc

⁴² www.techdis.ac.uk/index.php?p=5_1_1&id=195

⁴³ Margaret Hodge, Minister of State for Industry and the Regions 12/06/06 'e-Accessibility - An Opportunity not a Problem' www.dti.gov.uk/pressroom/Speeches/page30183_print.html

other assistive technologies to disabled people. There is widespread recognition that new infrastructure and models of service delivery must be implemented to address the current shortfall in provision and to streamline delivery.

There is general agreement that two key issues need to be tackled if provision is to be improved in this area:

- One relates to **simplification** – the fragmentation and complexity of the system is clear from the previous sections of this paper. A more streamlined, user-responsive system is required, in order to increase access to, and take up of assistive technologies in general, and ICT applications in particular
- The second relates to **mainstreaming** – a key underlying principle of the social model of disability when applied to policy, and a key underlying principle of the civil rights, anti-discrimination approach of the DDA, is that support for disabled people in employment should not be part of some special ‘programme’, but should be a normal part of the day-to-day activities of an employer.

Some developments are underway on both of these fronts in the UK

As far as simplification is concerned, in an important new development, which begins to address the fragmentation of provision, the government is currently piloting ‘individual budgets’ in 13 UK local authority areas which bring together resources from six different funding streams discussed in previous sections of this paper⁴⁴, and allow disabled users to access a single fund to spend on services and equipment as they wish. The results of the pilot are due in 2008 and will determine whether this model of individual budgets will be rolled out on a national level⁴⁵. According to the AAC Task Force, there is no evidence available at present on the use of individual budgets to purchase ICT⁴⁶, although early indications suggest that the overall effect of this initiative will be to empower disabled users to make their own choices regarding how the funds they are entitled to are spent.⁴⁷

Turning to mainstreaming, another recent development has been the removal of Access to Work support for employees of national government departments (and the government has also raised the possibility that this may also be extended to the wider public sector, including the health service and local government). This change was introduced in late 2006, at the same time as the introduction of the public sector duty to promote disability equality (discussed above), although the two developments are not directly related. The intention of the government is not to reduce the overall volume of resources available

⁴⁴ The funding streams involved are: local authority-provided social care services; Independent Living Fund; Supporting People; Disabled Facilities Grant; Integrated Community Equipment Services; and Access To Work

⁴⁵ www.cabinetoffice.gov.uk/social_exclusion_task_force/reaching_out/

⁴⁶ <http://66.102.9.104/search?q=cache:vxRiN2uN4ugJ:www.fastuk.org/Options%2520review%2520v4.doc+scope+becta+fast&hl=en&gl=uk&ct=clnk&cd=1>

⁴⁷ www.cabinetoffice.gov.uk/social_exclusion_task_force/reaching_out

through Access to Work, but to concentrate them on private sector employers, especially small and medium sized enterprises. It was argued that, alongside their obligations under the DDA, government departments should be seen as:

'... exemplar employers of disabled people, willing to make provision and adjustments from within departmental expenditure.'

The argument is, that provisions of aid and assistance to disabled employees should be a normal activity for government departments, in line with the DDA obligations to make 'reasonable adjustments' and that any special funding should instead be concentrated on smaller employers with fewer resources, and less awareness of disability issues. It is too early to say what effect the withdrawal of AtW funding from government departments has had, although trade unions and disability organisations (including the Disability Rights Commission), while expressing support for the principles of mainstreaming, have raised concerns that the change will, in practice, lead to a reduction of support for disabled employees in a funding-constrained environment.

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