Digital Equality
Reviewing digital inclusion activity and mapping the way forwards


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Introduction

Digital inclusion is a crosscutting issue, involving a number of interrelated social inclusion agenda, as well as the ever-developing information and communication technologies (ICT). Digital inclusion is, therefore, social inclusion with an ICT stream.

We have attempted to draw together the reams of research and good practice with the purpose of informing strategic thinking and joined-up approaches to digital inclusion. It is our intention that the information, proposals and structure of this document will be useful in supporting such approaches.

Use of this document might include:

- Encouraging discussion around digital inclusion strategy.
- Identifying initiatives exhibiting good practice and gaps in provision and accordingly supporting the development of national, regional and local digital inclusion projects to fill those gaps and build on existing ‘centres of excellence’.
- Influencing government and funders to support joined-up approaches and collaboration and to make necessary policy changes.
- Promoting and steering industry involvement in digital inclusion and identifying optimal routes to involvement where value can be maximised.

Although we next provide an over-arching Executive Summary, the entire paper is written with bulleted information and recommendations on specific issues. Issues are not discussed in detail, rather summarised with references for further information. Clearly many subjects, issues and ideas could be located under a variety of topic headings, but for some degree of brevity we have only included them in one place.

Therefore we expect that people might read the Executive Summary and perhaps the lengthier discussions section, whilst using the rest of the document as a resource that is “dipped into” in order to find more information on specific topics.

We apologise for the Anglo-centricity of the paper. Digital inclusion is largely a devolved issue and we have included short sections on the work of the devolved administrations. We were often not able to say which other initiatives cover specific areas of the UK.

The final health warning is that certain pieces of information are taken from extensive, documented research and others are opinions of experts based on experience in the field. The difference between such sources should be apparent from the referencing. We felt it appropriate to include both types of information.

Having said all of the above, we hope you find this review useful and we would very much appreciate your comments on the document, as well as information on your projects, good practice and your current thoughts on digital inclusion.

The totality of views expressed in this document are not necessarily those of every author, supporter or those acknowledged.
Executive Summary

Economic growth, productivity and jobs are increasingly driven by the twin tracks of ICT innovation and the widespread use of ICT in the general population. ICT use is now acknowledged as the third basic life skill after literacy and numeracy.

However, despite a raft of initiatives and campaigns, including the creation of 6000 UK online centres, more than a third of Adults have never surfed the WWW and 50% of UK homes don’t have Internet access.

This review intends to be a “state-of-the-nation” on digital inclusion. We cover a wide range of issues, highlight good practice and make recommendations.

We have provided information on:
- The 5 C’s of digital inclusion: connectivity (including home access and UK online centres), capability, content, confidence and continuity.
- ICT usage by communities, including communities of interest (e.g. older people).
- The perspectives of government, industry and the Third sector.

The report is arranged as bullets of information and recommendations on the above themes. We have not attempted to further summarise these here, intending that the layout will guide the reader to particular sections, as required.

In this summary we address three things:
1. Defining the premise for future digital inclusion work: and identifying the current gaps in resources and provision.
2. The strategic framework, upon which future activity should be based.
3. Key recommendations, including the work of a proposed digital inclusion unit

With these three areas in mind, a national strategy for digital inclusion could be developed, to build on the body of achievements to date.

1. Defining the premise for future digital inclusion work and identifying current in resources and provision

In order to develop a coherent approach to digital inclusion work, it is important to define the premise for future work and thus identify the gaps that need to be addressed.

Premise: individuals and communities can use ICT to enhance their quality of life, overcome difficulties and fulfil potential. ICT is an important route to information and equality of access to information is an essential aspect of creating social equality. ICT social / communication applications have been shown to promote social cohesion and identity. People need information and support to optimise their use of ICT; including:
- Communal access and structures to facilitate home use
- Appropriate technology, adapting ICT and accessing specialist equipment
- ICT skills development in line with technological developments
- Relevant content and user-friendly web searching tools

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1 Information Communication technologies such as personal computers, mobile phones, digital TVs, etc
• Participation as a citizen and creating content
Additionally, structures are needed to communicate the benefits of ICT to new users and to promote the innovative use of ICT for tackling community issues.

It is in the interest of government, business and the community / voluntary sector to work together to achieve this. Three types of gaps exist currently, which we need to address collectively in order to progress.

1. Gaps in supporting resources: these are the resources that enable an individual to benefit from community ICT initiatives. This includes cultural and social support (e.g. for childcare, language and transport) as well as targeted, local marketing and the availability of trusted intermediaries (see below) who can introduce ICT. Community development approaches are key to tackling this gap (see below).

2. Community-based gaps: although pilots have supported the use of ICT by specific geographic communities and communities of interest, these initiatives have not been scaled-up so that any disadvantaged community, such as young person leaving care, disabled person, etc, has access to such programmes. To reach scale and sustainability, a co-ordinated effort to roll-out good practice is needed. Whilst this includes supporting the work of UK online centres, it is also much wider. Demand driven approaches (see below) and tackling the third gap, are key here.

3. The gap in leadership and join-up: many initiatives and programmes are not working in partnership. Ensuring join-up occurs can avoid the re-invention of wheels and can enable current resources to be used more efficiently. Leadership across government, along with specific funding structures and a community development approach would help address this gap. We discuss this further, below.

2. Themes of a strategic framework
The following themes should be made central to developing a digital inclusion strategy.

ICT as a tool for social inclusion and ICT proofing
ICT can be used as a tool to promote social inclusion, e.g. projects for single parents could focus on homework support using ICT or projects for homeless people might include publishing creative writing on the web. Another project might tackle crime, isolation and community cohesion through wiring up a housing estate.

If ICT is introduced to a community from the perspective of addressing a community need it is more likely to inspire individual interest and to reach sustainability. Initiatives that attempt to provide ICT for its own sake are less likely to succeed.

Taking this further suggests that the many programmes to reach excluded communities, which already exist, need to consider the appropriate use of ICT within those programmes. We call this “ICT proofing” and propose that this is coordinated en masse across all neighbourhood renewal and social inclusion projects.

Examples of ICT proofing could include tackling crime by giving a neighbourhood watch team mobile Internet for communication and information recording and training on how to use it), or delivering ICT taster sessions within a particular group (e.g. a
project for people with learning difficulties). It is essential that projects then sign-post to or join-up with other relevant projects within a particular neighbourhood to continue the path of learning and development.

**Community development to promote “bottom-up” approaches**

Community development is on-the-ground work with specific communities to empower those communities to solve their own problems and reach their own aspirations. Community development work has a relatively long history so support structures exist and good practice is understood.

Community development can be applied through working with groups to join-up of local programmes. National and regional leadership and funding would need to be appropriate (see below) in order to translate national policy into local action and loose national co-ordination into creative, joined-up, local partnerships.

Community development can also help to define community need and aspirations, in order to find the best uses of ICT within a community. It can then ensure a progressive “pathway approach” is in place to support continued social inclusion (after “first steps” work) which leads to outcomes such as applications for jobs, improved health or greater life stability.

**Trusted Intermediaries**

Hard to reach groups are often in contact with workers associated with specific issues such as health, housing, etc and may also be involved in projects run by community groups or voluntary organisations (the Third sector). These workers are sometimes referred to as “trusted intermediaries”.

ICT can support the work of these intermediaries in new ways, for example, facilitating more frequent, trust-building, virtual contact with clients and by enabling co-ordinated interventions with clients who may have multiple needs for public services. The efficient use of ICT by these workers and their client groups will have a number of wins for stakeholders and is an example of the use of ICT as a social inclusion tool.

We propose that strategies be developed for promoting the use of ICT with different social groups and on specific social issues (such as health), which includes a role for trusted intermediaries.

An individual may not feel confident or motivated to enter a UK online centre, but they might be more open to new ways of working with trusted intermediaries. Relevant Third sector organisations should also be considered as key partners in promoting digital inclusion, since their workers are often trusted intermediaries.

As an example, a number of community portal sites that are managed and developed by the communities themselves provide excellent local information and could give considerable value to government sites. Currently trusted intermediaries for promoting government content tend to be larger organisations or services that do not always have the local knowledge that these sites contain.
Demand driven, market segmented, approaches
Much of the work so far to promote digital inclusion has focused on ensuring a supply of access to technology and skills training. At this stage it is important to drive up demand by targeting marketing campaigns at segments of the offline population.

Strategies for reaching specific market segments, need to be developed through partnerships of government, business and specialist voluntary sector organisations. Local marketing is preferred and national campaigns should be balanced by tailored, local marketing (ensuring that local provision exists when expectations are raised).

Demonstrations of the benefits of ICT should focus on the interests of potential new users, to provide an initial “hook”. Useful information, such as how to access government services on line, can also appeal to the needs of new users, but should not be prioritised initially, over generating enthusiasm for more trivial communications. Whilst UK online centres would form part of the outreach to new users, it is important to note that digital inclusion for the most hard to reach groups is not largely about physical infrastructure.

A significant fraction of the population insist they aren’t interested in the Internet, the approaches described above, which introduce ICT “by stealth” or find the hook are therefore key. It is important to understand what is behind their assertions. It is likely that people associate the Internet with computers, “boffins” and technical speak (not helped by the PC retailers’ marketing campaigns). This group have generally had bad experiences of education and of being made to feel stupid. They are not likely to approach situations in which they think they will have a similar experience.

3. Key Recommendations

3.1 Recommendations for Government

3.1.1 Ensure Leadership on Digital Inclusion
Strong leadership is needed to deliver on digital inclusion at all levels. A co-ordinating, cross-cutting department is required, which builds on the work of the e-Envoy’s office and supports leadership across government, regionally and locally. We propose that a Digital Inclusion Unit (DIU) is created and discuss its potential role in section 3.1.3.

It might be appropriate to locate the DIU within the ACU\(^2\) or ODPM\(^3\), given their cross-cutting roles. Most important is that the unit should work to the cross-cutting themes described here and should not translate digital inclusion into only a skills agenda. Whilst achievement of level 2 skills are desirable, so too are other outcomes of digital inclusion, such as confidence, community involvement and better parenting, though these are harder to measure.

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\(^2\) Active Communities Unit
\(^3\) Office of the Deputy Prime Minister, which includes the Social Exclusion Unit and Neighbourhood Renewal Unit and work with Regional Development Agencies (RDAs).
The remit and role of each government department with respect to digital inclusion needs to be clarified and relevant programmes “ICT proofed”. We propose that DEFRA\(^4\) leads on joining-up all aspects of digital inclusion in rural communities, not just those concerning broadband.

### 3.1.2 Use funding strategically

Funding is clearly central to any programme for digital inclusion. However, funding pots required by projects will not always be directly related to what might be thought of as digital inclusion (such as access to ICT and skills training). Money might be needed, for example, to fund a worker for a particular group, a marketing campaign or community development. This is appropriate, since it reflects the need, on the one hand, to “ICT proof” social inclusion and regeneration work and, on the other, to ensure ICT focussed projects are linked to wider social issues. Therefore, funding structures that facilitate holistic approaches are needed.

Funding is needed for:
1. Tackling aspects of digital inclusion such as skills training, community development and addressing gaps in resources.
2. Working with specific disadvantaged communities and communities of interest.
3. Creating joined-up programmes.

This clearly implies that there will be a number of different sources for funding digital inclusion work. Different government departments should hold pots of funding for different aspects of digital inclusion. This might involve bending current pots to digital inclusion and creating new pots. A department providing a majority of services online for a particular group should hold responsibility for encouraging that group to go online (for example Department for Work and Pensions leading on older people and disabled people).

Clearly funding information and support for business planning is needed by projects delivering on digital inclusion. Ufi’s\(^5\) role in supporting UK online centres, includes an information gathering role on potential funders. This should be linked to the DIU and widened to include all of those working in digital inclusion.

The DIU and RDA’s should also provide the funding required to create the joined-up partnerships required for programmes aimed at specific communities. Many funding pots leave the onus on delivery agents such as third sector organisations and local authorities, to create partnerships in advance of funding. This puts a strain on organisations and leads to ineffective and incomplete partnerships.

Funding for community development workers, with an understanding of the relevance of ICT in communities, is also important for creating joined-up approaches and ensuring small organisations have the information they need to be successful.

### 3.1.3 Establish a central Digital Inclusion Unit (DIU)

A Digital Inclusion Unit (DIU) is needed to support the development of strategies to promote the use of ICT by particular social groups and disadvantaged geographic

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\(^4\) Department for the Environment, Food and Rural Affairs  
\(^5\) University for Industry
communities. One unit is needed to do this because coordination is required for such a cross-cutting theme.

We propose that the DIU should:
1. Audit government departments (local, regional and national) for digital inclusion activity, “ICT proof” programmes and have powers to influence funding streams.
2. Collect and share information on good practice, maintain an overview of digital inclusion related initiatives and provide funding information / business development support to projects, in partnership with Ufi.
3. Ensure a community development approach underpins digital inclusion work and that community development workers understand the role of ICT.
4. Facilitate the involvement of industry in the digital inclusion agenda, according to the recommendations below (3.2).
5. Hold targets for use of ICT by offline groups and work to achieve them:
   - Develop strategies to promote joined-up approaches to digital inclusion for the segments of society that are more likely to be offline, in partnership with business and third sector organisations.
   - Work with task groups on these strategies, examining current good practice and possible initiatives that could be included in joined-up programmes. Provide partnership development funds.
   - Work with regions to develop consortia of partners that can translate the strategies to on the ground activity, with ongoing monitoring and evaluation.

![Figure 1. Proposed co-ordinating role of a Digital Inclusion Unit; example of work on disabled people and ICT.](image)
3.1.4 Form a strategy for the future of UK online centres, based on the variety of remits that they can fulfil. Thus, those centres that fulfil a community need for ICT provision, access to e-government, etc, and are working to capacity, require sustainable investment. However, it is important that outreach to the hardest to reach groups is a focus for centres, although this may mean working in partnership with other organisations and will not always result in new users within the centre. We also encourage the use of ICT centres as community media centres, where community participation and generation of Internet content are supported. Given the variety of activities taking place in centres, it is useful to map accreditation to the actual activities of interested users rather than push learners through specific courses.

3.1.5 Make adaptive ICT for disabled people with particular needs available as an assistive technology. This could make use of the current channels available for other assistive aids. Undertake a marketing campaign, in collaboration with specialist voluntary sector organisations and ensure support and training is available for disabled people and their personal assistants and carers.

3.1.6 Set a target date by which all young people in schools will have their own tablet PC. Use central procurement and work with business to ensure cheaper reliable light models.

3.2. Recommendations for Business

3.2.1 Collaborate on social innovation and community investment
New opportunities exist for the ICT sector by seeking to tackle social issues using ICT. The innovative thinkers in business should work with those tackling social problems in government and the third sector. This is often called corporate social innovation and in the field of ICT and Society there are opportunities on a plethora of social issues, involving all forms of information and communication technologies.

Business should also collaborate in the digital inclusion aspects of its community investment programmes, in order to enhance impact and use its leadership to create rational, joined-up programmes. An alliance representing industry is needed to maintain an overview perspective, strategise on new collaborative programmes and share good practice.

3.2.1 Ensure good practice in service and support and promote training
Business also needs to respond to Office of Fair Trading issues surrounding ICT hardware and software support (that services are often poor or not understood by consumers). There is a collective industry need to ensure good practice in service and support, perhaps through a voluntary charter. This will address some of the issues of confidence and trust that prevent increasingly sophisticated uses of ICT and that, in some cases, turn users into non-users.

Additionally, it is in the interest of the industry to ensure that there are networks of ICT trainers who can give home based training and also perform the “triage” nurse role in the case of equipment failure (defining the likely source of failure and hence sign-posting to the relevant specialist).
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Section One

The Digital Divide in 2004

Much of the debate about the Digital Divide to date has been around whether it exists, does it really matter and who is in it. A steady stream of research has been undertaken in recent years and a mass of statistics produced. In this section we have reproduced (without comment) a comprehensive (but not definitive) listing of these findings and their sources.

There is, of course, the old adage about statistics and lies, but from this wealth of information it is now possible to establish that there is a divide and that it does disadvantage the people who find themselves in it.

1.1 Key Statistics and Facts

The multifaceted nature of the digital divide has been extensively discussed along with the motivations for tackling this as an urgent social inclusion issue. The possible relationships between technology use and levels of positive or negative social capital have been discussed widely and are summarised by the Digital Europe project. The National Action Plan on Social Inclusion refers to ICT as a tool for social inclusion.

- Sept 2003: 12 million households in the UK could access the Internet from home (48% of all UK households, compared with 40% in 2002 and 34% in 2001).
- Oct 2003: 61% of households have a PC.
- Oct 2003: 18% of homes that have the Internet use broadband.
- Sept 2003: 56% of adults in Great Britain had used the Internet in the last three months.
- 61% of adults have used the Internet at some time.
- Usage in the last three months: 85% of 16-24 year olds, 41% of 55-64 year olds and 16% of those aged 65 and over.
- 99% of those accessing the Internet had used a computer (25% of which are laptops), 10% had used mobile phones and a very small fraction had used digital TV.
- Access outside of the home included workplace (43%), another persons home (25%), education establishments (16%), public libraries (10%) and Internet cafes (9%).
- Daily access is 50% for men and 38% for women.
- Internet usage includes email (83%), information on goods and services (83%) information on travel and accommodation (72%) and government sites (50% (85% for information, 27% for a form)).
• Home access varies by region: NE 43%, NW 43%, Y&H 43%, EM 48%, WM 46%, EoE 48%, London 52%, SE 53%, SW 47%; England 48%, Wales 41%, Scotland 42%, Northern Ireland 37%.
• Home Internet access increases with income. The two lowest deciles have access of 12 and 14% whilst the two highest have 74% and 85% access.
• 73% of UK adults use a mobile phone.
• Of households with Internet access 81% have dial-up and 17% have broadband.
• 98% of schoolchildren use the Internet, as do 67% of those of working age. In contrast just 22% of retirees use the Internet.
• The International e-Economy Benchmarking study (in which the UK came second) found that while the UK had strengths in market and political environments and Business / government readiness, it had a relative weakness in Citizen uptake (i.e. digital inclusion). PC penetration, Internet penetration and frequency / duration of use were all relatively low.
• Citizens Online has worked with Internet Service Providers and other partners to develop a “connectivity map” of the UK.

