HM Government

Delivering **Digital Inclusion**

An Action Plan for Consultation

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Foreword by Paul Murphy, Secretary of State for Wales and Minister for Digital Inclusion

Developments in digital technologies over the last decade have generated a period of extraordinary social and cultural change. Digital technologies impact on almost every aspect of modern society, creating huge social benefits. They can improve how we work, how we are entertained, how we communicate with each other, the healthcare available to us, and how information and knowledge can be brought together and used for our benefit. We now take for granted the technologies that give us these new opportunities. Our lives have been transformed by technology.

But these benefits are not enjoyed by all. While the majority of people in the UK are active participants in the digital revolution, these benefits are not distributed equally to all groups and communities. Inequality in the use and application of digital technologies is a new driver of social exclusion in the 21st century, which risks accelerating existing social divides and creating new ones. Digital exclusion is a symptom of wider exclusion, but also a cause.

Digital inclusion has two strands. Firstly, it is about ensuring that all citizens have the opportunity to enjoy the direct benefits which digital technology has to offer, through both access to technology and the skills, motivation and confidence to use it to improve the quality of their lives. Secondly, it is about ensuring that the indirect benefits of technology to improve all aspects of service planning and delivery are fully exploited. Only by taking action on both fronts can we ensure that all citizens, especially the disadvantaged, fully benefit from the use of digital technologies. Despite its significance, not enough people – individuals, communities, organisations, and decision-makers at all levels – are aware of the benefits of digital technologies. The measures outlined in this Action Plan aim to take the issue of digital inclusion into mainstream service delivery across all sectors.

We have plenty of good work to build on and much to be proud of when it comes to tackling digital exclusion and promoting the best use of technology. Within central government we have a Transformational Government strategy, ensuring that many citizens are benefiting from the greater personalisation, responsiveness and availability which technology brings to our public services. In local government the Digital Challenge has provided exemplars of good practice in tackling digital exclusion at a local level. We also have a world-class digital television infrastructure, backed by a £600m Help Scheme, to provide practical help for those who need the most support with digital switchover. Looking forward, in spring 2009 Government will be publishing the *Digital Britain Report* which will set out actions to support the UK's digital economy.

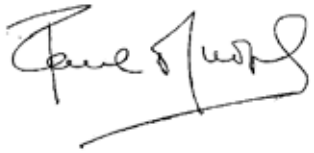
Across England there is a network of 6,000 UK online centres, including all public libraries, providing free or low-cost access and support to help people get online. For school-age children and their families, we have had a ministerial-led Taskforce exploring how universal home access to computers and the Internet can be achieved. And the newly-announced NHS Choices programme and Telecare pilots are showing the way to a world class, digitally enabled health service. Outside government, I recognise the valuable contribution of the third and private sectors, particularly in supporting community-based intermediaries. Close partnership with them is vital to ensure that information and communications technology (ICT) is enjoyed fairly by all sectors of the population.

While acknowledging the tremendous work already taking place, I am not complacent about the task ahead. The rapid pace of technology and its significant impact on all areas of life means we need to take time out to review progress so far and consider gaps which may not have been met in delivery. Critically, it requires urgent action if we are to ensure that digital technology becomes a vehicle for empowerment, rather than a force for further exclusion. We must therefore both *accelerate* the pace of change and seek to *deepen* its impact.

What is clear is that digital inclusion will not be achieved through unilateral action by me and my officials. The creation of the new role of Minister for Digital Inclusion, together with the establishment of a Digital Inclusion Cabinet Committee, signal this Government's commitment to a cross-government approach to ending digital exclusion and to driving through actions that will harness technology to ensure the best possible social outcomes for the citizen.

From the review of evidence, it has emerged that there must be a clear set of principles and a framework for action to ensure that **all sectors** are clear about their role and how it contributes to our strategic social goals. What is needed now is **clear direction and leadership**. There are many pilots and prototypes, but it is now time to provide a framework for delivery to enable every community and sector to realise the economic, social, and empowerment benefits for the most disadvantaged communities and groups.

This Action Plan presents an analysis of the issues, and outlines a fresh vision and action in hand. I hope that you will take the opportunity to comment on these proposals and help us to realise the benefits of technology for all individuals and communities.



Rt Hon Paul Murphy MP,
Minister for Digital Inclusion

Executive Summary

1. Commissioned by Paul Murphy, Secretary of State for Wales and Minister for Digital Inclusion, this Action Plan seeks to provide a framework for achieving greater digital inclusion and for championing the best use of technology to tackle ongoing social inequalities. It sets out both immediate actions and a number of proposals for consultation.
2. The Action Plan outlines the key issues relating to the use of digital technology and argues why digital exclusion is an increasingly urgent social problem. In summary:
   - Digital technologies pervade every aspect of modern society. However these opportunities are not enjoyed by the whole of the UK population – for example, 17 million people in the UK still do not use computers and the Internet and there is a strong correlation between digital exclusion and social exclusion.
   - There are significant and untapped opportunities to use technology better *on behalf* of citizens and communities. These include improved service planning, design and delivery, particularly to address the needs of disadvantaged groups and individuals.
3. The purpose of the Digital Inclusion Action Plan is to ensure that all citizens, particularly those who are disadvantaged, realise both the **direct** and **indirect** benefits of digital technologies. A summary of evidence on progress to date in these two key areas is presented in Chapters Three and Four.
4. We have been informed in this review by both the evaluation of existing research and new research undertaken to help develop the Action Plan. The detailed evidence will be published alongside this Plan in the form of Research Reports, which are summarised on page 80.
5. The Annex to this document describes in more detail current digital inclusion activity, with Government taking forward over 70 actions across the public sector. Despite these many successful initiatives and projects, summarised in Chapter Five of this document, there is still a lack of awareness across all sectors of the potential of digital technology to deliver very real social, economic and environmental benefits. And in delivering its services, both central and local government need to ensure that technology is being intelligently deployed to address some of the more complex and seemingly intractable problems society faces.
6. Through the **Minister for Digital Inclusion**, the **Cabinet Committee on Digital Inclusion** (MISC34), and a **Cross-Government Digital Inclusion Team**, we now have effective governance in place to drive forward action. However, outside government we need to build on the excellent work already taking place across all sectors and extend its reach and impact.
7. In planning how best to drive the digital inclusion agenda we are consulting on both the analysis we have set out in this document and on the proposals for a new **Digital Inclusion Champion** supported by an **expert taskforce** and a research team; and the introduction of a **Charter for Digital Inclusion**. The Charter should guide the work of the Champion and provide a high-level statement of intent agreed by all sectors, as well as with citizens – the client group for whom we are working.

8. We are also consulting more broadly on the importance of the role of government in analysing the gaps in activity and taking forward coordinated actions to address them, and on how best this new partnership approach could help to deliver the digital inclusion agenda.

9. We invite all those with an interest in digital inclusion to take part in this consultation, and to play a role in influencing the future direction of change. A short film presenting the main issues can be found at www.digiteam.org.uk

Chapter One

Overview

"The future is already here. It's just unevenly distributed."
– William Gibson (quoted in The Economist, 23 June, 2000[1])

Chapter One provides an overview of the key issues for digital inclusion, which is defined as: **"The best use of digital technology, either directly or indirectly, to improve the lives and life chances of all citizens and the places in which they live".**

What is digital inclusion?

1. This paper seeks to broaden the established understanding of digital inclusion. The prizes we are seeking are social and not technological. Digital inclusion work has often focused on the citizen's access to the Internet as the key to realising the benefits of digital technology – be that government services, entertainment, work and job hunting or cost efficient shopping. Initiatives have focused on access, broadband coverage and connection speed, digital literacy, and on accessibility of websites – initiatives addressing the **risk** that in an increasingly digital world citizens and communities will suffer unequal access to public services and the wider benefits that the digital age has to offer. These things are hugely important, but we want to broaden the definition and expand the understanding of the 'benefits of digital technology'. We want to encourage not only Government, but all service providers, to look more closely at the new **opportunities** that digital technologies offer in tackling the continuing problems of social inequalities, and to explore and understand the vital role that digital technology plays behind the scenes. This includes activities like the number-crunching and data-mashing that goes on inside government and in the third and private sectors, to develop and improve services.
2. The social and economic benefits of digital technology can be profoundly empowering. Increasingly, technology supports every aspect of our lives – at home, at work, in the community, in how we communicate and in the services we use. There is growing evidence that digital technology can greatly enhance both quality of services and quality of life – particularly for the most disadvantaged citizens and communities.
3. Analysis suggests that digital inclusion should be categorised in two general ways:
   - **Direct access to** technologies such as computers and the Internet, mobile phones, personal digital assistants (PDAs) and digital TV. These devices can help people gain access to:
     - employment and skills
     - social, financial, informational and entertainment benefits of the Internet
     - improved services, including public services
     - wider choice and empowerment around the major areas of their lives