Reasons why people don’t use the Internet: don’t want to/no need or interest (57%), no Internet connection (44%), lack skills or confidence (39%), cost too high (15%). 22% of adults say they haven’t considered using the Internet and don’t think they will.
• Studies in America show that 20% of the population avoid using the Internet but gain access via a friend or family member (e.g. asking them to find information or send an email) they are called “net evaders”. 66% of net evaders are parents of online children. 17% of non-users were users, but have experienced technical problems that haven’t been resolved and 24% of the population have no direct or indirect experience of the Internet. The result of these figures is that growth of the Internet population is now flattening at around 60%.

Digital exclusion maps well to social exclusion; promoting digital inclusion is often about solving social exclusion issues. The following factors cause social exclusion:

- Social and Individual
  - Lack of or inadequate food, shelter or clothing.
  - Disabled people
  - Financial problems and related stress.
  - Poor health
  - Difficult family environment or onerous family responsibilities.
  - Low self-esteem.
  - Literacy, English language, ICT and numeracy problems.
  - Low level of formal education and qualifications.
  - Lack skills and qualifications needed for employment and social involvement.
  - Negative experience of education.
  - Psycho-social problems.
  - Drug or alcohol abuse.
  - Disenfranchisement from democratic processes.
Disaffection for or alienation from the democratic system.

Geographic
- Rural isolation.
- Disadvantaged urban neighbourhoods with inter-generational unemployment.
- Lack of local access to training and education opportunities.

Community
- Lack of cohesive local approaches to enabling the transition to employment.
- Lack of social capital networks with those in employment.
- Information deficits relating to training and employment opportunities.

Cultural
- Language barriers experienced by immigrants and refugees.
- Cultural differences experienced by immigrants and refugees.
- Experience of racism on the part of ethnic minorities.
- Experience of discrimination on the basis of gender, race, class, religion, age, sexual orientation, disability, family status.

Economic
- Few or no jobs available.
- Lack of childcare provision to allow those with children to work.
- Disincentives to work arising from the welfare/tax system (poverty trap).
- Political and structural.
- Lack of state provision for social and services and infrastructure.
- Government policies restricting eligibility to training programmes.
- Constraints on entitlement to work for asylum seekers.
- Lack of accessible information on citizenship rights and issues.

Organisational
- Training organisations and employers using restrictive recruitment practices.
- Training organisations having restrictive eligibility criteria, training approaches, venues and structures.
- Training organisations lacking social supports for trainees.
- Training programmes and employers lacking engagement with the client group.

1.2 Key Aspects of Digital inclusion - The five C’s

Digital inclusion should not be thought of as an “in or out” phenomenon. The extent of ICT usage (frequency, skill and complexity) varies amongst individuals. Therefore digital inclusion has been depicted as a ladder, with those on the bottom rungs making very little effective use of their Internet interaction and those at the top being sophisticated users.

The ladder model emphasises the complexity of digital inclusion and could also be termed “continuity”, which is one of the 5 “C’s” representing key issues of digital inclusion: Connection, Capability, Content, Confidence and Continuity.
1.2.1 Connection – Home Access and Public Internet Access Points

Connection refers to the way in which people access the Internet. As well as the traditional PC, Internet access can be achieved through devices such as mobile phones and digital TVs (DTV). Over 97% of households have at least one TV\(^{16}\) and around 50% of these households have DTV\(^{17}\). The appropriateness of technology, such as mobile technology and DTV is considered in section 7. Connectivity also requires consideration of software and mode of connecting to the Internet, such as via phone lines, wireless etc and the issue of broadband. We haven’t covered these issues in detail in this paper.

Connection is considered below from a home perspective and community perspective (Public Internet Access Points (PIAPS)). Connectivity at home is generally considered to be the ultimate goal because the benefits include availability, privacy and the ability to tailor equipment. However appropriate community-based access might do more than overcome barriers of cost. It could also provide a focus for other community activity and communal applications of technology (e.g. local content generation, car-pooling software, etc)\(^{18}\).

1.2.1a Home access
- Internet access and subsequent interactivity can be affected by the fact that 5-10% of households don’t have a landline telephone connection and 2.5-3.5 million adults don’t have a bank account\(^{19}\).
- Perceptions of the cost of PC purchasing are highly inflated. A study found that non-users believed a new PC would cost around £800 when a reasonable computer can be purchased for about £400\(^{20}\).
- The i-Society project of the Work Foundation has examined the current and potential use of broadband in the UK, micro-barriers to adoption and the stages an individual goes through from an old slow computer to broadband on a faster machine\(^{21}\).
- Sweden has the worlds highest penetration of PCs in the home as a result of home computing initiatives in which employees can buy PCs though work (the company benefits from a tax break)\(^{22}\). These tax breaks are available in the UK and a Home Computing Initiative will be highlighted in early 2004 to promote the opportunity\(^{23}\).
- Age Concern is currently piloting a range of low-cost ‘starter’ computer and support bundles designed with the needs of older people in mind in selected areas across the country for a limited period.
- In Mori research 71% of home PC users felt pressured into buying something more expensive than they needed and only 50% are pleased with the computer they have. Only 25% are able to fix problems and 78% were insufficiently informed before buying the computer\(^{24}\).
- PC retailers have likened PCs to cars, in that they need on-going servicing and a user needs the right skills to be able to operate the PC. On-going work by retailers and the Office of Fair Trading\(^{25}\) to communicate this message are important in preventing the fall off in Internet use due to broken PCs. These need to be positive messages so that new users are not discouraged. User support services can be scaled up in disadvantaged communities.
through cross sector partnerships to provide members of that community with support service work, whether through employability schemes or intermediate labour market models. Such work is run by some PC refurbishers and has begun in some of the DfES “Wired up Communities” schemes. This could be built upon with support from the NRU and business.

- Recommendations from the Office of Fair Trading report on IT Goods and Services included:
  - Support services are often poor and consumers need better information when buying them.
  - Consumers need information about on-going costs such as inkjet cartridges.
- Keri Facer has examined issues of home use such as how the PC gets fixed (the need for resource networks) and gender inequality.
- Housing Associations, Registered Social Landlords, etc, have a role to play. Hairnet UK Ltd has made a speciality of working with Registered Social Landlords in establishing ICT access and training for tenants. However:
  - Apart from a small number of exemplars, social landlords are lagging behind local authorities in the adoption of ICTs in ways that will directly benefit tenants, because of lack of vision, skilled staff, funding and the need for organisational culture change. There appear currently to be no strong drivers towards improvement, whether Government policy, financial incentives, or tenant action.
  - Allocation policies and tenancy agreements usually mean that tenants have no spare room for themselves or children to use a PC quietly, and are discouraged or forbidden to run a business from home.

**PIAPs including UK online centres**

UK online centres and other Public Internet Access Points (PIAPs) refers to Internet access kiosks, publicly funded Internet access terminals in libraries and community centres and privately run Internet cafes. PIAPs may have one or more of the following functions:

- Access by regular Internet users while away from home or workplace.
- Access to the Internet by those without access at workplace or home.
- Walk-up kiosks intended only for brief and incidental use.
- Kiosks having a special and specified purpose (e.g., those supplied by NHS or police forces).
- Introduction to the Internet for those with no or little prior experience.
- Learning support to assist in improving Internet and other ICT skills.
- Internet access as an adjunct to another primary purpose (e.g., Library).
- Internet used in support of another primary purpose (e.g., to help in giving advice to clients or helping them to find information).

A further important distinction relates to purpose, which may be:

- Entirely commercial (for example a commercial cyber café).
- Entirely social (for example a public library).
- Mixed (for example a community initiative offering some commercially priced and some free or subsidised services).
The range of environments is very variable, with some providing substantial support and training to users, others simple access with little support. In many cases, they provide a welcoming environment and actively assist people to develop digital skills. Many operate on a community development agenda taking on an appropriate local character, are familiar with working on a partnership basis and engaging with a variety of government departments and other funders, in order to access a number of different funding streams.

- PIAPS have been installed in public places such as shopping centres, stations and hospitals, offering information through a touch-screen facility. The Department of Health have installed 180 kiosks, providing advice on medical conditions and healthy living, but it is unclear whether funding will continue. An initial evaluation found that, although 42 per cent of people in the surrounding area had visited the location, of these, just 7 per cent had used the kiosk.

- In 2001 and 2002 a pilot scheme installed kiosks in 212 Post Offices in Leicestershire and Rutland. These offered a broader service, providing advice and, in some cases, the opportunity to interact with organisations such as the Department for Work and Pensions, the Inland Revenue, local authorities, voluntary bodies and commercial bodies. Although popular, in October 2002 ministers decided not to take forward a publicly funded service on the grounds that it would neither significantly improve government departments' ability to meet their objectives nor generate a viable level of income for Post Office Limited and its branches. However, there is commercial interest in placing kiosks in Post Offices and a service is likely to be piloted in Cornwall.

The Office of the e-Envoy estimated that 98.6 per cent of the population in England would live within 5 miles of a UK online centre when the network was rolled out, giving almost full national coverage. The target of 6,000 UK online centres has been met, it is estimated that about 6,900 exist. There were three major strands relating to the provision of UK online centers:

- Information and Communication Technology learning centres. The scheme provided centres in the most deprived local authority wards in England, or rural areas with significant transport problems, to give Internet access to disadvantaged groups. The project was allocated £199 million of capital funding from the Capital Modernisation Fund (CMF) and £77.5 million from the New Opportunities Fund (NOF) to support running costs. Local groups interested in setting up such a centre sought advice from their local Government Office for the Region to apply for funding. The Department for Education and Skills and the New Opportunities Fund Board took the final decision on whether to provide capital and revenue funding respectively.

- Internet cafés and community schemes. The Department for Education and Skills also invited existing centres, such as Internet cafés and community-based projects to apply for the UK online centre brand. Although no funding is available, they benefit from the national marketing and communication campaigns and from practical support.
• The People's Network. Resource (the Council for Museums, Archives and Libraries), in collaboration with the NOF, provided computers and Internet access in over 3,000 libraries in England by the end of 2002. In England the network received £77.5 million funding from the NOF to provide libraries with ICT equipment and connectivity and a further £14.2 million to train library staff in information communication technology skills and learner support.

• The diversity of centres is hugely valuable, and the fact that there exists a wide range of centres from the most informal (such as INNIT or the Leadgate Tea-Rooms) to the more institutional surroundings of libraries and the more formal context of colleges, is healthy. So too is the relative coherence of a single UK online branding.

• There are also numerous mobile centres. Age Concern runs four, which are single decker, wheelchair accessible, buses, with computer equipment on board.

• Silwood Cybercentre, although in part an outreach centre of Lewisham College, works with a housing association and is actually a ‘wired up’ terraced house on an inner-city housing estate.

• Haringey Arts Council is the ‘Cultural Industries Hub for UK online centres’ and provides a range of digital opportunities for those wanting to be involved in the media industries.

• The Drum in Sheffield is one of many UK online centres run by the Community Media Association, which provides both radio training and community radio programmes.

• ICT centre manager research found:
  • Many people are curious about the Internet and when offered the opportunity to ‘try it’, often in another context or non-ICT centre location, many are happy to ‘have a go’.
  • There is a good level of knowledge of the services offered by public access points or ICT centres, but many do not know where they are located in their local community.
  • Many centres offer a wide variety of ICT courses to meet the varied needs of centre users, but many new users are confused by the range of courses and they find it difficult to determine which course would best meet their needs.
  • Users find few problems in saying they cannot use IT, the same level of openness would not arise if they declared a deficiency in basic literacy skills. IT training can provide a valuable first step to start learning again or improving literacy.
  • E-Mail is without doubt the most used and most instantly rewarding activity for new users. However, email is often regarded as something separate from the Internet.

• 80% of users of PIAPs have access to the Internet elsewhere (such as at home, at work, etc).

• A survey of 1,360 users at 59 centres indicated that:
  • 61% of users belonged to at least one of the target socio-economic groups (unemployed, ethnic minorities, disabled, lone parents, over 60s,
who are not engaged in learning and individuals requiring help with basic skills).

- 55% of users had not previously used the Internet.
- 27% of users progressed to a learndirect course after attending a centre.
- 16% of users progressed to further education or higher education.

- Research from Cardiff University suggests that the use of public sites has failed to meet expectations because they don’t have much of an impact in winning over the “digitally excluded” and those people who do want to access the Internet prefer to do so from work or home.

- There is a widespread perception in the field that the UK online centres movement has drifted away from social inclusion towards ‘learning for earning’. This may be a misrepresentation, but it reflects the widely-acknowledged tension between the drop-in role and the formal learning role in centres. For example, the clear potential for centres to work with asylum seekers and refugees seems to have been underexploited. Similarly, one of the TargIT centres that works with homeless people has found that, if they offer courses, no-one is interested: their constituency does not trust formal provision and is only prepared to use informal access. It is important to acknowledge that some centres can and do carry out both roles.

- The e-envoy has said publicly that UK online centres “have not delivered on social exclusion.” In this important consolidation time there are three key considerations:
  - Given the timescales and the fact that many centres have barely begun operating, it’s very early to be making this observation as a criticism.
  - It would be unreasonable to expect much progress in this area given the context in which the centres have been trying to establish themselves, with strings attached to revenue funding and a requirement to work with educational sector partners to deliver courses.
  - As early work with pioneer centres showed, the key to reaching the most excluded people is through the agencies that work with them. This takes time, dedicated partnership work and often calls for a community-sector-friendly support network that can draw on appropriate mentors and resources.

- The difference between outputs and outcomes of centres needs more work according to one study. Outcomes refer to a process, like drawing excluded members of society into the centre that leading to increased confidence for the centre user or to meeting a personal goal to use ICT more frequently. If a centre becomes too output focussed, e.g. focus on externally accredited exams, it may become ‘output shackled’. How does one measure the success of centres? Who is measuring? If the answer is the DFES then there may be a focus on only looking at educational benefits. However, there are many benefits from using a centre in terms of improved social and work related issues for communities in deprived areas, community regeneration and cohesion.

- Responsibility for the management and administration of UK online centres was passed to Ufi Ltd in April 2003. Ufi also operates the learndirect network, which uses innovative technologies to meet the work related skills needs of employers and individuals to make an impact on business...
productivity as well as social exclusion. The combined capacity of the leardirect and UK online network offers a range of services from initial access to the Internet through to achieving a qualification.

- Ufi’s mission is ‘to work with partners to boost people’s employability and organisations’ productivity and competitiveness by: inspiring existing learners to develop their skills further; winning over new and excluded learners and transforming the accessibility of learning in every life and work.’

- Ufi are coordinating regional and national support for centres, focussed on issues such as business planning and fundraising.

- Resource has developed a three year Action Plan for public libraries for 2003 - 2006, in collaboration with a wide range of partners. It includes the plan to establish and promote public libraries as main access points for e-government services. Comprising three themes - books, reading and learning, digital citizenship, and community and civic values, two of its many actions are to promote take up of e-government by excluded groups, and to demonstrate how libraries can enable an online environment for community content creation42.

- Some of those centres best placed to reach disadvantaged target groups are likely to be least able to find funds from elsewhere (DfES / Ufi) are trying to tackle this. For public libraries, funding for equipment has ceased and will cease for training in March 2004. Local authorities will meet all revenue costs. The New Opportunities Fund stated that the Lottery is unlikely to be a source of funds since its policy is one-off interventions.

- Funding streams (and their restrictions) available to centres needs to be clarified and should enable a centre to meet objectives across government, whilst being flexible enough to allow local needs to be met.

- ICT is associated with enhanced confidence, independence and employability, and the technology stimulates engagement because it is not associated with previous failure in the classroom. If the UK online centres programme is to address social exclusion it has to be accepted that people who experience exclusion tend to be reluctant to go into formal or institutional contexts; and that their need for informal access justifies public funding43.

- Centres at the forefront in this field, such as Shipley Communities Online34 depend heavily on external sources of funding like ERDF. The fact that a number of commercial UK Online centres have failed, albeit in a mixed market, does suggest that the term ‘sustainability’ needs to be used somewhat less uncritically. We should draw attention to the fact that the operation and survival of many centres depends on the commitment and involvement of volunteers, whose time is typically invisible in the account sheets. The question arises as to whether it is not time to disaggregate some kinds of centre from others44.

- Most centres are now beginning to shift their attention from the dominant technological problems, to issues of use and constituency. As they approach this more mature stage, the distinctions between centres become more apparent. In our view there is now a case for clear categories based on
declared roles, constituencies, and organisational structure.45.

- Ufi is working with the Office of the e-Envoy, DfES and other Government Departments to pilot nine e-government services. The e-government pilots will identify the potential for the Ufi network of UK online and learndirect centres to support e-government service delivery. The government should pay private and voluntary sector bodies to act as intermediaries in the delivery of e-services, according to research by think-tank the Institute for Public Policy Research.46. The recommendation challenges the Office of the e-Envoy's view that intermediaries need not be paid.47.

- Government has awarded the Citizens Advice service £20 million to provide the basis for access to electronically delivered advice services in bureaux in England and Wales. The Citizens Connect programme aims to ensure that CAB clients are not excluded from the potential benefits of electronic government services, and to improve the quality of advice services available to clients. CAB has detailed recommendations on improving government services delivered online.48.

Research from BECTA which will be published soon has found:

- Substantial innovation from centres in:
  - On-Line Materials
  - E- Democracy
  - Informal Learning
  - Social Capital

- Most of the significant innovations, which have been achieved in the production of online materials, relate to access issues for people with special needs, particularly people with physical and sensory impairments.

- Innovations in informal learning relate to measures, which have successfully been developed to interest people in the use of new technologies and the Internet and have not been linked necessarily to the Learning and Skills agenda. Often they have addressed the most ‘disengaged” and this group does not necessarily wish to progress on to formal learning pathways.

- This issue has led to a failure to link up to the Learning and Skills Council (LSC) agenda. Relationships with local LSCs were therefore not strong and there was minimal knowledge of the Neighbourhood Learning Fund.

- Centres which were part of national voluntary sector organisations were the most confident about their prospects of survival believing in their organisations ability to fund raise for what works. Some organisations, which had existing links with learndirect, were not confident about their futures, believing that changing policies of hubs increased vulnerability.