[1] William Gibson is best known for depicting a visualised, worldwide communications network before it became ubiquitous in the 1990s, and credited with anticipating and establishing the conceptual foundations of the Internet and the World Wide Web

This requires people to have the motivation, skills and opportunity to engage in technology. Until they become self-sufficient users, they may initially be supported through an intermediary, such as a school or UK online centre, or community volunteer.

- **Indirect use of** technologies, where greater use of digital technology to plan, design and deliver services leads to significant improvements through:
  - better service integration so that multiple services across sectors work together (often an issue for socially excluded people)
  - better and quicker service planning (through better mapping of overlapping services, needs, and tackling problems in deprived communities, including crime and security)
  - equipping frontline staff to support complex needs, for example, using mobile networked technology which can provide immediate access to information and allow an immediate delivery of services while in the field

Where are the problems?

Access to the direct benefits

4. This paper will demonstrate the profound effects that the use of digital technology can have on individuals and on the services they receive, but it will also show that many people are still missing out on these benefits. In the UK, an estimated **17 million people** over the age of 15 are not using computers and the Internet[2]. This is where the majority of direct benefits can be realised. Some have made an informed choice not to engage directly in using the Internet, and no part of this action plan suggests they should be compelled to engage without a reason or need. However, analysis of those who are missing out shows a strong correlation with those experiencing social disadvantage. Research shows **15 per cent** of the population – more than **six million adults** – are both socially and digitally excluded.[3]

5. These members of our communities are missing out on the benefits which digital technologies can offer.

   "If only a portion of society has access to information tools such as online learning, electronic health records, and e-government services, then society will move in direction of greater inequality."[4]

Missed opportunities in realising the indirect benefits

6. Others are missing out on the indirect benefits of technology – particularly the preventative action and improved service effectiveness enabled by a greater understanding of how technology can help to tackle the problems faced by disadvantaged groups and individuals. There is a risk that some parts of central government, local authorities and their service delivery partners may not be sufficiently exploiting opportunities to use digital technologies as an efficient and effective tool to improve the lives and life chances of citizens. There is a big disconnect between those

[2] Dutton, W and Helsper, E (2007) *The Internet In Britain 2007*. (Oxford Internet Surveys)

[3] Digital Inclusion Team (2007) *The Digital Inclusion Landscape in England: Delivering Social Impact through Information and Communications Technology*. London: Digital Inclusion Team

[4] Information Technology and Innovation Foundation (2008) *Digital Quality of Life: Understanding the Personal and Social Benefits of the Information Technology Revolution* http://www.itif.org/files/DQOL.pdf

who know what digital technology can do and those who understand the needs of disadvantaged people. Despite the flexibility and capacity of technology to offer joined up delivery across sectors and solutions to those with complex requirements, there exists a silo mentality in the design and delivery of some technology-led solutions.

7. There is increasing evidence to show that, while not without its risks and disadvantages, addressed earlier this year through the Byron Review and subsequent action plan,[5] digital technology *can* greatly enhance the quality of services and quality of life for individuals – particularly the most disadvantaged. The review of evidence challenges the sceptical view that digital technologies are luxury commodities of little real value for serious improvement in life opportunities. There is a great deal of good practice which demonstrates that, where there is suitable access and support , these technologies are not only actively taken up by disadvantaged people but also help to address the complex issues behind their problems, from unemployment to poor health, homelessness to social isolation.