- The following ‘risk factors’ on sustainability were noted:
  - Insecurity of staff because of absence of long-term funding decreased incentives to ‘bed’ innovation down.
  - Lack of knowledge of funding opportunities.
  - Lack of skills in bid writing and planning and inappropriateness of tools for organisations that do not see themselves as coming from a ‘business’ culture.
  - Lack of time to chase funds and effectively market and network.
  - Lack of time to build partnerships.
• An absence of partnership working, which could enable people to see the benefits of working together.
• In some areas a belief that local politicians are convinced of their value and therefore will ensure they are sustained.
• Whilst involvement with Ufi Hubs has in some cases been positive, it has often been seen as a stalling process and there is a perceived mismatch in objectives between UK online and learndirect.

(In response to the above statement Ufi would emphasise the range of services that are available throughout the network of UK online and learndirect centres.) There will be an opportunity for UK online centres to offer a more formal learning experience, however, there will be no obligation for UK online centres to form a relationship with Ufi hubs.

• Emerging organisational models which may impact on the sustainability of UK Online sectors:
  • Voluntary sector contract – single UK Online project
  • Voluntary sector contract within multi-purpose/other main purpose organisation
  • Voluntary sector contract – part of a national network (e.g. RNIB)
  • Voluntary contract – part of local, cross-sector strategic consortia involved with community ICT / learning.
  • Statutory contract with voluntary sector partners – Statutory contract working via community development principles/networks.

Recommendations - PIAPs including UK online centres
Barriers relating to access have been well documented by think tanks, academics and by the government’s own research and policy initiatives. Key recommendations include providing comfortable, non-threatening environments, starting with people’s own interests and relevant content. Child care provision is crucial to engage many women. Despite this knowledge, most e-gateways are relatively formal learning opportunities.

Do’s and don’ts for PIAPs as recommended by Foley et al.
Do:
• Provide a pleasant environment with approachable staff. Try to permit a wide range of opening times.
• Provide new users with a warm welcome.
• Make the venue a social experience and fun - not old, drab and techy.
• Have varied access to ICT, not just at benches or desks.
• Take/introduce ICT in other environments (community centres, hostels) or use vehicles that provide ICT access.
• Introduce ICT by stealth – i.e. put library catalogues online or provide computer access to commonly used information.

Don’t:
• Don’t hide; make the centre noticeable from the outside.
• Don’t stress qualifications and avoid a school-like environment.
• Don’t have too many forms.
• Don’t make people wait.
• Don’t provide old and slow ICT equipment.
PIAPs should highlight the benefit of Internet access, clarify how much home computing costs and encourage home use.\footnote{50}

From a Direct Support report for the DfES\footnote{51}:

- Centres that predominantly provide informal access for people who experience exclusion are very different from facilities that offer quasi-college provision or outreach training. It is a good time to recognize such differences formally in policy.
- Access centres function best as part of wider generic community resources that attract local people for a range of activities. It is not realistic to expect them to become financially self-sustaining without distorting their roles, although they do tend to add value to whatever funding they receive.
- Where they are part of generic community resources, access centres fulfil fundamental social roles that contribute to government objectives on community cohesion, social capital, and community capacity building. They reach parts that other agencies cannot reach, reflecting their role as community sector resources rather than as centres of formal learning and seen in this context they justify public funding.

- Those monitoring UK online centres need to set up quality control arrangements to measure the service provided by UK online centres and take-up amongst hard-to-reach groups. They should arrange periodic unannounced inspections to monitor performance, to allow assessments about which UK online centres should continue and to help ensure resources are used on target groups. Local authorities should also monitor the performance of UK online centres in libraries.\footnote{52}
- Centres can monitor usage of machines by collecting data when people log on. This allows managers to collect information for funders whilst providing users with the informality they desire. This should then inform target-setting, to move away from measuring the success of centres purely on the basis of number of training certificates awarded.

- Job Descriptions of the newly emerging roles of the people who work in centres are needed to facilitate their training, accreditation and help develop funding streams.
- Since the operation and survival of many centres depends on the commitment and involvement of volunteers, central coordination, support and training for volunteers is essential. The key benefits would be to ensure quality of the end-user training is preserved as volunteer trainers’ skills are kept up to date; ensures greater consistency of delivery across different areas; and helps with volunteer recruitment, retention and diversity. However, it should also be noted that reliance upon long term volunteering is difficult and risky and in many cases a volunteer should be supported into paid work rather than maintaining an unpaid role.
- Two resources for developing UK online staff should be rolled-out:
  - NIACE (The National Institute of Adult Continuing Education) have produced a publication to develop the skills of those volunteers supporting adult learners who are learning information and communications technology skills in voluntary and community settings.
It has also been designed for programme co-ordinators setting up ICT mentoring schemes.

- Community Learning Resource is a website to support everyone working in Adult and Community Learning. It covers the National Learning Network initiative, Technical Guidance, Skills Development and Learning Content.

1.2.2 Capability – ICT, skills and employability

The second of the four ‘C’ s is capability. This means ICT skills that can improve quality of life and skills that increase employability. It is recognised that there is an increasing dependency on technology (53.2% of EU workers reported using a computer for work and 30% of Internet users have used the Net to search for work). Therefore there is a need to provide at least basic and easily accessible ICT training for those for whom traditional education channels have been a challenge.

The government’s Skills Strategy White Paper has several implications for digital inclusion:

- A new entitlement to free learning for those without a good foundation of employability skills.
- The safeguarding of learning provision for wider personal fulfilment, including those, such as pensioners, who may not be seeking employment.
- A better choice of opportunities to encourage adults back into learning (including community UK online centres).
- The acknowledgement of ICT skills as the third basic skill and its inclusion in the Skills for Life programme.
- Developing the range of introductory courses available in ICT and extending the tools for diagnosing and accrediting those skills including an on-line ICT skill diagnostic tool and e-skills passport.
- Frameworks for Regional Employment and Skills Action (FRESAs) to be developed by Regional Development Agencies (RDAs).
- Individual Learning Accounts (ILA) will not return in England, but other providers might be involved in “first step” and return to learn opportunities “who can meet the necessary quality standards”.
- A will to maintain learning opportunities for older people. The ILA did allow this group freedom in choosing what to learn and who to learn with.
- An additional review by the LSC on supporting learners with learning difficulties will be published. (Disabled adults may not be able to access online training if they don’t yet use ICT, can’t afford broadband or can’t get to a learndirect centre. Special provision for disabled people will be needed, with sufficient funding for learning support at an appropriate pace.)
- A need to build “learning communities”, where the aspirations of communities are raised. The Learning Curve is a learning and development strategy for neighbourhood renewal which looks at supporting those involved in delivery and this should be integrated in FRESAs.
• BECTA have described a variety of literacies to understand the meaning of ICT as the third basic skill:\(^58\):
  • Information Literacy - the ability to seek, find, retrieve and evaluate information resources. These are the skills typically used by Librarians but are useful to anyone solving their own problems.
  • Technology-related Literacies - these are the practical skills necessary to use ICT equipment and networks for the purpose for which they have been designed and developed.
  • ICT Literacy - the ability to use the ever expanding range of relevant technologies effectively. This changes overtime as the hardware and software change.
  • Net/Web Literacy - the ability to use online tools and work with the values developed by the communities on the Internet and Web. This includes using appropriate Netiquette and understanding web-site structures and navigation.
  • Composite Literacies - are the goal-oriented literacies which combine the skills and understanding of to engage with and solve real world problems.
  • e-Learning Literacy - the ability to use the technologies relevant to learning in an appropriate way. Typically this includes accessing resources, identifying sources of support, working collaboratively and building on-line communities.
  • e-citizenship Literacy - the ability to use the technologies relevant to citizenship in an appropriate way to meet social goals. It is similar to e-Learning but additionally requires an understanding of the rights and responsibilities of being an active citizen and the ability to act in the real world.

• BECTA are undertaking a study with the aim of proposing Metadata that is appropriate for the way users in UK online centres search the web for information. The approach assumes that users will be following self-directed learning and looking for content that they find appropriate for their needs.\(^59\).

• The EMPLOYMENT initiative involved a number of projects including ICT training. Basic ICT training was most common followed by specific ICT training aimed at employment in information society sectors (primarily multimedia), and other sectors (e.g. teleworking and tourism and cultural sectors). In the 1997 round of EMPLOYMENT, the UK had more than 300 projects overall. About 30 percent - more than 100 projects - had a "building the information society" objective. Among these projects were a high proportion aimed at two target groups: women (often women returners) and disabled people.

• A “pathway approach” to interventions\(^61\) could also be considered as a generic tool for digital inclusion. A pathway approach means that the full set of specific barriers to employment experienced by different groups is recognised. A series of linked interventions and supports are put in place before, during and after the training period to address the various needs and to enable the person make the transition from marginalisation to employment. A pathway approach encompasses the following main interventions (for further details see Appendix, section 9):
• Contacting and motivating disadvantaged groups
• Developing skills
• Ensuring social and cultural supports
• Providing employment and career guidance services
• Providing employment progression measures

• A study of the possibilities of using interactive digital TV for learning reached the following conclusions:62.
  • Lifelong learning policies linked to providing greater access to ICT appear to be increasing participation of those already engaged in learning but don’t appear to be encouraging wider participation of those not already active in learning.
  • Potentially, interactive television has an important role in widening participation in learning, particularly in encouraging people to participate in informal learning as a first step towards more formalised learning.
  • When available current interactive TV offerings through broadcast/scheduled TV do offer a few but limited learning experiences for some groups of learners.
  • Overall, technical issues appear to be less of a problem than market-orientated issues. Many technical solutions are available but are not being rolled out as the market conditions are not favourable or appropriate, sustainable business models have yet to be developed.
  • The education and training business generally has little control of these developments and is dependent upon a relatively small number of players in the interactive digital TV industry and the barriers to entry are high compared to utilising the web.
  • There is potentially a big market for leisure learning services through personalised TV. There are signs that this market is now beginning to develop in North America and may start to develop in some parts of Europe by the end of 2003.
  • It is likely that content on-demand and “personal” delivery services will also develop focused on specialist target audiences aimed at up-skilling professionals. These might involve public-private partnerships.
  • Within the e-government agenda there is a drive to make local and national government services accessible over multiple platforms including interactive TV.

• The key to all of these skills is socialisation and self-confidence, the lack of which lie at the heart of the social exclusion problem. People who have a low level of skill or a narrow skills base must negotiate to survive; but deprived people are poor supplicants. They must also collaborate to survive, a key policy question is whether people with narrow skills bases can collaborate to create multimodal, multimedia content. (Kevin Carey63).

• The private nature and flexibility of e-learning, any time, any place any pace learning appeals to many new learners, particular those in target groups and helps to overcome the digital divide.
• e-Learning, involves the use of new multimedia technologies and the Internet to improve the quality of learning. It offers opportunities to enrich
learning and for some it can greatly improve the extent of learning. Learning can take place at the learners own pace and can involve live, online interactions / support. Concerns include possible lack of support if e-learning is seen as a way to save money and the fact that such opportunities are only available to those who are ICT skilled. Further information and resources are available.64

- The DfES produced a consultation paper, ‘Towards a Unified e-Learning Strategy’ in July 2003 and a consultation process is due to close this January (2004). The aim of the paper is to embed e-learning in all aspects of teaching and learning. International benchmarking studies have shown that the UK’s main barrier to successful e-learning is low uptake and usage rather than infrastructure.65

- NIACE are investigating the potential of online learning to overcome social exclusion through a comparison of different approaches. It will consider access (comparing home and public access), ICT competency, design of the online course, different models of online learning delivery, retention, learning skills and learning support (e.g. tutors, learning centre staff and family and friends).66

**Recommendations on Capability – ICT, skills and employability**

- Identify models of learning, how people learn, and where appropriate use ICT to map learning activities to accreditation, don’t use accreditation to create learning programs. A focus on Level 2 skills can obscure individual learning styles and community learning (Fred Garnett, BECTA)

- ICT training should concentrate on face-to-face delivery and personal contact and support. Where ICT is used to deliver training, the focus should be on practical work uses and be task-oriented. Examples of this are using the Internet for research and job searching.67

- ICT can be used as a hook for work on literacy, language and numeracy skills and as a way of enhancing learning experiences. It is not currently used widely enough in these contexts.68 Broadband deployment is likely to be important here since it is those who experience literacy challenges in the Internet’s text-based environment who may make heavy demand on streamed video/broadband services.69

- ICT training must relate to people’s/communities’ reasons for wanting to learn in the first place; courses must therefore be customisable so that ICT skills can be embedded into something of real use and relevance to the needs of the learners.

- People can be overwhelmed by the amount of information thrown up by a search engine and the task of finding a good source for the specific information needed.70 Searching and analysing skills need to be taught. Investment in natural language search tools which can help users refine their search criteria in a more intuitive way, would also help.

- The DfES Cybrarian project aims to assist in decreasing the digital divide by facilitating access to the Internet and to learning opportunities for those who currently do not, or cannot, use the Internet because of a lack of skills or confidence or because of physical or cognitive impairments. The training and marketing strategies for this project needs to be extensive and in
partnership with community and voluntary sector organisations.

Recommendations following the government’s Skills Strategy White Paper:

- Support to RDA’s on the development of their Frameworks for Regional Employment and Skills Action (FRESAs) should be underpinned by information on good practice from those specialising in particular communities of interest, such as AbilityNet in their focus on engaging disabled people with ICT.
- Third sector organisations are supporting the skills agenda and digital inclusion through their introduction of ICT to socially excluded people. Their approaches may not fit to any prescribed methodology, but need to be valued, since they are often the first step back to learning.
- Digital inclusion includes a skills agenda, but is wider than that, having relevance to service delivery, social inclusion, community development, culture, democratic participation, etc. A strategy for digital inclusion is needed which interweaves with the skills strategy.
- Third sector organisations also help reach harder to reach people with these aspects of digital inclusion, beyond the skills agenda. Funding based on one particular agenda are not logical since they ignore the reality of work on the ground, in particular the need to find a safe environment and an initial “hook”. “First step” opportunities must have the widest possible interpretation to allow for the experts to draw down funds for reaching out.
- It is important to support community based UK online centres, which have demonstrated their ability to reach out to harder to reach communities with new technologies. While quality standards may vary, we note the importance of centres that have done “first steps” work, not just from a skills perspective, but also in developing community, etc.

- Employers should encourage the development of ICT skills as a basic skill and as part of their corporate responsibility. Although the Government’s “Skills for Life” programme has a stream aimed at employers, it would be more helpful if ICT training had a higher profile.

1.2.3 Content – community focused Web information

The third ‘C’ is that of content. Even if connection and capability were fully addressed, there would be no point in everyone having unlimited access, if there was no compelling, useful and relevant content.

- Research indicates that there is still a shortage of content to motivate disadvantaged groups online. A study by The Children’s Partnership in the US identified content-related barriers to getting disadvantaged communities online. There is a real lack of relevant, particularly local, information and very limited cultural diversity in the content available online. Information is still overwhelmingly in English and tends to be designed for an audience with average or advanced literacy skills.
- Of 1000 relevant websites, The Children’s Partnership found that:
  - 6% or less of on-line content was the local information users want and need
• 1% of on-line content was developed for adults with limited literacy
• 1% of on-line content was created in a culturally relevant manner, and
• 2% of sites made information available in a variety of languages.
• These types of information were often what low income and under-
  served users were looking for to meet their daily needs.

• The relationship with community information, which is local and specific, is a key issue. Government can only provide part of the picture, therefore it is important that local community information is generated, maintained and fed up to other gateway sites.
• The development of user-generated content has provided very successful particularly in the field of developing stories and poems, which can be downloaded. This has been very successful in including disadvantaged groups.
• The government has funded Community Grids for Learning (CGfLs) through NOF-CALL. As they have developed, CGfLs have become very diverse in character, with a wide range of forms of implementation. Most of them focus on providing community information as a starting point. This can be as a simple diary or calendar or as an integrating portal, like the North Lincolnshire Grid. More ambitious grids, like Brixton on-line or myEdinburgh, are ‘second-tier’ hosting resources that provide tools that local community organisations can use in developing their own resources.
• NOF have also funded a range of websites under nof-digitise.
• Changes in the nature of society have meant that most information is generated by mass media with very little local content or local generation. ICT can be a tool in changing this.
• The Community Media Association (CMA) include community based radio, television and Internet projects. The CMA supports people to establish and develop local media enterprises for community-based creative and cultural expression, community development, information and entertainment. The CMA provides information, advice, training and consultancy. It produces publications and organises events, and it represents the interests of community media to Government, regulators, industry and the voluntary sector. The CMA has the following to say about the information age:
  • Communication is the means by which people create their identity. It underlies our sense of community and our sense of difference. At the heart of the knowledge economy are changing patterns of communication, which change our self-perception and the communities to which we belong.
  • The challenge of the communications revolution is to harness the tools of the Information Age for the benefit of people and of communities. Community Media have an essential role to play in meeting that challenge.

• Language is an issue, with the dominance of English, Unicode allows any language and characters to be displayed as real text and is used in the multi-lingual project Multikulti. In London schools, 307 languages are spoken.
• As part of a project to develop a web content management system that can be freely adopted by any local authority APLAWS (Accessible and Personalised Local Authority Web Sites) have identified a range of considerations for publishing multilingual content on the web.

• Age Concern runs a chat site called the Baby Boomer Bistro which has proved to be successful at attracting older people new to the Internet. People coping with health issues, social exclusion, loneliness - or simply those who enjoy meeting new people of similar age and interests - regularly access the site in order to share conversation. In addition, more serious themed and hosted events provide an important way for older people to participate in discussions with politicians, policy makers and professionals.

• Homelessness Information Pages, or HIP, is an initiative of the Glasgow Homelessness Network. The website aims to give homeless people advice on their rights, answer their questions, signpost them towards relevant help, and show them what help and support is available.

• The Big Issue lists site that has free and paid for information on issues such as employment, health, moving home and personal situations.

• A website aimed at tackling the problem of school bullying won the Best Digital Inclusion category in the 2003 eWell-Being Awards. It has been visited by more than 325,000 people in four years.

• The Children’s Partnership in the USA is creating a ‘Community Contentbank’ to stimulate content development within deprived communities. Contentbank.org is envisioned as a community space that will provide an ongoing process for users to develop materials themselves, alongside experts who help quantify and analyse what users need and want.

• Manchester Community information Network, MCIN works in communities to develop electronic content. This content creation raises awareness by people on the use of ICT and allows them to improve their ICT skill levels, by doing things that they enjoy rather than simply providing ICT courses.

• MCIN works with communities to develop locally based information and service gateways, which provide a single point of access to information and service from a variety of sources from all sectors. This approach allows for holistic information provision. For example consider housing, people may require general information on housing which could be accessed through government sites, but may also require information on housing associations, council house policy, tenant and resident groups, etc.

• Ethni-city is an MCIN web site for the BME community in Manchester and has a very active steering group made up of different BME communities. Traditionally these communities would not be sitting at the same table.

• Bungay Net is a media and communications service run by local people for local people in a small market town in rural Suffolk.

**Recommendations on Content – community focussed Web information**

• Ensuring relevant content is available for all communities includes training and supporting content creation by the communities themselves.
• Hellawell writing for a Fabian Society report\(^{58}\) (and BECTA\(^{96}\)) studies communities online (including inmates, Muslim Women, homeless people and disadvantaged geographic communities in Stockton and Tees Valley) and makes recommendations including:
  • Fund community organisations, training providers and excluded groups to produce content.
  • Integrate content development into UK online centres’ learner reviews.
  • Integrate life episodes such as leaving care, leaving prison, experiencing mental health problems and being a refugee into the UK online portal.
  • Audit existing multi-media applications that could have wider use for excluded groups and make them available via learndirect. Develop new ones with the private sector.
  • Content creation is not being funded as part of the development for digital inclusion but tends to be funded through European and NRF monies. Therefore it becomes opportunistic rather than strategic. Funding should be given directly for the development of community content from one pot, preferably centrally managed.
  • Also where local community content exists there is no relationship with the main Government web sites who have had a tendency to deal with the national voluntary sector agencies. There needs to be a recognition that local content which is relevant to people lives is what will attract people.
• The role that media companies such as the BBC and Granada Group have played in developing content, including learning materials, is very valuable and should be continued.
• Websites such as UKVillages and netmums\(^{97}\) could play the role suggested by Hellawell\(^{98}\): Councils would have a far better chance of capturing the attention of many customers if they offered their services via a community portal with a lively, local and interactive front end that was not branded ‘Council’, or ‘Health Authority’, or any other public body, but through which all public bodies could stream their information and services into. Information could be presented in life episode format and draw on the complete range of services available in the locality, but accessed via a neutral site.
• There is no government website portal specifically for older people in the United Kingdom, although the UK online portal includes retirement as one of its life episode events and one website\(^{99}\) provides key information from several departments. The Pension Service website\(^{100}\) provides key information on pensions and is developing as a gateway to better signpost pensioners to other services. By way of example see from the USA\(^{101}\) and Canada\(^{102}\). These sites provide a first point of access to all government services and information for older people, designed with their particular needs and interests in mind\(^{103}\). One site would not attract all, but a collation of key services could be useful.
• Monitoring established in 2002 needs to be developed to examine the accessibility of government e-services and websites against accepted best practice (perhaps by following up and developing the NAO’s survey and the work of Age Concern and the RNIB). This should ensure minimum
standards are achieved and provide advice where websites are below standard\textsuperscript{104}.

- Website accessibility is a key issue (affected by the Disability Discrimination Act\textsuperscript{105} see section 2.2) which needs to be addressed in a joined-up, strategic way. For example, it should be an element of all web development courses.

- The Community Media association makes the following recommendations\textsuperscript{106}:
  - Government should ensure that involvement in creative and media-based activities is at the heart of measures to support education and access to information and communication technologies.
  - Government should support the development of a network of Community Media Centres providing neighbourhood access to facilities for community media production, offering training and practical experience and providing access to broadcast and distribution systems.
  - Government should support Community Media Centre development by ensuring affordable access to distribution platforms and appropriate communications policy and regulation.
  - Government should ensure that development of Community Media Centres supported by the UK Online initiative, National Grid for Learning, University for Industry (Ufi) and Scottish Ufi.
  - Government should establish a Community Media Fund whose purpose would include support for start-up and development costs, operating costs including social and creative programming, training and learner support costs, and research into audience and impact.

1.2.4 Confidence and motivation – promoting adoption

The fourth ‘C’ is that of confidence, which together with motivation are the key drivers to reaching those who as yet have failed to discover any personal reason to get online. This area presents the toughest challenge and requires innovative and “out of the box” solutions.

- Sept 2003\textsuperscript{107}: Reasons why people don’t use the Internet: don’t want to/no need or interest (57 %), no Internet connection (44 %), lack knowledge or confidence (39 %), cost too high (15%).
- Projects promoting Internet access show that a “hook” is needed. On showing a non-adopter a topic that they are very interested in, on the Internet, they have signed up to ICT courses within minutes. People are also very concerned that they will look stupid or feel embarrassed.
- iSociety interviewed over 2000 people to capture their attitudes towards ICT: 27% of the population are enthusiasts, 42% are quiet pragmatists and 31% aversives\textsuperscript{108}.
- The Oxford Internet Institute\textsuperscript{109} has conducted an Internet Survey and concluded that while the battle for digital access is being won in Britain, government and business now face a struggle to convince everyone that the Internet is worth using. The survey was designed to learn who does and does not use the Internet and why. A nationally representative random
A sample of 2,030 persons age 14 and up was interviewed face to face between 23 May and 28 June 2003.

- The financial benefits of Internet use have been estimated in a study. In their first year of use, savings through online shopping are not outweighed by costs of being online (there is an estimated net cost of about £70). In later years there is an estimated net saving of about £60). The same study suggested that users save about 3.5 hours a week by using the Internet.

- Foley et al propose an ICT adoption model with a number of stages (awareness, access, skills and training, use, impact). Awareness is the first, since without it the possibility of use is significantly reduced.
  - Awareness of the ways in which ICT can be used in everyday life and work.
  - Awareness of ICT access or availability.
  - Awareness of ICT impact and benefits.

**Recommendations on Confidence and motivation – promoting adoption**

- There is a need to articulate a vision for a digital society (the Canadian government has done this and it reflects in public enthusiasm for ICT).
- Business should experiment with new ways of marketing ICT goods and services to late adopters, particularly in partnership with those promoting digital inclusion.

- A citizen centred case for ICT use needs to be made (David Wilcox-Partnerships Online). One report discusses identifying and enhancing features that users require (such as services, information sources or methods of communication) to ensure that the benefits derived from Internet use by socially excluded groups will be maximised. It is unlikely that all of these features or services will have to be provided by the public sector. Indeed, the public sector could become a catalyst in encouraging community groups or the private sector to better meet the needs of socially excluded groups. Many socially excluded groups expressed disappointment about the usability and assistance provided by online benefits systems. There appears to be considerable room for improvement.
- There is evidence that many people who have issues accessing ICT do not see themselves as disabled, therefore strategies are needed to raise awareness that ICT access is available to everyone, even if they believe they can’t use ICT because of a physical problem (rather than a disability).
- Research is needed to understand the lack of motivation to use ICT by certain groups. The main reason for late adoption is “not interested”. This reason should be un-picked (e.g. does ICT seem too technical or scholarly) so that a route to adoption can be found along the lines of “not interested” to “haven’t tried yet” to “lack of confidence” to “ready to try”.
- Gaming gets young people interested in using and exploring ICT and should be used as a basis for digital inclusion.

- Integrating ICT into other programmes for socially excluded groups (“ICT proofing”) is a way of encouraging use without putting the focus on the technology: ICT is a tool for many life-improving activities.
• The NAO recommends that the Department for Education and Skills/Local authorities should encourage a more proactive approach towards hard-to-reach groups, to promote awareness and encourage use of UK online centres. This should be based on evidence of what works, for example, bringing laptop computers and data projectors to older people in day centres, residential care homes, sheltered housing, etc, to demonstrate the benefits of the Internet\textsuperscript{117}.

1.2.4 Continuity – promoting on-going usage

The final ‘C’ is that of continuity. Suggested by Charles Lowe, this refers to the need for pilots to be rolled-out where proof of concept exists, for on-going funding of projects that work and generally, for routes to continued and increasingly sophisticated use of ICT to be promoted and resourced. Learner progression is important in this aspect, whether progress to qualifications, work, increased confidence or social inclusion.

There is a need to make the business case for digital inclusion work by demonstrating the impact that it has on many aspects of social inclusion and community regeneration. Demonstrating change will help ensure continuity.

In this category, one might also include the issues discussed in Section 1.2.1 regarding the need for ICT equipment in homes to be maintained and problems fixed, etc.
Section Two

Communities of interest

Disadvantaged communities that face social exclusion are also more likely to be digitally excluded. European Commission research from 2002 shows an average of 34.3% for Internet penetration, with this being lower for disadvantaged groups: disabled people 28%, people over fifty-five 12%, people on low income 19%, people of low educational attainment 11%, women 29%, rural areas 29%.

We focus on some specific communities of interest in the next sections, but the list is far from exhaustive.

- Work also needs to be done in reaching people with learning difficulties, asylum seekers and ex-prisoners\(^{118}\).
- Other groups likely to be digitally excluded include travelling communities, those in specific industries, such as trades people, forestry, fishing and agriculture and single parents\(^ {119}\).
- In Ireland, an estimated 68% of all tradespeople / skilled workers (plumbers, electricians, etc) are late adopters. 31% want more IT training and 24% are very or fairly interested in accessing the Internet\(^ {120}\). This group is less likely to be reached through work, since they don’t work for large companies. ICT companies should consider reaching this untapped market, which would also promote digital inclusion.
- Sally McKeown\(^ {121}\): We are involved in numerous projects with prisoners, refugees and asylum seekers. One project at Haslar Holding Centre in Gosport is looking at the use of IT to help with English and also to help with providing access to information. One of the big issues surrounding work in any kind of prison in this country is that they can’t use the Internet. When you talk about prisoners and use of the Internet, everyone seems to think that every prisoner is going to start finding out how to make bombs. We’ve had a lot of work in prisons over a number of years and we keep coming up against similar perceptions. People in prisons can do Open University courses, they can extend their intellectual horizons – as long as they don’t use the Internet to do so.

2.1 Older people

- Over the next 50 years the age pyramid of the population will be turned upside down. The 2001 census revealed that people aged 60 and over already outnumber children under16 in the UK for the first time.
- There are 19m people over 50 in the UK and this is set to rise to 22m in 2026\(^ {122}\).
- Older people tend to have greater need for public services (health, social care, pensions for example) than younger people. The risk is that as services continue to develop around technologies, older people will be excluded further in society. 50% of social security expenditure is spent on
those aged 65 or over and some 40% of NHS expenditure\textsuperscript{123}.

- 39\% of those aged 55 to 64 and 16\% of those aged 65 and over have used the Internet in the last three months (Sept 2003)\textsuperscript{124}.
- Age Concern research shows that of the 34\% of people 55 years and over who are computer users, 66\% feel it has had a positive impact on their lives\textsuperscript{125}; also\textsuperscript{126} Older people face particular barriers to going online. For example 2.8m are 'economically inactive'; around 1m want a job but there is a mismatch between skills available and needed as well as ageism in the workplace.\textsuperscript{127} Older people tend to have fewer qualifications than younger people but more skills\textsuperscript{128}.
- Older people may also face the following barriers to going online: insufficient income and a perception that Internet access is costly; difficulties with vision or physical dexterity; difficulties with mobility, lack of suitable transport or rural isolation (training facilities can be inappropriate or inaccessible) and the perception that if they did not benefit from IT education at school or use IT at work, that it is not relevant to them (Gill Adams, Hairnet\textsuperscript{129}).
- ICTs can repair some of the social 'despair', which can blight old-age – in scattered communities/families, relationships can be maintained and mediated through technology. ICT can also provide access to information, including about government services and benefits, particularly benefiting people with limited mobility or poor transport links; increase older people’s capacity to take part in citizenship activities; provide a gateway to life long learning, employment and a greater involvement in voluntary or free time activities; provide an alternative, in some cases a more convenient, way of shopping for products and services; can enable older people to live independently in their own homes for longer and can also be a social activity – giving new life to existing relationships and creating new contacts and friendships.

- Over 100 Age Concern\textsuperscript{130} venues provide computer and Internet ‘taster’ sessions and computer clubs to thousands of older people across the country every year, with the help of hundreds of dedicated volunteers. Age Concern’s approach recognises that older people often prefer to learn in a relaxed, non-confrontational environment, often with training by people of their own age who do not make any assumptions about prior knowledge or experience.
  - Age Concern has established four mobile computer training centres, incorporating features such as easy wheelchair access and larger keyboards / mice. Trainers travel with the buses to guide training sessions and provide assistance for people who simply "drop-in" to sample the technology. Older people’s carers are especially welcome and a free respite service, enabling carers to take part in the training, is available.
  - 27 Mobile Internet Taster Session areas have been established, providing computer and Internet training for older people in day centres, residential care homes and sheltered housing. Once the training has come to an end a computer is left at each of 12 chosen venues, so that
older people can continue to explore the Internet and benefit from the training.

- Over 30,000 copies of Age Concern’s free Internet guides are being used by older learners, including 7,000 copies of Punjabi and Urdu Internet beginners guides and a CD version for self-paced interactive tutorials.

- Hairnet is a social business creating employment opportunities for computer-literate over-50s, who each create their own micro-social business. Hairnet does not use volunteers. It has created a 'Grey army' of professionals whose IT/teaching/mentoring and project management skills, have been found to be recyclable\textsuperscript{131}.

- Hairnet has created a virtuous circle: creating employment opportunities for over-50s who are already computer literate, to pass on these skills to others in their community – in a responsive, learner-led fashion. 150 licensed Hairnet trainers throughout the UK (most over 50) have introduced about 9,000 new learners (most over 50) to computing/Internet/email.

- Hairnet Trainers train independent, mostly older, people in their own homes on their own computers who may have found syllabus-led training and/or classroom training and/or training on unfamiliar kit and/or training outside their home environment, not suitable. These students pay a capped fee per hour to the trainer direct. They also train older people in supported housing communal rooms, by devising and implementing IT training strategies, from procurement and set up of kit through to exit strategy via a computer club. This is usually free to end-user and financed by a Registered Social Landlord. Finally trainers train scheme managers and others who work in Supported Housing.

- Sandwell silversurfers is a project to create an on-line community that will connect older people throughout the six towns of Sandwell in the West Midlands\textsuperscript{132}.

**Recommendations – Older People**

- Partnerships with business and government can be successful in reaching older people with technology, but to achieve this to any scale, uptake targets must be set, with funding streams available to trusted intermediaries.

- Taster sessions and training should be built around equipment communally or individually available. Strategies should be built in partnership with mainstream business where possible, e.g. an equipment supplier would have a business partnership with organisations such as AbilityNet, Age Concern or Hairnet.

- Business needs to do better designing usable products and in marketing to older people and will lose market share if it does not promote low cost reliable options designed with the needs of older people in mind.

- Emphasis on 'making things simple' e.g. touch button kiosks in public places, can be a mistake. There should be more trust in the capacity/desire of older people to learn and make choices. Giving people ownership of equipment (whether communally or individually) and the means to learn is
better than providing more and more over-simplistic equipment with no training/awareness raising.

- Individual learning accounts were useful ways for older people to access training by organisations they were comfortable with. Something similar is needed and projects reaching older people with ICT need revenue funding more than capital funding. Many grants simply do not provide sufficient revenue funding for the ‘people resource’ to deliver appropriate low cost training for example. The emphasis should not be on “new” projects.
- Very little funding, for example in the form of subsidies, has been made available to individuals to enable them to purchase their own hardware. We would welcome such a move by government, for example linking it to the completion of a training course with recognised providers such as Age Concern and Hairnet.

2.2 Disabled people

- AbilityNet\textsuperscript{133} is a unique pan disability national charity, specialising in all aspects of accessible IT. Its aim is to ensure universal access to appropriate IT. Services provided include assessments, 1:1 training and ongoing support, professional training, consultancy, accessible web audits and design, accessible IT kits.
- AbilityNet have gathered the following information from numerous sources to demonstrate the economic benefits of supporting the use of ICT by disabled people:
  - Estimated 8.6 million people in UK have a disability.
  - 4.9 million of working age and 3.3 million in work.
  - 1 in 5 people become disabled when they are at work.
  - 4.1 in 6 chance that once a worker becomes disabled they will lose their job.
  - An estimated 3\% of the working population leaves work through a disability each year.
  - Estimated 5 million are IT disabled: with upper limb mobility problems, visual, other sensory or learning impairments.
  - 50\% of the current workforce use a computer.
  - 36\% of companies claim they have a skills shortage.
  - The cost of losing an employee on medical grounds has been estimated by one employer at £160,000.
  - Research in progress by City University (for Joseph Rowntree Foundation) focuses on the social implications of Internet provision of goods and services for disabled people.
- A combination of lack of awareness that disability does not prevent ICT use, lack of knowledge of the independence ICT can deliver and lack of access to funding for home computing leads to lack of demand from the disabled community. It should also be said that while some disabled people need particular adaptive technology, the majority don’t and digital exclusion is manifest because of the social exclusion a disabled person can face.
The Disability Discrimination Act DDA\textsuperscript{134}, has implications for digital inclusion and disabled people. Part 2 of the DDA protects disabled people from discrimination by employers by making it unlawful for an employer to treat a disabled person less favourably than he would treat other people. It requires employers to make reasonable adjustments to arrangements which place a disabled person at a substantial disadvantage in comparison with non-disabled persons, either as a jobseeker or employee. Reasonable adjustments might include changes to IT equipment, or an internal Intranet, to facilitate access for disabled employees.

Part 3 of the DDA applies to any organisation which provides goods, facilities and services to the public. Its provisions mean that it is unlawful to discriminate against disabled people by refusing them service, providing service on worse terms or providing a lower standard of service. It also requires service providers to make reasonable adjustments to the way they provide goods and services to make them accessible to disabled people. This includes duties to change policies, practices and procedures and to provide an auxiliary aid or service if this would enable (or make it easier for) disabled people to make use of services which would otherwise be impossible or unreasonably difficult for them to access.

Although there is as yet no case-law on this question, the provision of information via a web-site should be presumed to be a provision of a service within the meaning of the wording of this section of the DDA. While an anticipatory duty to make adjustments to the provision of a service via a website should be assumed, it is not an absolute one. Factors which would be considered when assessing what might be reasonable include the costs and practicality of any adjustments that are needed.