The pace of technological change

8. The pace of technological change has been, and continues to be, exponential. It is unlikely that the rate of change in the coming decade will be any less rapid or its impact any less significant than it has been over the last ten years. Putting this in stark terms, there are now a billion PCs worldwide[6] and, just 30 years after its debut, a mobile phone can be found in the hands of half the global population[7]. Digital is here – there is no turning back.

9. Until the recent past, the devices that we have at home or at work have been very different. We watch a TV, we listen to a radio, we play on a games machine, we phone on a mobile, we take pictures with a camera and we listen to music on a CD player. At home or at work we use a PC or a Mac for Internet browsing and office work. Recently, these distinctions have significantly blurred and will continue to do so over the coming years. It is already possible to listen to radio on a TV, the Internet or a mobile phone. It is possible to watch TV over the Internet. In South Korea the deployment of TV on mobile phones is already widespread. Within this digital convergence there is a convergence also of the media industries of film, TV, music, print and publishing.

10. While the process of "convergence" has been in train for some decades, the technical outcome of convergence is fraught with uncertainty, notably in its impact on business models, but also on which devices and services the user and businesses will adopt in the converged world. This provides many uncertainties in the regulatory regime needed for the converged world. Future challenges for government include convergence between the Internet and TV (IPTV) and entertainment being a possible anchor for home internet access. Appendix 1 sets out briefly the most immediate challenges and developments.

11. It is not always new technologies that need to be considered. Many products have accessibility features for people which are not fully understood and exploited. Further investment in these features may be driven by greater uptake of what is already possible. For example, as Web 2.0 (the use of the Internet to support community building, online collaboration, information sharing and learning) develops, digitally excluded people are not only denied opportunities to be *consumers* of ICT-delivered services, but also

[5] Department for Children, Schools and Families, Department for Culture, Media and Sport, and Home Office. (2008) *Byron Review Action Plan*. www.dcsf.gov.uk/byronreview/pdfs/byron_action_plan.pdf

[6] According to research and advisory company Gartner www.gartner.com/it/page.jsp?id=703807

[7] Research from International Telecommunication Union www.itu.int

producers of content through online communities and social networking sites. The prevalence of online social networks[8] has resulted in significant changes to the way in which many of us interact as individuals and in how we distribute content across the Internet. We are seeing both the rise of totally new online networks of people with no links to the offline world, and more significantly those that provide support and added value to existing offline social networks, and act as a catalyst for people engaging with the online world.

12. As a current example, NHS Choices[9] enables users to comment on NHS services, in a similar way to travel sites such as Trip Advisor[10]. Lord Darzi's *NHS Next Stage Review*[11] encourages greater use of digital technologies for capturing user experiences. Without access to the Internet, digitally excluded people will lack this opportunity to give their views, share experiences with others, and have an equal influence on service provision.

Market factors

13. There is a concern that there may be an inequality in realising the benefits of digitally-delivered services. Today, the digital marketplace in the UK is a complicated and constantly-changing mix of suppliers with a vast array of offerings. Intense competition on price and product offering characterises this market, with suppliers moving into each other's territory on a regular basis – a result of communications, computing, and entertainment coming together. There is a massive complexity and fast rate of change in the market but patterns are visible.

14. All suppliers are interested in growing revenues and achieving margins. There may be little commercial value in investing where the costs are too high or the revenues are uncertain. For telecoms services, this is usually a matter of geography, but uptake could feasibly be affected by the economic status of consumers in a given area. While some pricing models, such as pay as you go mobile, have spread technology far beyond the original early adopters, there remain some digital products where those unable to obtain credit might be excluded.

15. There might be circumstances where we need to consider more direct action on home access to technology for those groups in greatest need. For example, the Department for Children, Schools and Families funded a Computers for Pupils programme for eligible pupils in the most deprived neighbourhoods and following the report of the Home Access Taskforce to consider universal home access, has launched an initiative providing funding and support to increase access and effective use. The Department for Innovation, Universities and Skills also proposes to explore how the benefits of technology might be made available to adults in learning, including those from disadvantaged groups. Libraries could lend laptops as well as books and other resources to specific targeted individuals. We may also need to consider creative private-sector models such as in the case study below, which have potential to widen access to technologies to low-income employees.

[8] Clicks and Links Ltd on behalf of Communities and Local Government (2008) *Online Social Networks*. Delivering Digital Inclusion: an Action and Consultation Plan Research Report.

[9] NHS Choices www.nhs.uk/Pages/homepage.aspx

[10] TripAdvisor www.tripadvisor.co.uk/

[11] Professor the Lord Darzi of Denham KBE (2008) *High quality care for all: NHS Next Stage Review final report*. ISBN 978-0-10-174322-8. Command paper Cm7432. www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_085825

16. More generally, the principle behind this strategy is that fair access to essential and universal public services should not be denied due to an inability to access or use digital channels. Balancing individuals' preferences must be balanced with the efficient delivery of public services so that the cost to the taxpayer is not unreasonable compared to the cost of choice. By allowing people the opportunity to access services efficiently online or by telephone, resources can be better directed to where they are needed most, to support face-to-face services and mediated access to those who have particular needs.

Tackling access issues: Computing skills and technology (CST) programmes

In the wake of the continued requirement to increase usage of computers and to bring about the associated benefits to the skills base of the UK workforce, a section of the IT industry has over the last two years been developing a framework for employers to offer computers to their staff for use in the home. Discussions have taken place with government departments, within the private sector, and also with the third sector to help get the balance right between a commercial offering and one which leads to great digital inclusion in society. The formation of the Digital Inclusion Technology Group (DITG)[12] and the launch of computing, skills and technology programmes (CST) represent a new initiative to deliver computers into the home via employers. It has taken two years to set up, at a cost to a small number of companies of around £2m, and it has taken that time because the industry understandably is keen to introduce a permanent and assured solution for employers and employees alike. CST was soft launched in Autumn 2008 and currently 80,000 staff in a number of companies will benefit from CST programmes.

17. It is important to note at the start that by identifying a problem, this does not automatically imply that it is for government to resolve. Some issues are for the market to resolve, some for communities and individuals themselves – and some may not have any immediate solution. But we need to understand the problems and Government will, following this consultation, need to take a view of where action on its part, at either local or national government level, is appropriate. It will also agree where action within other sectors (perhaps driven by guidance, or even exceptionally in some cases by legislation) is necessary.

If these problems are overcome what do we stand to gain?

20. Digital inclusion is about creating social equity and improving social outcomes through digital technologie. This social capital has economic benefits for government and society, as well as environmental benefits too.

Economic benefits

21. The dividing lines of social equality are closely aligned to those associated with digital exclusion – age, geography, educational attainment, income, motivation and skills, disability, ethnic minority. Many socially excluded people and communities are shut out from many of the digital technologies which are starting to form the **backbone of the modern knowledge economy**. Skills that were once the preserve of technical specialists are now essential for employment.

[12] Digital Inclusion Technology Group (DITG) www.ditg.org.uk/

22. Digital inclusion is fundamental if we are to maximise our potential for economic growth, prosperity and social cohesion. From enhancing Information and Communications Technology (ICT) skills necessary to compete with emerging economies, to encouraging and enabling innovation, digital technologies and the ways in which we apply them are becoming increasingly integral to our information based economy.

23. There is considerable data which demonstrates the varied economic benefits of digital cost savings from technology. Key figures taken from *Economic benefits of digital inclusion*[13] include:

    - **£200m** contribution to the UK economy until 2020 by raising ICT skills
    - **1.14 to 1.54 per cent** increase in UK Gross Domestic Product (GDP) 2008-2010 due to public spending on e-government and digital literacy programmes
    - **£140m** per year potential saving through fewer missed hospital appointments with NHS Choose and Book

24. Research conducted by the European Union[14] provides insight into the economic benefits of achieving digital inclusion. A report by the European Commission estimates that if all the current EU policy targets on digital inclusion were met, economic growth in Europe could be boosted by **€85 billion** in the next five years.