There is an estimated 15\% of people with the cluster of syndromes which spans chronic physical disability, arthritis, shaking hands and clumsiness and this is heavily skewed to people above 60. The figure for people with a visual problem is approximately half of this figure and many of them have a problem severe enough to impair keyboard accuracy, particularly with a qwerty interface\textsuperscript{135}.

Many data selection devices such as radio tuners are now only operated through visually accessible continuous tuning. This has meant that the first generation of digital radios is inaccessible to blind people, a serious regression in accessibility (Kevin Carey, HumanITy\textsuperscript{136}).

There is relatively slow progress in and implementation of “voice in” applications to reduce dependency on manual input interfaces. Voice input is still problematic and has been surprisingly slow is in lexicographic ranges defined by the information provider, e.g. travel booking, health informatics and electronic programme guides for digital television (Kevin Carey, HumanITy\textsuperscript{137}).

“My Computer My Way” is an AbilityNet tool, supported by Microsoft, which teaches individuals how to adjust their computer settings to make usage easier\textsuperscript{138}.

DisabledGO is a website which provides very detailed access information of relevance to hearing impaired, mobility impaired and vision impaired

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\textsuperscript{134} Disability discrimination act

\textsuperscript{135} Adaptive technology issues

\textsuperscript{136} Good practice
people, all carers, and those who are temporarily incapacitated, elderly and infirm as well as parents with pushchairs. Reveal is a database housing material in accessible formats for blind people. It is supported by the Royal National Institute for the Blind and the National Library of the Blind and currently holds more than one hundred thousand titles.

Ability magazine, published by the BCS Disability Group, is the only national publication focusing on IT for disabled people. Sponsored by VNU Business Publications, Ford and Ufi, the publication is available as a printed magazine, through a website and as an e-book. It exists to promote general awareness of the unique enabling role of information technology in the context of disability.

The Leonard Cheshire Workability project aims to break down barriers that can exist for disabled people in the search for work. It aims to provide disabled people with the skills and support needed to gain access to training and employment. Disabled adults are provided with computer equipment in their own homes, training them in new skills and help in the job search process. There are now over 3,000 disabled clients with computers supplied under the programme.

In South Wales, the local Partnership works with the Shaw Trust in Neath to ensure that specialist support and equipment is available to disabled learners to improve their independent living and vocational skills.

An IT initiative for Asian disabled people has recently been opened in North West London.

In a recent survey of 931 UK online centres, 79% provided wheelchair access. This is higher if you take out the private sector i.e. “branded” centres where only 53% have wheelchair access.

Information from the end of September 2002 (covering 565 of the 1,589 CMF funded UK online centres) showed that 10,036 users, around 9% of the total number of users, considered themselves to be disabled. Disabled learners amount to around 17% of all learndirect learners in 2002/03 (around 46,000 learners).

A project is currently underway to provide a kit consisting of basic adaptive technologies to enable UK online centres to provide a better service for disabled users. Each kit costs £2000, the budget is sufficient for 711 kits.

In cases where, for whatever reason, learndirect centres are unable to meet the needs of individual learners, they are asked to contact Learner Services. Calls are then dealt with directly, or, if they are unable to answer the enquiry, it is passed to the support helpline operated by AbilityNet.

In early 2002 Ufi commissioned external research to look specifically at the adequacy of Ufi’s services for disabled learners. Ufi also commissioned United Response to look at all the services offered by Ufi/learndirect and to advise on the actions that would be required to ensure compliance with the DDA.

Ufi is taking numerous actions to improve the offer to disabled people, including:
• Providing a disability specific help-line for Hubs, learning centres and individual learners available through the learndirect help-line (provided by AbilityNet).
• AbilityNet also developed case studies of best practice and produce guidance for hubs and learning centres on effective assessment of learners’ needs.
• Developing guidance materials for Hubs and Learning Centres to consider physical accessibility issues.
• Ufi is looking to develop further projects to test out new approaches to meeting the needs of disabled learners. Ufi has obtained funding from European Social Funds to provide Disability Champions in part to encourage disabled users to access learndirect centres and in part to ensure learndirect centres can meet their needs as well as a Wireless Outreach Network bid to test out web-cam learner and tutorial support for deaf learners.

Recommendations – Disabled People
• The government’s own e-strategy benchmarking should include a disability measure. Goals focused on social deprivation and on learning/employment need to be examined as they can make disabled people a low priority, since their needs can be more complex and may involve additional funding.

• Health, social service and care professionals delivering at a community level are working to an ‘assistive technology’ agenda prioritising equipment from wheelchairs to continence aids with assistive technology somewhere in the middle. ICT is not seen as enabling in the broader sense, but as one of a range of aids. Digital inclusion could be on their agenda, but isn’t.

• The government should support and fund the voluntary sector to really raise awareness through media campaigning and create demand from the people who will stand to benefit. At the same time, a grouping from this sector could lobby for subsidised funding of ICT for disabled people.
• Employers should consider the economic case for ensuring all staff (whether they identify as disabled or not) know how to make adjustments to their computers and are aware that adaptive technology exists.

• Two of the fundamental reasons for user interface (UI) chaos are the refusal to accept that standardisation does not affect competitive advantage and the cost of telephone tariffs militating against server side applications. If information provided through television, radio, hi-fi, telephones, etc, are all merged and supplied, together with tools, through server side applications, users will be able to cut their user interface purchases and simply travel with one UI and operate another at home and a third at the office. This, in turn, will free funds for people to buy modularised, customised UIs that suit their physical needs. When politicians discuss ICT and social exclusion they do so in terms of human inadequacy to deal with a digital information system as if the human were at fault. Given the poor design of many user interfaces and poor information and tools design, it would be fairer to talk
about a functional gap between people and information systems (Kevin Carey, HumanITy\textsuperscript{155}).

- There is a list of 13 sets of software tools which public sector systems lack and which either exist fully functionally or are in development to such an extent that the public sector should be seriously concerned with them (HumanITy\textsuperscript{154}) for more information.

- Kevin Carey\textsuperscript{155} argues that people with learning difficulties can benefit from multimedia tools and that being able to access and understand information is more important than the process by which you learn.

- Sally McKeown\textsuperscript{156}: Without adequate training you can be left with a child with communication difficulties, for example, who has ownership of quite expensive, complex equipment, but is not able to use the technology. We don’t at present provide computer training to learning support assistants in schools and that is another big barrier for disabled children.

2.3 Black and minority ethnic communities

- The Department for Education and Skills has published research\textsuperscript{157} undertaken jointly by CRER, the Institute for Employment Research and the Centre for Ethnicity and Racism Studies at the University of Leeds. The project was concerned with how people from minority ethnic groups living in disadvantaged areas of the UK access and use ICT. It involved both a national household questionnaire survey and detailed local studies involving qualitative interviews and focus groups conducted in Handsworth, Wolverhampton, Bradford and Leeds. The research found a variation in ICT use according to ethnicity, with the averages for ownership being 72% mobile phones, 43% digital TV’s and 38% PCs. The main reasons for not using the Internet were lack of skills (48%) and lack of interest 41%.

- BME populations tend to show a higher uptake of the Internet compared to the expected rate based on wealth\textsuperscript{158}. This is thought to be because the motivation is higher, since relatives overseas can be communicated with cheaply.

- The skills strategy white paper\textsuperscript{159} notes the skills differences amongst different black and ethnic minority groups, where some groups do much better than average and others far worse.

- Naturally, many of the ways of reaching black and minority ethnic (BME) communities with technology are not different to reaching any generic community e.g. holistic, flexible and localised ICT provision\textsuperscript{160}. Nine examples of good practice are discussed in a report\textsuperscript{161} which concluded that many projects have good outcomes but are not able to communicate these sufficiently to funders.

- Language is an issue, with the dominance of English. Unicode allows any language and characters to be displayed as real text\textsuperscript{162} and is used in the multi-lingual project Multikulti\textsuperscript{163}.

- Black Information Link (BLINK) is an independent, community-interactive site for justice, equality, anti-racism and social inclusion\textsuperscript{164}.
• Moving Here\textsuperscript{165} is a website which explores, records and illustrates why people came to England over the last 200 years, and what their experiences were and continue to be. The site mainly looks at the Caribbean, Irish, Jewish and South Asian communities but is growing all the time.

**Recommendations- Black and minority ethnic communities**
• A report on this subject\textsuperscript{166} following on from a gap recognised by PAT \textsuperscript{167} made recommendations including the following:
  • Support functions are needed, such as language support, childcare and services, which are culturally sensitive and ethnically diverse.
  • Increase access to software in minority languages.
  • Use the term “project champions” rather than “community champions”.
  • Map BME projects and help establish networks and partnerships to develop joint funding applications, exchange good practice and facilitate capacity building.
  • ICT learning opportunities need to make available women only times to be accessible to specific BME groups.
• A further report\textsuperscript{168} recommends combining ICT with English language classes, finding a relevant link to an individual's life and supporting the joining-up of ICT projects/provision.

2.4 Disadvantaged Young People
• Schools are required to achieve child:computer ratios of 8:1 (Primary Schools) and 5:1 (Secondary Schools) by 2004. After that there are no plans to increase personal access levels further (Valerie Thompson, e-Learning Foundation\textsuperscript{169}).
• Schools have traditionally invested in fixed ICT equipment, notably desktop computers in IT suites, partly because of the historical difference in price between a PC and a laptop. However, the price of portable computing has dropped dramatically over the past two years and Government statistics\textsuperscript{170} show that the number of laptops in schools doubled from 2001 to 2002.
• Announcements by Charles Clarke in 2003 involved:
  • Learning content - £280m more for e-learning credits.
  • Teacher provision - £195m more laptops for teachers.
  • Broadband connectivity - £287m more to allow all schools to have broadband capability by 2006.
• The majority of ICT in Schools, and e-learning programmes affecting schoolchildren, focus almost exclusively on the classroom. Yet we know from the recent Impact Research published by BECTA\textsuperscript{171} that access to ICT at home has a bigger impact on educational outcomes than access at school!
• Government figures\textsuperscript{172} estimate that 80\% of UK households with children at school have computers, a very steep growth rate in recent years. However the 20\% of those that don’t, 1,416,360 households in the UK, equating to more than three million school aged children, will be from the most deprived families, with a high proportion from ethnic minorities and households where there is no wage earner.
• This source of disadvantage is not helped by the fact that only about 1 in 20 schools make their ICT resources available after school\textsuperscript{173} and then often only for an hour or so. Across the country, valuable school ICT resources are locked up, unused, after school, at weekends, and during holidays.

• While most of those children who are on the wrong side of the digital divide cannot look to their school to help them access ICT in the way that better off children can, community access is often barred to children (e.g. lemdirect centres), not available when needed (e.g. library provision in rural communities) or too expensive (e.g. cyber cafes) (Valerie Thompson, e-Learning Foundation\textsuperscript{174}.

• The assumption that a computer at home is automatically available to a child (particularly an issue when the computer is for an adult to conduct their work at home, or where there are several children competing for the same machine) is wrong (Valerie Thompson, e-Learning Foundation\textsuperscript{175}).

• Leading figures tend to ask for a show of hands of who has a computer at home from a classroom of children. Inevitably those without one will not wish to be embarrassed, so will put their hand up so as to be like the rest (Valerie Thompson, e-Learning Foundation\textsuperscript{176}).

• E-Government community initiatives exclude the role that schools play, or could play, in the community. This results in lost opportunities to target adults with specific ICT and learning needs linked to supporting their children’s learning – often a practical entry point into dealing with their own learning needs (Valerie Thompson, e-Learning Foundation\textsuperscript{177}).

• Children living in homes with access to computers are enjoying a significant educational advantage over those who don’t. Very few schools are addressing this situation, very few have the means to do so even if they wished to. The e-learning Foundation\textsuperscript{85} was set up in 2001 with a mission that every child in this country should have access to a computer when and where they need one within 5 years. It is working through a national network of local e-Learning Foundations to raise the funds in a sustainable way to make this possible. Funds come from parents (the usual donation is £5 a week through a 3-year covenant that attracts 28\% Gift Aid), Government, company sources (donors have included Microsoft, EDS, Barclays, Toshiba) and personal donations.

• The e-learning Foundation, and its network of over 30 local e-Learning Foundations, is also a key force in driving the agenda of personal and home access for schoolchildren. Underpinning their work is the commitment by parents, across the country, to contribute on a regular basis, whether it is at £5 / month or / week.

• While some LEAs play a pivotal role in the development of local foundations and fundraising at school levels (such as Lambeth, Essex and York), others are unable to apply resources, leaving schools to take up individual initiatives.

• e-Learning Foundation promotes the following key principles:
  • Equity of access; access by any child should not relate in any way to whether a parent can or will contribute.
  • Involvement by parents and other local stakeholders; without their sustained support schools are left to resort to serial one-off fundraising activities that have to be repeated time and time again.

e-Learning foundations
- Ensuring that portable ICT resources will be made available outside school hours, and for home use, to respond to low home computer ownership in areas of disadvantage (or that alternatives to home access are implemented where it is not safe or appropriate to carry laptops home).
- While many schools may be uncomfortable about asking parents to contribute, many agree that this approach is the best solution to their problem of how to increase personal access for students.
- Certain young people are particularly vulnerable and ICT can help to support and develop their quality of life\(^{178}\):
  - Young carers who need to be at home to care for a sick relative could keep up with education through e-learning.
  - Children in care can use ICT as a process of counteracting institutionalisation.
  - Young people in prison might catch up on basic skills.
  - Truanting / excluded pupils can sometimes be re-engaged through computerised learning and activities.
  - Young people with physical and learning difficulties can benefit enormously from ICT.
- The NCH National Childrens charity\(^{179}\) is building on its safety work around young people and technology in a programme designed to bring together the ICT Industry, voluntary organisations and government, to ensure equal and safe access to ICT, for all children regardless of their advantage. The programme aims to: identify best practice and relevant standards from implementation of five beacon projects; disseminate experience and guidelines about practical access to ICT, to all voluntary and statutory authorities working with children and influence government to provide funding and support for equal access to ICT for identified groups of marginalised children in the UK.
- Parents Online\(^{180}\) is an interactive government information website for Parents, which informs them of the benefits of Internet access for young people whilst providing practical advice on guarding against dangers.

### Recommendations - Disadvantaged Young People

- The Treasury should provide special tax breaks for contributions to school e-learning funds through their local charity. Future ICT in Schools Division policies should recognise the importance of home access as part of the “extended classroom”, with a new emphasis on portable computing.
- The ICT industry should continue the development of alternatives to the business laptop for schools. A school device that is to be taken home needs to be cheap (<£500), light (<1 kg), robust, have built-in wireless and can easily plug into peripherals such as digital cameras. Government should work with industry to reach this, through central procurement and undertake that every young person in school has such a laptop.
- The DfES should build on existing infrastructure (for example, there are over 140 learndirect centres in schools which cannot currently be accessed by young people) to enable access to e-learning to all age groups.
• NCH National Childrens charity, which has established a Children and Technology unit, recommends the following:\textsuperscript{181} A national strategy is needed that controls the risks of IT for vulnerable and socially excluded children, while exploiting its opportunities – at home, as well as in school. Such a strategy should be viewed as essential to achieving the goal of ending child poverty. A cross-departmental unit needs to ensure that responsibility is not blurred and that policy is co-ordinated. Access to IT needs to be integrated into existing programmes. Every disadvantaged estate and area in the country should have a project for children and young people, which include a staffed Internet café. Fosters Carers need to be supported to have home ICT access. All children in residential settings should have safe but appropriate access to IT.

2.5 Women

• Women are delivering services in their communities and as part of the Voluntary and Community Sector they are being encouraged to get online to be able to deliver Government services (Sue Webb, Women Connect\textsuperscript{182}).
• Community Development initiatives have supported Women’s Organisations in developing an ICT awareness and strategy (Women Connect of Community Development Foundation)\textsuperscript{183, 184, 185}.
• The Women’s Electronic Village Hall is a long established, pioneering women’s ICT project.\textsuperscript{186}

Recommendations - Women

• For women’s organisations to deliver services there is a need to focus on capacity building and embedding technology in organisations. Current focus on training and skills development will not assist women’s organisations, which are under-resourced, with a very low capacity and disproportionate levels of confusion and fear.
• Women’s organisations and networks have a particular need to address privacy and security.
• ICT companies could support women’s organisations by identifying needs around service delivery (e.g. Women’s Centre’s, Rape Crisis Centres, BME Women’s Organisations, Networks) and providing reduced rates for ICT services.
• The focus on diversity as a whole can mean that women’s issues are not included. Policy and consultation needs to include women’s voices, with lessons learnt from overseas, e.g. Women’s International Networks are addressing the social divide that is replicated online.
• Initiatives are needed to address pornography and negative images of women on the Internet.
Section Three

Geographic Communities

The benefits of online communities are not yet proven, though many believe ICT can play a role in developing and regenerating communities. Malcolm Forbes of Brixton On-line explains examples are “Patchy and in the main down to the activities of social entrepreneurial individuals of mainly middle class communities.”

He goes on to say, “There is still a long way to go in developing similar benefits for the residents on the vast housing estates around Brixton for example. A start has been made in the development of local ICT centres and with some of the training programmes funded by government that are making an impact on some of these housing estates. I think it is still too early to say definitively that there has been a positive impact on the whole community in areas of social deprivation.” Forbes identifies three broad criteria to judge whether an online community initiative is successful:

1. A successful initiative would be one that is known about and held in high regard by the majority of the people in the local community.
2. A significant number of those people would use or have benefited from the initiative.
3. The initiative would be run by people in the local community and will have stimulated some of them to go on to other things.

Whilst rural communities can be disadvantaged in the same way as an urban communities (and are therefore included in the section on disadvantaged communities) there is also a specific issue of broadband for rural areas which we cover separately.

3.1 Disadvantaged Communities

ICT and regeneration have been examined with the question asked “How can ICT help the regeneration process?”:

- The word “help” is very important in this question. ICT should always be seen as a tool, a facilitator or intrinsic part of a product, but never as the solution. It should be the means to an end. Using ICT can help to produce, directly or indirectly, a range of benefits for both individuals and communities. The Government’s National Strategy for Neighbourhood Renewal, sets out one of its major principles as “Reviving local economies”, and a key idea to be used in fulfilling this objective is “improving IT in deprived neighbourhoods”.
- Amongst the potential benefits of using ICT, highlighted by the report, are:
  - making information and communication more accessible
  - building confidence
  - developing new skills or updating existing ones
  - improving the image of an area
helping groups suffering particular disadvantage, such as disabled
improving the delivery of goods and services;
creating new businesses and boosting business activity;
overcoming social or geographical isolation, and
strengthening networks within local communities.