Sustainability benefits

25. In the longer term, certain applications of technology will be key to **reducing carbon emissions** and provoking the behaviour change necessary to create a more environmentally sustainable future. This has implications for society as a whole in terms of decreased emissions through remote and mobile work. For example the report by the Climate Group and the Global e-Sustainability Initiative (GeSI) reveals that annual man-made global emissions could be cut by 15 per cent by 2020 by transforming the way people and businesses use technology. This could deliver energy efficiency savings to global businesses of over €500 bn.[15] However, there are some direct benefits for disadvantaged people and communities in particular, which may become important in the future. These include:

    - introducing 'Homeshoring' in areas of deprivation (where local people are trained as call centre operatives, working either in their home in a local 'hub')[16]
    - intelligent metering – where the energy or usage within a household is measured in detail; identifying areas of consumption and offering routes to reduction
    - access to information and services which reduce energy costs and support recycling (eg online conversion to greener suppliers and sites such as Freecycle).

[13] FreshMinds and UK online centres (2008) *Economic benefits of digital inclusion: building the evidence*. Ufi Ltd. www.ukonlinecentres.com/corporate/images/stories/downloads/economic%20benefits%20of%20digital%20inclusion%20-%20building%20the%20evidence.pdf

[14] European Commission (2007) *Commission Staff Working Document, Accompanying the Communication "European i2010 initiative on eInclusion": Impact Assessment SEC(2007) 1470*. Brussels ec.europa.eu/governance/impact/docs/ia_2007/sec_2007_1469_en.pdf

[15] The Climate Group on behalf of the Global eSustainability Initiative (GeSI) (2008) *SMART 2020: enabling the low carbon economy in the Information Age*. Creative Commons www.smart2020.org

[16] DC10plus: the network for change *Homeshoring: Nottingham's homeshoring pilot partnered with Cisco, UK Virtual Call Centres and a local community centre to pilot a homeshoring scheme with Boots* www.dc10plus.net/projects/Project529

26. The 'prize' of digital inclusion is not the technology itself, but the capability of that technology to connect individuals to new life-enhancing opportunities, to develop stronger communities, and deliver better, more efficient and effective services. As highlighted in the recent Empowerment White Paper, *Communities in control: real people, real power*[17] the exploitation of technology to empower people and communities is vital.

The way forward

27. This is a document about **partnership, consultation** and **joint work** to evidence and agree solutions. It seeks to build a better shared understanding of the issues from the point of view of the citizen, or community, by consulting with those in the public, private, and third sectors to provide the appropriate cross-sector leadership to help people and places seize digital opportunities.

28. To summarise, this action plan is about progress towards digital inclusion, which we can define as: **"The best use of digital technology, either directly or indirectly, to improve the lives and life chances of all citizens and the places in which they live."**

Tackling disadvantage through ICT

A mum of two from Nottingham has beaten her drug and alcohol addiction and got the skills and confidence to move on with her life, thanks to the Greenway UK online centre. Seven years on from her first visit to the centre, 30-year-old Anna Marie now works there as Treasurer.

"Back then, my life was pretty much a mess. I mean I was a down and out, drinking two bottles of brandy a day and taking heroin and crack. My head was all over the place and I couldn't see far enough to see my way out of the rut I was in. I was also a complete techno-phobe. I was frightened computers might jump out at me or something, and I always thought they were for people with money, an upper class thing. But somehow facing that fear helped me face a lot of other things too, and my life began to change for the better the moment I heard about the Greenway Centre.

"It's been one big journey for me. Learning about computers and the Internet was just the first step. Over the years I've gone on to do more courses like computer maintenance, desktop publishing, English and Maths. I didn't have much confidence when it came to numbers, but now I'm a Treasurer. I would never have imagined I'd be able to do that a few years ago. I thought I was useless, and it took a long time and a lot of support for me to start thinking differently."

Question 1: How far do you agree with the definition of digital inclusion and the nature of the problem set out here?

[17] Communities and Local Government (2008) *Communities in control: real people, real power*. (Cm 7427) ISBN: 978 0 10 174272 6 www.communities.gov.uk/communities/communityempowerment/communitiesincontrol/

Chapter Two

Why is digital inclusion important?