In addition to these benefits, however, it is also important to see how ICT
can integrate into wider regeneration policies and activities. A traditional
view is that an increase in an individual’s skills improves their employment
prospects. Not only does the chance of getting a job improve but
possibilities of advancement within employment increase. As individuals
benefit from higher disposable incomes, and become financially more self-
sufficient, then so their deprivation and exclusion decrease.

A collection of essays on transforming regional economies and
communities with information technology has been recently published with a useful overview essay by Claire Shearman.

Case studies have been developed by a number of projects illustrating how
new users and community groups enjoy, struggle and benefit from ICT.

ICT can contribute to wide social objectives, such as a young people’s ICT project reducing the fear of crime, sometimes this is purposeful, other times not. ICT therefore needs to be embedded in neighbourhood renewal projects, with diffused outcomes allowed.

The important thing within any community building strategy around ICT is
to understand the seduction of IT (for example, it will often engage traditionally 'hard-to-engage' older men and allow them a vocabulary for community exchange). After the honeymoon, though, comes boredom or disenchantment – the 'exit strategy' for any intervention therefore needs thinking about carefully. Hairnet has successfully set up Computer Clubs following its ICT projects in sheltered housing and has found they need professional facilitation for at least a year (although only three hours a month).

Community Development (CD) is powerful when combined with ICT. CD aims to give people in disadvantaged areas or communities of interest more control over their lives. It builds the confidence, capacity and sustainable networks in communities that are essential to effectiveness and widespread participation. It supports communities to develop their own activities, services and assets, to respond to opportunities from outside and engage with the agencies and policy makers that affect their lives. CD also works with professionals and policy makers to enhance capacity to engage effectively with communities and to change ways that prevent people from participating effectively.

The Citizens Online / BT Everybody Online projects are examples of good practice using a community development focus. Each project is co-ordinated by a locally based project officer. The role of the project officer is to foster a network of local facilities, programmes, partners and volunteers. Using various forms of communication, the project officer works with the local community to understand their needs and to create a co-ordinated local action plan to overcome the barriers to increased ICT and Internet access.
SustainIT\textsuperscript{195} has information resources for communities establishing ICT projects.

Partnerships Online\textsuperscript{196} have launched a site Making the Net Work\textsuperscript{197} which includes guidance on developing local learning access centres, a toolkit for creating online communities and best practice from the US.

The DfES Wired up Communities project used capital funding (matched with revenue funding from other sources) to establish 7 pilot projects in locations of different natures (inner city, rural, market towns etc). Key outcomes are available\textsuperscript{198} along with a toolkit\textsuperscript{199} so that other communities can follow a similar approach, whilst learning from the mistakes and successes. Issues included the amount of time required to get people beyond very basic level, expectations were raised too high, or milestones were delivered more slowly than promised. On-going sustainability is also a challenge. People living in disadvantaged communities are often suspicious of government schemes. Outcomes include: a significant difference has been made to the communities involved, online networks have been created, the value of email and discussion forums has been proven in the community setting and the value of raising community cohesion through the use of community champions was demonstrated.

Several Wired Up Communities projects struggled to reach the high levels of penetration aspired to by the programme, despite subsidies for users and considerable marketing, promotion and outreach work. In addition, more than a quarter of respondents receiving technology had not used it to access the Internet, almost half of these reported that they were ‘not interested’ in the Internet. The Wired Up Communities evaluation also questioned the commonly held viewpoint that once people have access to and used technologies, they will embrace them wholeheartedly. 18\% of Wired Up Communities users stopped using the Internet after the subsidy period had ended\textsuperscript{200}.

Recommendations - Disadvantaged Communities
- Include Community Development in ICT policy initiatives and tackle the issues that communities care about using ICT as a tool.
- It is important that research should include an investigation of the potential negative impacts for socially excluded groups. These could include direct impacts such as easier access to online gambling, loan sharks and junk mail. Indirect disadvantages could be the ability of vendors to use the more precise consumer profiling information they might possess through ICTs to disadvantage or discriminate against some groups in society\textsuperscript{201}.

3.2 Rural Communities
- Approximately 67\% of the UK population have access to a mass-market broadband solution (targeted at residential or small business users). Broadband availability is highest in urban and suburban areas (where 75\% of the UK population live). However, broadband availability falls
significantly in market towns, rural villages and remote areas. In a submission on this issue, the Broadband Stakeholder Group\textsuperscript{202} has made a number of recommendations for progress.

- BT aims to bring ADSL broadband to 90% of UK homes\textsuperscript{203}.
- Government activity is summarised in the 2003 UK online report\textsuperscript{204}.
- 3G mobile networks are currently being rolled out across the UK and it is expected that the service will cover an area including 50% of the population by the end of 2003\textsuperscript{205}. (Local Futures work\textsuperscript{105} in a variety of rural economies shows that in rural areas mobility is the killer application in ICT.)

In a report by the Commons' Environment, Food and Rural Affairs Committee, concerns are voiced that ministers' faith in market forces to develop broadband had allowed a 'digital divide' to open up between town and country. Describing broadband availability in rural villages and remote communities as 'dire', the Committee warned, "there is a proportion of the countryside where provision of broadband cannot reasonably be left to the marketplace"\textsuperscript{206}.

- The Rural Broadband Interest Group is a gathering of interested organisations and individuals with the aim of directing policy, following technology, pooling information and assisting communities / organisations to address the issue\textsuperscript{207}.
- Tele2 (now Liberty Broadband), the East of England Development Agency and BT introduced a new demand registration systems, which enable customers to register interest in receiving broadband services. Todmorden in West Yorkshire became the first exchange to reach the trigger level set by BT after 200 consumers expressed interest with their ISPs in receiving ADSL services. Community pressure groups are springing up all over the country to convince suppliers that there is a demand for broadband\textsuperscript{208}.
- A regional broadband expert in each RDA, as part of the UK Broadband Taskforce, aims to promote broadband take-up, especially in remote and rural areas.
- The Rural Broadband Unit and Social Enterprise Unit of the DTI and DEFRA are supporting the Community Broadband Network (CBN), a new initiative to link communities who have taken a DIY approach to local broadband provision. These social enterprises are driven by need rather than profit and are community owned. For their success, it is vital that they exchange experience with each other so that lessons are learnt, pitfalls avoided and wheels not reinvented. The Community Broadband Network is managed by Ruralnet\textsuperscript{209} and The Phone Co-op.
- The Countryside Agency has produced a review of 13 early community broadband projects in England. The purpose of the review is to identify best practice activities by communities, local authorities and individual businesses to overcome the lack of broadband services in villages, small towns and rural business parks\textsuperscript{210}.
- Funding for community broadband projects has been provided from a number of sources, such as the DTI's UK Broadband Fund and the Market Towns Initiative from the Countryside Agency.
**Recommendations - Rural Communities**

- Clear strategy is needed - despite much focus on broadband, there is still no clear strategy on ensuring universal access and no strategy at all on deployment of higher performance broadband.
- Government has been told by MPs to rethink its broadband policies and to commit to a timetable for ensuring that high speed Internet services are available to the whole of the UK. In order not to disadvantage such rural areas intervention is essential. It went on to add that the Government should now subsidise the cost of broadband rollout in the most remote areas.\(^{211}\)
- There is confusion about what actually constitutes broadband speeds and an absence of strategy on very high broadband speeds.
Section Four

Government

Government has a key role to play in tackling digital exclusion and it is essential that there is a “joined-up” and coherent approach to tackling the issues. In this section we have included some of the initiatives, strategies and projects in the hope that wider awareness may encourage greater collaboration on a national, regional and local level.

Departmental objectives which relate to digital inclusion have been collated by the Office of the e-Envoy, based on Public Service Agreements (PSAs) and are provided here. There is a profusion of pilots and pathfinders and a number of objectives, which could be turned to the digital inclusion agenda. In order to make a real difference government needs to encourage / resource those that are scalable and sustainable, as well as ensuring all relevant agencies play a role in digital inclusion.

4.1 Global and European context

The first phase of the World Summit on the Information Society took place in Geneva, December 2003. The summit brought together ‘all relevant UN bodies’ and other intergovernmental organisations, including international and regional institutions, non-governmental organisations, civil society and the private sector. It aimed to be ‘a unique opportunity for all key stakeholders to assemble at a high-level gathering and to develop a better understanding of this revolution and its impact on the international community.’

- The digital divide became a political priority in Europe with the launch of the eEurope Action Plan in 2002 and a commitment from the highest level to create a “cheaper, faster, more secure Internet”.
- An eEurope 2005 action plan follows on from a Commission report aimed at making the EU the most competitive knowledge-based economy by 2010. The resolution covers the importance of providing citizens with the access and skills needed to live and work in the new information society.

4.2 Devolved assemblies

4.2.1 Scotland

- Sept 2003: 42% of Scottish households have Internet access. Digital inclusion is very largely a devolved matter and the Scottish Executive has created a digital inclusion team to co-ordinate action. Outputs include:
  - A published digital inclusion strategy “Connecting Scotland’s People”.
  - Digital champions established in Social Inclusion Partnership areas.
  - Availability of public web access is publicised.
  - Up to 1000 new public internet access points are being created in a wide variety of places where people go as part of their everyday...
lives e.g. pubs, shops, post offices, hairdressers, community centres, learning centres, etc. In addition all 557 libraries in Scotland offer free Internet access. UK Online centres do not operate in Scotland.218
- 2 digital communities have been created (this included training and supporting community-developed content).
- Awareness raising campaigns are run to highlight the benefits of the Internet.
- 400,000 “Internet Made Easy” training CDs have been distributed to early Internet users. All these initiatives are being independently evaluated219.
- A 2005 access target aims for Internet access to be generally available to people within 1 mile in an urban area and 5 miles in a rural area220.
- The main themes of the digital inclusion strategy are: Awareness and promotion; Access; Support; Skills; Content; Community Involvement – ensuring that initiatives are sustainable at a local level and that local communities have a sense of ownership221.

4.2.2 Northern Ireland
- Sept 2003222: 37% of Northern Irish households have Internet access. ‘Bridging the Digital Divide’ a consultation document produced by Central IT Unit for Northern Ireland (CITUNI) as part of the Office of the First Minister and the Deputy First Minister shows only 39% of 50-64 year olds and 9% of over 65s have home access223. A follow on document highlights the current situation, good practice and proposes the set up of a Digital Inclusion Unit working party between business/education/community sectors to drive, manage and monitor digital inclusion initiatives224. It builds on earlier documents examining the issue in Northern Ireland225, 226, 227, 228.
- Invest Northern Ireland is taking forwards the e-Agenda, which includes a team of 6 ICT advisors229.
- A number of projects have already been funded through European Peace and Reconciliation funds to help counter digital exclusion including initiatives under the ‘comm.unity’ programme of Business in the Community.

4.2.3 Wales
- Sept 2003230: 41% of Welsh households have Internet access. The Welsh Consumer Council also produce statistics231.
- The Welsh Assembly has created a strategic framework for a digital future Cymru Ar-Lein – Online for a Better Wales in consultation with 3000 organisations232. Initiatives to promote digital inclusion include:
  - A database of ICT facilities across Wales.
  - The People’s Network, providing free Internet access and improved access to information services in public libraries.
  - An e-communities programme.
  - “Joined up services” to farmers and provision of free Internet access for farmers via Welsh Assembly Government Divisional Offices.
  - The Welsh Language Board has compiled a comprehensive list of computer resources available in Welsh or facilitating the use of Welsh.
• Three Citizens Online / BT Everybody Online projects in conjunction with the Communities First programme.
• Wales on the Web website.

4.3 UK National government departments

Many departments have an impact on digital inclusion. The Department of Transport for example, in its proposed “lane rental” scheme, will increase the cost of digging up roads to lay cable, which is a disincentive to infrastructure investment for dispersed and poor communities. A list of departments, relevant initiatives, public service agreements (PSAs) and responsibilities are given below.

4.3.1 Office of the e-Envoy

• Office of the e-Envoy (OoE) own the targets of “universal access”: that by 2005 everyone that wants access to ICT should have it within walking distance and that all government services should be online. Patricia Hewitt also announced that every home in the UK should have a connection to online services through a digital network by 2008 - whether through a personal computer, DTV, mobile phone or other device.
• The 2002 UK online annual report set out progress against a strategy for digital inclusion which involves:
  • Encouraging people to use the Internet by increasing awareness.
  • Investing in the network of public Internet access points.
  • Embedding ICT into lifelong learning opportunities.
  • Advising citizens on Internet safety.
• The 2003 UK online annual report emphasises the need to address motivational barriers, promote ICT skills and work with industry on digital inclusion involving all forms of ICT.
• Objective III: help deliver key public service priorities. Improve public services by working with departments to help them meet their PSA targets, consistently with the fiscal rules. Joint target with HM Treasury.
  Ensure departments meet the Prime Minister's targets for electronic service delivery by Government: 100% capability by 2005, with key services achieving high levels of use. Objective IV: lead the reform programme for public services. Improve public services by working with departments to redesign services around the needs of customers and embed the four principles of public service reform.
• In May/June 2003 OoE ran the UK online “Get Started” campaign to encourage new users to the Internet. This was done in partnership with organisations such as Dixons, Granada, Age Concern and the Princes Trust.
• UK online partner organisations, such as Barclays and Abbey National, added a value of over £1.5m to the campaign.
• They are also leading on the Home Computing Initiative (to promote ICT uptake through employee PC purchasing schemes) and are facilitating the establishment of an industry Digital Inclusion Alliance.

4.3.2 Dept for Education and Skills (DfES)
• Relevant areas and projects (discussed throughout this paper) include: The Skills Strategy\textsuperscript{240}, Towards a Unified e-Learning Strategy\textsuperscript{241}, Cybrarian project\textsuperscript{242}, Parents Online\textsuperscript{243}, Wired up Communities\textsuperscript{244}, and the wireless outreach network\textsuperscript{245} which uses laptops for adult learning and community centres. DfES support Ufi in managing learndirect and UK online centres\textsuperscript{246}. The DfES have worked with NIACE to examine the role Learning Partnerships play in regeneration\textsuperscript{247} and have produced a national survey of Skills for Life (which includes ICT)\textsuperscript{248}.

• Raise standards in English, maths, ICT and science in secondary education so that by 2004 75% of 14 year olds achieve level 5 or above in English, maths and ICT.
• Reduce by at least 40% the number of adults in the UK workforce who lack NVQ 2 or equivalent qualifications by 2010. Working towards this, one million adults already in the workforce to achieve level 2 between 2003 and 2004.

4.3.3 Department for Work & Pensions (DWP)
• Over the three years to Spring 2006, increase the employment rates of disadvantaged areas and groups, taking account of the economic cycle of lone parents, ethnic minorities, people aged 50 and over, those with the lowest qualifications, and the 30 local authority districts with the poorest initial labour market position. Significantly reduce the difference between their employment rates and the overall rate.
• Objective III: combat poverty and promote security and independence in retirement for today’s and tomorrow’s pensioners.

• Objective IV: improve rights and opportunities for disabled people in a fair and inclusive society.
• In the three years to 2006, increase the employment rate of disabled people, taking account of the economic cycle, and significantly reduce the difference between their employment rate and the overall rate. Work to improve the rights of disabled people and to remove barriers to their participation in society- this is led by the Disability Unit in the Department for Work and Pensions.

• Objective V: modernise welfare delivery so as to improve the accessibility, accuracy and value for money of services to customers, including employers.
• Make significant progress towards modernising welfare delivery so that by 2005, 85% of customers have their benefit paid into their bank accounts.

4.3.4 Department for Trade and Industry (DTI)
• The DTI run the UK Broadband task force, sponsor the independent Broadband Stakeholders Group and have overall responsibility for telecoms policy. They also deal with sector skills councils such as e-Skills UK.

• Make the UK the best place in the world for e-business, with an extensive and competitive broadband market, judged using international comparative measures of business uptake and use of information and communication techniques.

• Objective IV: successful enterprise and business: help to build an enterprise society in which small firms of all kinds thrive and achieve their potential, with (i) an increase in the number of people considering going into business, (ii) an improvement in the overall productivity of small firms, and (iii) more enterprise in disadvantaged communities.

• Make sustainable improvements in the economic performance of all English regions and over the long term reduce the persistent gap in growth rates between the regions. Joint target with ODPM and HM Treasury.

4.3.5 Office of the Deputy Prime-Minister (ODPM)

• ODPM's remit covers electronic voting and Regional Development Agencies. An e-innovations fund for Local authorities was recently announced consisting of £14.5m for projects to improve e-services and to promote digital inclusion.

• Pathfinder projects are run with local authorities to increase access to ICT. Nuneaton and Bedworth Borough Council, for example, received £1.3 million from the Invest to Save Budget for a ‘Silver Surfers’ project.

• Objectives: promote better policy integration nationally, regionally and locally; in particular to work with departments to help them meet their PSA floor targets for neighbourhood renewal and social inclusion.

• Improve delivery and value for money of local services by assisting local government to achieve 100% capability in electronic delivery of priority services by 2005, in ways that customers will use.

In ODPM: Neighbourhood Renewal Unit (NRU) & Social Exclusion Unit (SEU)

• The Policy Action Team 15 report which highlighted the need to address the digital divide, was one of 18 PAT reports feeding in to the national strategy on neighbourhood renewal.

• A review of progress against PAT 15 was not made public, UK online centres would be the biggest single area of achievement.

• The Social Exclusion Unit was set up by the Prime Minister to help improve Government action to reduce social exclusion by producing ‘joined-up solutions to joined-up problems’. The SEU are not active in digital inclusion.

• The Social Exclusion Unit’s ‘National Strategy for Neighbourhood Renewal’ (2000) proposed a strategy based on four key principles to reverse decline in deprived neighbourhoods. The first principle focused on reviving
local economies and one of the key ideas to help people to compete for jobs was improvement in the use of the Internet in deprived neighbourhoods. ICT could also contribute to the other three principles of the Social Exclusion Unit’s strategy: reviving communities, providing decent services and partnership working.\textsuperscript{252}

- Neighbourhood Renewal: A National Strategy Action Plan was launched by the Prime Minister on 15 January 2001. The Strategy sets out the Government’s vision for narrowing the gap between deprived neighbourhoods and the rest of the country, so that within 10 to 20 years, no one should be seriously disadvantaged by where they live.\textsuperscript{253} At national level, the Action Plan is implemented by the Neighbourhood Renewal Unit (NRU). At regional level, neighbourhood renewal teams have been set up in the nine government offices to provide a direct channel of communication from neighbourhood / community groups to the neighbourhood renewal unit and will act as facilitators to support the development of Local Strategic Partnerships.

4.3.6 Office of Fair Trading (OFT)
OFT have issued a report on consumer IT goods and services, this was briefly discussed in section 1.2.\textsuperscript{254}

4.3.7 National Audit Office (NAO)
NAO reported on progress in making e-services accessible to all and encouraging use by older people.\textsuperscript{255} Some key findings were highlighted in section 1.

4.3.8 Home Office (HO)
- Objective VI: support strong and active communities in which people of all races and backgrounds are valued and participate on equal terms.
- Bring about measurable improvements in race equality and community cohesion across a range of performance indicators, as part of the government’s objectives on equality and social inclusion.
- The Home Office leads on Internet safety for children.

- Increase voluntary and community sector activity, including increasing community participation by 5%, by 2004.

- The Active Community Unit (ACU) of the Home Office is developing an ICT investment strategy for the voluntary / community sectors.\textsuperscript{256}
- The ACU needs to have a full picture of digital inclusion issues and the role ICT can play in developing community and tackling social issues.

4.3.9 Department for the Environment, Food and Rural Affairs (DEFRA)
- Objective II: enhance opportunity and tackle social exclusion in rural areas.
- Reduce the gap in productivity between the least well performing quartile of rural areas and the English median by 2006, and improve the accessibility of services for rural people.
- Look to join-up work to improve rural broadband access.
4.3.10 Department for Media Culture and Sport (DCMS)

- Culture Online is a DCMS initiative to create innovative projects increasing the availability of cultural content via the Internet\(^257\).
- The People’s Network\(^258\) – is a project to connect all public libraries to the Internet and improve their provision of content and information services.

4.3.11 Department of Health (DOH)

- Ensure that by the end of 2005 every hospital appointment will be booked for the convenience of the patient, making it easier for patients and their GPs to choose the hospital and consultant that best meets their needs. Improve the quality of life and independence of older people so that they can live at home wherever possible. Improve life chances for children, including by improving the level of education, training and employment outcomes for care leavers. (The Government will review this target in the light of a Social Exclusion Unit study on improving the educational attainment of children in care.)
- Value for money in the NHS and personal social services will improve by at least 2% per annum, with annual improvements of 1% in both cost efficiency and service effectiveness.
- In a pilot digital TV project, 100% of users said they would use the InVision service (which allowed users to see and speak to a nurse) again\(^259\).

4.3.12 Her Majesty’s Treasury (HMT)

- Objective VIII: improve the quality and the cost effectiveness of public services.
- Improve public services by working with departments to help them meet their PSA targets, consistently with the fiscal rules. Joint target with Cabinet Office.

4.4 Regional and local government

- Government Offices represent national government departments in the nine English regions. The Government Offices for the Regions (GOs), and their corporate centre, the Regional Co-ordination Unit (RCU), are responsible for delivering policy in the regions, and their multi-Departmental constitution, makes them ideally placed to implement crosscutting initiatives, and to advise Departments on successful implementation strategies at regional and local level\(^260\).
- One of the key tasks of the Regional Co-ordination Unit (RCU) is to ensure a greater degree of co-ordination among area based initiatives (ABI’s). Information on many of these ABI’s, delivered through local partnerships is provided, including digital inclusion pathfinders\(^261\).
- Regional Development Agencies (RDAs) are non-departmental public bodies with a primary role as strategic drivers of regional economic development. RDAs aim to co-ordinate regional economic development and regeneration, enable the English regions to improve their relative
competitiveness and reduce the imbalance that exists within and between regions.

- Each RDA has 5 statutory purposes, which are:
  - To further economic development and regeneration
  - To promote business efficiency, investment and competitiveness
  - To promote employment
  - To enhance development and application of skill relevant to employment
  - To contribute to sustainable development

- RDAs agendas include regional regeneration, taking forward regional competitiveness, taking the lead on regional inward investment and, working with regional partners, ensuring the development of a regional skills action plan to ensure that skills training matches the needs of the labour market.

We have looked at RDA activity on digital inclusion, examining whether a strategy exists and how much this includes infrastructure work, Frameworks for Regional Employment and Skills Action (FRESA’s), creating demand, social inclusion and community regeneration. Regions vary significantly in their focus on this issue. There doesn’t appear to be a national steer to create joined-up strategies (see section 8). Thus we are not surprised that regional ICT strategies focus largely on broadband and often don’t strongly consider digital inclusion. Nevertheless there are some hopeful signs in regional strategies and much that could be built upon.

- **North West** - In the North West’s ICT strategy, ICT is considered to be at the heart of the regions strategy, since it improves personal skills, confidence and employability, as well as giving a competitive edge. ICT is seen as a cross-cutting theme, which can be used as a tool for social inclusion and the strategy has been developed through a series of consultations and workshops. The strategy notes the need to create user demand, consider broadband for under-served areas and tackle the digital divide. The need to develop good content, tackle skills issues and think about culture, language issues and disabled people is discussed. Delivery against the strategy focuses on local implementation, involvement of the private and community sector and bending of funding streams towards the goals of the strategy. Manchester Digital Developments Agencies are being established to drive forwards the agenda.

- **One North East** – The “e-Region” strategy has been developed by the Regional ICT Strategy Board, which includes sub-regional partners, Local Strategic Partnerships (LSP’s) local authorities and others. Links have been made to the Regional eLearning Foundation, the eBusiness centre, the Skills Initiative, community development and the community and voluntary sectors. Sub-regional strategies tend to focus on SME’s and broadband, but also consider content and the need for high speed, Internet access, community hubs. They focus on the following areas: eBusiness, eLearning, eInfrastructure, eGovernment and eCommunity. ICT activity in communities is seen as part of the programme to tackle the region’s position of having the highest concentration of disadvantaged neighbourhoods in the country. In one sub-region, research has found that there isn’t a single focal point of leadership for directing and promoting joined-up ICT initiatives,
that working groups have not collaborated and that effort has been duplicated. The need to raise awareness of the benefits of ICT for communities has been noted. Good practice in content includes a portal for disabled people and communities online. The RDA intends (in 2004) to lay down standards for digital inclusion in development and redevelopment projects. The approach to social inclusion in the strategy involves working with the third sector, developing digital inclusion programmes that include individual and community development and developing a digitally inclusive approach to development projects. This approach centres around directing community programmes so they promote digital inclusion, for example computers could be installed in rented housing, or ICT married to rural inclusion programmes.

- **Yorkshire Forward** – Yorkshire Forwards have a Digital Industries Strategy and Action Plan, which is particularly focused on development of digital industry. The strategy for the "E-Region" is undergoing a full revision and the role of the team behind this includes diversity and inclusion.

- **Advantage West Midlands** – The ICT strategy focuses initially on infrastructure development, particularly on broadband (noting that the rural west is disadvantaged in particular). Marketing and collaborative, partnership models are to be used to meet user needs. In the medium term, the region is seeking to drive up the use of e-Business by engagement with SMEs, delivering high quality advice to businesses and engaging with the ICT solution providers in the region to ensure they meet the needs of SMEs. Longer term strategic approaches to e-Learning and e-Government are in formulation.

- **East Midlands** - ICT forms a strand of the regional economic strategy. Three strands form the core – eBusiness, eGovernment and eLearning. The need to promote the advantages of ICT and the creation of content are noted. Awareness raising campaigns using demonstration facilities, awards and access centres, with materials in different languages, are planned. Additionally, the continual development of broadband is to be accounted for, rather than assuming a static definition. For each strand of activity, supply, demand and support are considered. The FRESA will include actions to promote ICT skill development called e-Skills 4 life. Currently projects are not drawn into a thoroughly coherent digital inclusion strategy, but work is heading in that direction.

- **East of England** – The strategy for ICT in the East of England (EEDA) focuses squarely on broadband access. The region's regional economic strategy highlights the potential economic, social and environmental benefits of ICT for businesses, the environment and the region's urban and rural communities. EEDA's approach is to encourage the promulgation of new ideas, practical projects and best practice by supporting the growth of networking between the key players in the region. A framework of working groups to coordinate regional ICT initiatives have been established:
  - **Strategy and Infrastructure**: To develop partnerships and promote joined up thinking and general awareness across the region. To co-ordinate the work of the themed groups and to evaluate and promote best practice in ICT.
• Skills & Education Group: To promote innovative application of distributed learning at HE, FE and generic levels for all sectors of the community.
• Business Support Group: To encourage the take-up of e commerce and ICT technology amongst SME's.
• Public Sector Group- To encourage joined-up thinking and the adoption of best practice across government in the region and to help extend e-government across the region.

• **South West**– The ICT strategy\(^270\) covers a period of ten years and although focussed on broadband supply, does consider in some detail the need to raise basic ICT skills. It also notes that ICT can promote inclusion and that good co-ordination is essential. The strategy notes that funding opportunities need to be kept abreast of, good ICT schemes fast tracked and that training providers are essential partners. A website is used to track updates and log projects\(^271\).

• **South East**- SEEDA\(^272\) has a broadband strategy, but no strategy for digital inclusion, so links have not as yet been made to FRESA’s etc, though this is likely to change in the future.

• **London**- The Greater London Authority (GLA) leads on digital inclusion and established London Connects\(^273\) which is a London-wide agency bringing together local, regional, and central government to support the delivery of the e-government agenda across the capital. Its objectives include the following:
  • To ensure the benefits of technology are available to all by initially supporting research into technology access and impact, and then acting on the conclusions.
  • To use technology to encourage public participation in democratic processes by assessing the impact of the many experiments now taking place, and then actively promoting the success stories.
  • By 2005 London should have major initiatives to address the so-called ‘digital divide’ in London both in terms of access and affordability of services as well as basic e-skills, and with every Londoner having ready accessibility to a public access point connecting to London’s e-services.

The GLA, London Development Agency and London Connects have commissioned documents encouraging and directing regional strategies for digital inclusion\(^274, 275\). Following on from the launch of the second of these documents, with ensuing feedback, the GLA is considering the best actions forwards for London.

• Samantha Hellawell of IScommunications noted the following issues concerning project delivery at regional and local level\(^276\):
  • Funders are perceived as customers rather than socially excluded people.
  • There is often no clear strategy and leadership at regional level.
  • There are poor linkages between strategy and delivery.
  • There is little knowledge of what already exists and a mess of unrelated projects at local level.
  • There is confusion about the different digital divide ‘brands’.
  • The poor linkages between the strategic partnerships and local delivery partnerships would appear to be one of the fundamental issues emerging
from the regional audits. The range of funding sources can often lead to new localised delivery partnerships, which do not link to any overarching strategy.277

- Clearly the Regional Development Agencies must take responsibility for developing an ICT strategy for the region that underpins its economic aspirations and which addresses the exact nature of the digital divide in that region. Local audits should be carried out to map existing and planned ICT provision to the opinions and needs of excluded people, particularly those not using any existing services. Seeking out people who aren’t using a local ICT centre and asking them why not, can be an extremely valuable exercise. Once a clear map exists and barriers facing existing and potential customers are documented, hard decisions can be made about how to rationalise provision, since there will almost certainly be overlap and gaps278:

Recommendations for regional approaches to digital inclusion include279:

- As a first step towards developing good practice and identifying what a resource centre might provide, a region-wide conference should be organised to share information. This could become a regular event or lead to a series of smaller workshops at the sub-regional level.
- A help desk providing online or telephone assistance to help socially excluded groups overcome computing and Internet problems should be established. A centre should also provide information about the location of online centres and ICT training and skills development opportunities.
- Community associations or neighbourhood organisations should be supported and encouraged to develop informal Internet help groups.

Local Government

Objectives include improving delivery and value for money of local services by:

- Introducing comprehensive performance assessments and action plans, and securing a progressive improvement in authorities' scores.
- 100% capability in electronic delivery of priority services by 2005, in ways that customers will use.
- Local delivery against the objectives of the DWP on employment for geographically and socially disadvantaged people (see section 4.3.3).

- It is important that members of the Local Strategic Partnership (LSP) understand the potential of ICT to contribute to improving their neighbourhood. Time should be set aside to help educate them about how technology is helping residents in other areas to better communicate, develop skills, improve health, engage disaffected youth and so on. LSP members could start by setting up their own electronic network to e-mail and discuss issues with each other. The Neighbourhood Renewal Unit should encourage ICT know-how in LSPs by making ICT a key strand in its skills and knowledge programme and showcasing best practice280.

- The Improvement and Development Agency281, IDEA, has the practical task of supporting local authorities in implementing electronic government

Research recommendations

Objectives

Local Strategic Partnerships

Local e-government
and has produced case studies on using ICT to improve services. A self assessment tool from the IDeA offers a means for comprehensive review by a local authority of its neighbourhood renewal activity. It covers leadership and strategic planning, performance management and democratic and community engagement, the tool kit includes a checklist of action and policy, and a useful publications and web sites resource guide. IDEA also has case studies and support on digital inclusion.

- The IT Trends Report 2001/2 issued by the Society of Information Technology Management indicates that although progress has been made, ‘significant financial, organisational and cultural obstacles are hindering progress’. Understanding of the Government’s e-government strategy amongst elected members and chief executives is low in most authorities.

- The Foundation for Information Technology in Local Government is an independent body that promotes innovation in local democracy and service delivery.

- An e-innovations fund of £675m has been announced this year for Local e-Government Programmes. The first round of the e-innovations funding will be targeted at projects in E-Learning, Bridging the Digital Divide, Emergent technology for better government, Innovative use of technology to improve services and Local authority e-business.

- The Beacon Council Scheme, which aims to encourage and share good practice by councils, has two initiatives devoted to encouraging online access to services and social inclusion through technology. 25 Councils applied for Beacon status under the Social Inclusion through ICT theme, 10 were shortlisted: Blackburn with Darwen, Cambridgeshire, Derbyshire, Derwentside, Knowsley, Liverpool, Sunderland, Tameside, Vale Royal and Wirral.

- One of the largest council housing estates in the London borough of Lewisham is set to become a wireless hotspot, providing all its residents with high speed Internet connections, email and access to community discussion forums. The Winslade estate in New Cross Gate could become a model for providing wireless access to e-government services across the borough. Possible future developments include Internet telephony, enabling residents to make phone calls within the estate at negligible cost.

### 4.5 Regulation

- The Communications Bill included the establishment of OFCOM – The Office of Communications, which replaces five existing regulators (ITC, OFTEL, etc). Citizens interests are at the top of OFCOM’s duties and it has provision for community media such as radio and TV. OFCOM’s responsibilities which impact on digital inclusion include:
  - A duty to promote media literacy - to bring about, or to encourage others to bring about, a better public understanding of the nature and characteristics of material published by means of the electronic media.
  - An advisory committee on elderly and disabled persons. A duty to encourage availability of easily usable apparatus, capable of being used with ease, and without modification, by the widest possible
range of individuals (including disabled people). Such domestic electronic communications apparatus should be as widely available as possible for acquisition by those wishing to use it.

- Consumer research and publication of information and advice for consumers.
Section five

The Community and Voluntary Sector (Third sector)

The third sector, which comprises the community and voluntary sectors, social enterprises and social businesses, is seen by many as the most undervalued and under-resourced player in this area. This sector has both a role to play in supporting social inclusion through ICT and a need for capacity building in its own use of ICT. These two issues are covered below.

5.1 The Third Sector Delivering on Digital Inclusion

- A report focusing on the role of the third sector in promoting an inclusive information society makes a forceful argument that this sector has and can increasingly play an important role, through\(^{288}\):
  - Providing training in basic computer skills.
  - Providing ICT training aimed at employment.
  - Using the Internet to interact with government on behalf of disadvantaged groups.
  - Strengthening civil society by communicating their social mission through the Internet.
  - Expanding relevant content for disadvantaged groups and giving those groups a public voice.
  - Increasing awareness of ICTs, including building trust and providing information.
  - Engendering a feeling of community and building networks online.

- The third sector play three roles in digital inclusion\(^{289}\):
  - As champions; actively promoting digital inclusion through delivering projects.
  - As mediators; acting as conduits between disadvantaged groups and ICT.
  - As supporters; introducing disadvantaged groups to ICT, through making use of ICT as organisations themselves, even if the usage is not sophisticated.

- ICT projects go well when the following are possible\(^{290}\):
  - A local champion with the vision, belief and ability to inspire others.
  - Project co-ordinators to manage the centre / project with good interpersonal skills and adaptability.
  - Volunteers who are willing to be trainers.
  - Easily accessible premises.
  - Sufficient equipment and support, upgraded as needed.
  - Effective and sustained promotion and marketing that promotes awareness.
  - Funding for all of the above.

- Funding information for ICT projects is available in a number of places\(^{291, 292, 293}\), the latter also gives information on running laptop outreach projects.
**Recommendations - the Third Sector Delivering on Digital Inclusion**

- The Third sector needs to push for and be welcomed to contribute to policy development on digital inclusion.

- The Third sector could be more effective if funding streams were clarified and digital inclusion made a priority as part of all social inclusion and community regeneration programmes. European businesses fund ICT projects in the third sector much less readily than in the USA and need to therefore play a more active role. In its role to support UK online centres, Ufi are collating information on funding streams, this should be shared more widely.

**5.2 ICT use by the third sector – information**

Increasingly, the use of ICT in this sector will not only enable it to achieve its aims more effectively, but can support the client base of organisations in using ICT. A number of reports have highlighted the issues facing the community and voluntary sectors in their use of ICT\(^{294, 295, 296}\).

Simon Davey, IT4Communities / Worshipful Company of Information Technologists\(^{297}\), notes:

- ICT use in the Community and Voluntary Sector promotes two core advantages: cost reduction and process improvement. However, there is a clear need for substantial capacity building (organisational development) within the sector rather than simply ‘dropping ICT’ into an organisation. The core aim for introducing ICT then requires a clear focus on strategic use rather than ‘bauble’ technology, such as websites and databases, with no clear organisational relevance.

- There are four aspects of ICT resource: strategy, training, applications development and technical support.

- Applications development is a weak area within the sector and there is clear rationale for greater re-use of developments (e.g. similar organisations using similar applications such as tracking databases) or better use of existing software.

- It is generally the case that community / voluntary organisations don’t know the best things to buy; equipment doesn’t work as it should; money is spent on developments that don’t live up to expectation and when things go wrong there is no-one to turn to for help.

- Many agencies cannot afford professional technology support, but those that can often find it unsatisfactory, since vendors are unfamiliar with the unique needs that voluntary agencies have. Organisations also need support beyond simply fixing problems in an emergency – they need technical specialists who will take the extra time to train staff, suggest changes or improvements to current capabilities, and work with an agency’s management in a more long-term, strategic manner in regards to technology.

- Many of the concerns about technical support to the voluntary sector apply equally well to small businesses and one of the main factors is the over
technical and jargonistic approach of support vendors. It would be better to address this issue in its entirety and ‘educate and develop’ the support sector rather than marginalize specific ICT support for voluntary sector organisations. Good information about “total cost of ownership” is needed, for example. The use of ICT for e-Learning by voluntary organisations is also unfounded and under-exploited.

- At the same time there are some areas of the voluntary sector who are not able to afford even the lowest level of commercial IT support, and for these groups a properly funded and co-ordinated network of IT support and development workers, Circuit Riders (see below) and volunteers is likely to be the best way forward.

- National Council for Voluntary Organisations (NCVO) has an ICT Project to build the quality and extent of good ICT management throughout the voluntary sector. The ICT briefing and guidance sheets can be accessed via NCVO’s website.

- Circuit Riders are mobile IT professionals who support the third sector’s use of ICT. A support movement of such workers is developing in the UK and a mailing list managed by LASA exists to share good practice.

- Volunteers with ICT skills can be accessed through IT4Communities. IT4Communities, is a national IT volunteering programme, provides resources on the most effective use of volunteers for ICT in the Third sector. Project based activities are promoted, it emphasises the importance of strategy, recruits both volunteers and charities and links the two to deliver sustained support to the sector. The organisation also contributes to national strategy and acts as a bridge between the technology sector and the voluntary sector.

**Recommendations ICT use by the third sector**

- Business and Government should support National voluntary-sector umbrella organisations in identifying and initiating capacity building initiatives to enable charities and community groups to work with business.

- Financial support is needed for Circuit Riders, open source solutions and greater volunteering infrastructure and support. Circuit riders with particular specialisms e.g. for women’s organisations, should be encouraged.

- ACU need to take a clear, strategic lead here with relevant funding, a review is currently taking place.
Section Six

Industry

Industry is a route to digital inclusion as employers, through partnerships with government and Third sector organisations and through their marketing and business development strategies.

- Digital inclusion is an issue for industry because:
  - For the ICT and New Media sectors, there is a risk that business will be blamed for driving forwards a digital revolution, which reinforces and enhances social exclusion.
  - Online business opportunities are missed when potential customers are not online. Those supporting e-business and e-government need these services to be used.
  - Specific ICT markets are currently untapped, e.g. market penetration for home Internet use reaches only 50% of the population.
  - Business can innovate and find new uses for its products by tackling social inclusion.
  - Industry needs a pool of skilled, potential employees and vibrant places to do business.
- Socially responsible investors now include the digital divide as a significant social risk issue when evaluating corporate risk in the ICT sector. 13 per cent of the ICT companies in Europe’s top 500 companies explicitly mention the digital divide in their annual or social reports.

How business can have an impact:

- Sharing resources:
  - Professional IT volunteering, business mentoring, etc (for examples see IT4Communities).
  - Cash and/or product donations (e.g. AOL Innovation in the Community Awards)
  - Use of premises (e.g. location of AbilityNet centres within businesses such as HP.

The business case: staff motivation and development, and reputation / networking by giving to local communities.

- Innovating:
  - On responses to social issues (e.g. BT’s Everybody Online project with Citizens Online).
  - On products (for social issues) (e.g. IBM’s Kidsmart, Oracle’s Think.com).
  - On marketing of ICT to untapped markets (BT Home Computing working with Age Concern).

The business case: developing innovative business climates, showing leadership on developing innovative solutions to social issues and on developing new / demonstration uses for products. Business would see these as flagship initiatives. For brand reputation, they would prefer sole ownership.
• Collaborating with other companies, partners and government to help achieve scale:
  • Supporting one initiative to tackle an issue (e.g. IT4Communities; steered by British Computer Society, The Worshipful Company of Information Technologists, Citizens Online, Business in the Community and Intellect, with company volunteers and sponsorship by Microsoft, IBM, Kaizo and ACU).
  • On partnerships for mutual benefits (e.g. Microsoft / AbilityNet “My Computer My way305”, Cable & Wireless on safe-surfing with Childnet International306)
  • Supporting a brand (e.g. Silversurfers festival- Age Concern sponsored by Microsoft and Cable and Wireless, as part of “Get Started”, which included Granada Group etc).

The business case: tackling an issue with greater impact, co-branding (like “Red Nose day”) and developing partnerships between business and others.

• Essential to industry involvement in digital inclusion are well-developed Corporate Social Responsibility (CSR) agendas for individual businesses. This includes embedding of CSR throughout the company on the basis of a good business case and policies for work programmes undertaken so that potential partners can target their approaches. CSR should be integrated throughout a particular business, so that all aspects of the business can contribute and benefit. Employee volunteering/ development assignments (as Human Resource processes), marketing, public services and new business development are key parts of ICT businesses, which would benefit from a digital inclusion focus.

• Research into corporate responsibility in the IT sector, by Citizens Online in 2001307, found that less than 25% of IT companies had a clear CSR strategy, only 15% support Internet access initiatives, but most companies felt the sector should be investing more in the community. Some ICT businesses have taken leadership in promoting generic responsible business practice (e.g. Cable and Wireless308). However leadership for the sector as a whole, on CSR, and on the digital inclusion agenda, has not yet achieved scale. The Global e-Sustainability Initiative has worked with companies from the sector to look at CSR issues for the sector globally, with environmental issues at the fore309. Digital Europe has also looked at social responsibility in the information society and concluded that business needs to align innovation to social responsibility to benefit both business and society310.

• Case study examples of partnerships involving business, to promote digital inclusion have been published by Business in the Community and include good examples of what can be achieved311. Over-arching initiatives to engage with business on the digital inclusion agenda, such as the comm.unity312 campaign of Business in the Community have had some successes, but have so far failed to make the most of business leadership to ensure sustainability and scale. Citizens Online are working to launch a new alliance of industry for digital inclusion.

• Business in the Community’s “MAD4IT” action week313, which was run by the Cares campaign314 demonstrated the ability of employee volunteers to contribute to the digital inclusion agenda.
• The Boston Consulting Group (BCG) has outlined six requirements for business based initiatives, founded on the tenet that “Philanthropy has its place, but market-based business initiatives are the only sustainable way to narrow the digital divide.” BCG suggests that the needs of a particular community must be addressed, with minimal, appropriate technology and using partnerships to bring in additional resource. In addition they must lead to models which are economically viable, scalable and replicable.

• Fujitsu are taking this approach in their work to build capacity and e-inclusion into their model for delivering ICT in public services.

• Forum for the Future argue that business needs to take responsibility for access and digital literacy as they introduce new technologies on the market.

• Small to medium size enterprises (SMEs) have been supported in their use of ICT through UK online for business, which has been seen as a success. Given that SME’s employ 55% of the population and many people experience ICT for the first time at work, this programme will impact on digital inclusion.

• Oct 2003: 65% of SME’s are Internet connected (one third using broadband).

**Recommendations - Industry and digital inclusion**

• Responsibility for digital inclusion should widen: investors should consider the digital divide as a social risk issue for sectors beyond ICT, including those that are developing digital products and services, for example banking, music and retail.

• Government should support initiatives to build the capacity of the third sector to work with business, support brokers and promote partnerships with business in which ICT is used to tackle social issues (an example of Corporate Social Innovation).

• The power of ISPs to control the sites which Internet surfers will find (“walled gardens”) needs to be counterbalanced by non-profit or government search engines.

• Initiatives to address negative uses of the Internet, such as addictive behaviour, pornography, etc, have largely focussed on prevention through filtering. Emergent anecdotal evidence suggests that commoditisation of sex is increasing because of exposure to Internet materials. A working party (perhaps established by government) should examine trends and possible solutions beyond prevention, such as education and the availability of online support for addicts, based on the social risk as well as the risk of future blame and litigation aimed at industry.

• Business needs to take a more pro-active role in supporting voluntary sector efforts towards an inclusive information society. It is essential that more initiatives are based on collaborative actions and more closely aligned to core business.
• Corporates with interest in open source software should support the “social software” agenda\textsuperscript{325}. Links between open source and refurbishing initiatives also require support.

• Companies with ICT capacity should support initiatives (such as IT4Communities\textsuperscript{326} to assist the community and voluntary sector with their use of ICT.

• Companies need to support social businesses that are addressing digital inclusion issues as much as they are willing to support relevant charities. Relevant parts of the larger business could work with social businesses (e.g. Hairnet\textsuperscript{327}, UKVillages\textsuperscript{328} and DisabledGo\textsuperscript{329}) to develop sustainable models for reaching untapped markets. Trading arms of charities, which reach untapped markets e.g. AbilityNet\textsuperscript{330} and ACEnt (Age Concern Enterprises) should also be supported in achieving scale.

• National voluntary-sector umbrella organisations need to support capacity building initiatives to enable charities and community groups to work with business. Where “business support” is called for, the business case for support needs to be made strongly. “Support” does not necessarily mean cash, although clearly important, the full resources of a business need to be called upon to achieve a win-win situation.

• Corporate Social Innovation\textsuperscript{331,332} should be adopted by more ICT companies so that they innovate on digital inclusion and use of ICT in social issues. This can have clear business benefits.

• ICT businesses that provide software, services and hardware for individuals need to examine their penetration in “socially excluded markets” and work with communities, voluntary organisations and government to establish ways to tap these markets. This may involve significant loss leaders, work with or establishment of social businesses, Public-Private initiatives / mixed economy models etc. The BCG\textsuperscript{333} model should be invoked for this work, whether applied to geographic communities or communities of interest. The drive to promote Home Computing Initiatives\textsuperscript{20} might be a way of generating revenue to fund this.

Digital Europe reports by Forum for the Future, on social inclusion and technology\textsuperscript{334,335} recommend the following:

• Invest in public Internet access points. Business could play a greater role in addressing the failings of public Internet access points. Where employees have relevant ICT skills, volunteering and mentoring could provide valuable support to over-stretched staff in libraries and community centres and a significant boost to employee morale. Greater business investment in public Internet access points would secure the long-term sustainability of many ventures.

• Develop simple, cheap Internet access device: Low-income users need not be dismissed as charitable cases. There are business opportunities outside the current market if innovation can be directed towards creating appropriate products and services.

• Improve accessibility through design: Online service providers need to offer greater choice in the way content is displayed to reach more diverse audiences. A recent development in the US suggests that differentiated designs could help.

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\textsuperscript{325} Social software agenda
\textsuperscript{326} IT4Communities
\textsuperscript{327} Hairnet
\textsuperscript{328} UKVillages
\textsuperscript{329} DisabledGo
\textsuperscript{330} AbilityNet
\textsuperscript{331} Corporate Social Innovation
\textsuperscript{332} ICT companies
\textsuperscript{333} BCG
\textsuperscript{334} Digital Europe reports
\textsuperscript{335} Forum for the Future

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layout could be a possibility. Users signing up to AOL in the US can choose between different layouts according to their particular interests. A similar system could allow users to choose between levels of linguistic and typographical complexity.

- Improve relevance through community building- User-generated content such as chat rooms and message boards have the potential to bring down content barriers to wider use of the Internet and promote social interaction. Online service providers could become repositories for online community building tools and tips. Much of the necessary software is already available for free but users have to know what to look for and where to look. Making it all freely available in one place would be a way of actively promoting the social potential of the Internet.
Section Seven

Miscellaneous

7.1 Refurbishing and recycling

- Waste electrical and electronic equipment legislation (WEEE) sets criteria for the collection, treatment and recovery of ICT hardware and other “white goods”. It makes producers responsible for financing most of these activities and retailers responsible for take-back schemes. The WEEE directives will come into law in August 2004, with implementation deferred until 2005. The impact that WEEE will have on refurbishing of computers (i.e. re-use) compared to recycling (i.e. scrapping) is not yet clear.

- The “second hand car market” for PC’s (refurbishment) needs support at a national level, to ensure that initiatives with a social purpose are of high quality and can join-up where possible to achieve economies of scale, whilst reaching untapped markets.

- Different refurbishers have different scopes and scale of operation, a database is available.

- Tools for Schools has provided 20,000 refurbished computers to schools and other organisations working with learners across the UK. They work extensively in partnership and are a good example of “joined-up” working, with partners including Age Concern, Parents Online, Teach First, community centres, training centres for the unemployed, pensioners projects, charities, Neighbourhood Renewal projects, cultural groups, Local Education Authorities, Education action Zones and schools.

7.2 Appropriate technology

- The appropriate technology for a given person is not clear. Business tends to market to technophiles. Mobile telephony and digital TV have a higher penetration than PCs, though the Internet experience can be limited on such devices. Digital connectivity could also be argued to include phone conversations with call centre staff who are using PCs to access information.

- Communication / community applications of ICT or “Social Software” continue to emerge, alongside a debate as to whether ICT downgrades, increases or just changes the nature of social networks.

- An iSociety report on mobile phones and everyday life describes how mobile phone ownership “tipped” between 1998 and 2001 when a rise from 27% to 73% occurred. 38% of British people say they could not do without their mobile (compared to PC-19%, Internet-18%, email-17% and texting-15%). Mobile phone usage is not equal however, with a large number of...
owners making little use of their phones. 29% use their phones only in emergencies; only 9% use their mobile as their main phone; only 14% use their phone everyday and only 6% use WAP or Internet services. Half of 45-65 year old users have their phones switched off most of the time.

- Fareham Council has the facility to receive SMS text messages on a number of local issues such as vandalism, stray dogs and recycling.
- By 2005 it is predicted that the number of Internet connected mobile phones will exceed the number of Internet connected PCs. In around 100 countries the mobile is more common than the fixed line phone.
- Location based technologies offers many novel applications of ICT and therefore a route to new users through the work place, particularly those that are mobile.

- The government intends that digital TV (DTV) should become a means to provide all citizens with access to e-government services. Some local authorities are pioneering the use of DTV as a service delivery channel.
- Requirements of those with disabled people need to be taken into account in any further development of government digital television and information kiosk services.

7.3 e-Democracy

- Whilst maintaining and increasing democratic processes is a much wider issue than using technology, ICT can be used in new ways to support and encourage these processes. Four ways in which e-government can work have been outlined:
  - Information- a one way process.
  - Consultation – citizens provide feedback on policy.
  - Active interaction – citizens actively shape policy options over time and self-organising, with government retaining overall responsibility.
  - Integration- full integration between front-end delivery of services and the processes by which departments and agencies share information / knowledge to improve policy making at the back end.

- The main national activity of e-democracy is the UK online CitizenSpace, which provides general information on UK government and allows you to find your MP. Discussion spaces have no constitutional status and there is no obvious mechanism of response / accountability.

- e-Voting programmes need to be underpinned by capacity building and digital inclusion work. Citizens Online have produced a guide on how to do this.
- Kearns recommends e-Democracy pathfinders as part of devolving decision making to neighbourhoods, with training in digital citizenship.
- Government have produced a policy paper on e-democracy, which it divides into two interdependent tracks- e-Voting and e-participation, underpinned by the principles of inclusion, openness, security and privacy, responsiveness and deliberation.
8. Appendix

A Pathways Approach to Employment
This approach\textsuperscript{14} was highlighted in section 1.2.2 and further information is given here.

<table>
<thead>
<tr>
<th>Pathway Approach intervention and core elements</th>
<th>Information society context of interventions</th>
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<td><strong>Contacting and motivating disadvantaged groups</strong></td>
<td>- Using ICT to provide information on local training opportunities</td>
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<tr>
<td>- Reaching out to disadvantaged groups</td>
<td>- Developing online programmes to support capacity building</td>
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<td>- Selecting participants for intervention</td>
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<th><strong>Developing skills</strong></th>
<th>- Basic ICT skills training</th>
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<tr>
<td>- Developing courses for specific skills, soft skills and practical skills</td>
<td>- ICT training for employment and self-employment in IS sectors (multimedia, call-centre, teleworker, professional level ICT)</td>
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<tr>
<td>- Choosing certifications</td>
<td>- ICT training for employment and self-employment</td>
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<td>- Choosing trainers</td>
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<td>- ICT training for employment and self-employment in a specified non-IS area</td>
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<th><strong>Ensuring support for social and cultural needs</strong></th>
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<tr>
<td>- Ensuring affordable training interventions</td>
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<td>- Ensuring childcare supports</td>
<td>- Internet networks for cooperative learning and peer support</td>
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<td>- Ensuring cultural support in culturally diverse projects</td>
<td>- Counselling and guidance for business creation using IT skills</td>
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<tr>
<td>- Providing citizenship information</td>
<td>- Web based information to support citizenship</td>
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<td>- Supporting decision-making</td>
<td>- Web based programmes to promote cultural acceptance</td>
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<th><strong>Providing employment and career guidance services</strong></th>
<th>- Developing multimedia career guidance</th>
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<tr>
<td>- Providing career guidance</td>
<td>- Using ICT to deliver local employment and career counselling services</td>
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<tr>
<td>- Providing information on local</td>
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| employment opportunities | - Online career planning  
|                          | - Establishing ICT databanks of local employment information |

| **Developing employment progression measures** | - Using the Internet for mentoring and tracking  
| - Engaging with employers | - ICT to link with employers  
| - Providing work placements | - ICT for supported employment  
| - Supporting business start-ups and self-employment | - Teleconferencing for mentoring  
| - Providing supported and transitional employment | - Mentoring former participants in employment  
| - Tracking progression in employment |
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