"The pervasiveness of ICT skills, both at work and for leisure purposes, means that functional competence in using ICT needs to be counted as an essential skill for the modern world."
– Skills White Paper, March 2005[18]

Having examined some of the key challenges to digital inclusion, and some of the wider benefits to be gained, Chapter Two examines the problems faced by specific groups and explores the use of digital solutions to social problems. It also sets out why we think digital exclusion is an increasingly urgent social problem.

1. The relationship between digital exclusion and social and economic outcomes is deeply entrenched and, as such, complex. It is when we relate the benefits to **individuals and communities** that we can see how it matters most to people's daily lives. The following section illustrates the effect on four core groups: young people, adults, older people, and communities; and this section also summarises the under-pinning benefits derived through the delivery of effective public services for everybody.

Young people

2. As technology evolves, it is important that the younger population learns to take advantage of the benefits it can offer. If young people fail to engage with new technologies, they risk falling behind their peers in education, and will ultimately suffer in what is increasingly a technology-dependent globalised job market. Key issues include.

   - **Achieving their potential:** one million young people are missing out on achieving their academic potential because they don't have access to computers and the Internet for homework and revision. Evidence shows that home access to ICT adds as much as a half a GCSE grade per pupil. Similar impact is found at A Level[19]. Contrary to the view that all young people are connected, or will be over the next few years, it is estimated that by 2025, there will still be 10 per cent of all 15-24 year olds not using the Internet[20]. This is of particular concern for those who are not in employment, education or training (NEETs), who will be particularly disadvantaged in even getting started in employment opportunities. Those with special educational needs (SEN) can also benefit, with 71 per cent of special schools in England reporting that ICT had a substantial impact on helping pupils with SEN.[21]
   - **Learning in their own way and at their own pace:** there is a major opportunity to engage with excluded young people through the media which they do use, such as games-based technology as well as alternative models for education and learning for

[18] HM Government (2005). *Skills: Getting on in business, getting on at work. Part 1 overview*. (Cmd 6483-1) www.dcsf.gov.uk/publications/skillsgettingon/docs/skillspart1.doc

[19] Schmitt, J. & Wadsworth, J. (2004). *Is There an Impact of Household Computer Ownership on Children's Educational Attainment in Britain?* London: LSE. cep.lse.ac.uk/pubs/download/dp0625.pdf

[20] UK online centres and FreshMinds (2007), based on Ofcom and ONS data. *Understanding digital inclusion – a research summary*. Ufi Ltd. www.ukonlinecentres.com/corporate/images/stories/downloads/uk_online_digitalinclusion.pdf

[21] Office of National Statistics, *Focus on the Digital Age* www.statistics.gov.uk/focuson/digitalage/

excluded pupils. For example, Notschool[22] is an online service which has provided a successful model for young people disengaged from classroom learning because of illness, pregnancy, bullying, phobia, travelling, reluctance to learn, disaffection and exclusion.

Technology as an enabler

A UK online centres project in Leeds has seen Leeds Library and Information Service team up with Interplay Theatre, a community organisation which helps disadvantaged or disaffected young people realise their potential. Working together, they're helping young people use technology to explore and change their lives.

Graham, 15, has been going along to Interplay Theatre for about a year, working towards NOCN multi-media qualifications.

Graham explains: "I first got kicked out of school in Year 7. I used to get really angry, and batter people. I don't really know why. I never went back 'til Year 9. The high school was too big for me – I'm used to small places. I just ignored people, kept to myself. But then it's like I'd suddenly get scared and lash out at people again.

"I felt like a wild rabbit in that school, out of place. I didn't belong there. This place is different – it doesn't feel like a school. What with all the multi-media and all that, doing it is actually fun. It is work, but all right work – interesting work. It's like I can be me here.

"At the moment I'm doing this DVing – it's like putting visual effects to a music track – like a music video. And there's all these computer programmes you do it on, and edit it and stuff. I love it – I love all the multimedia stuff. Everything.

"Doing my music on the computers calms me down. It's like I'm a different person now. If I hadn't come here, I reckon I'd be in a cop station somewhere. I certainly wouldn't be getting an education, and qualifications and stuff. I missed so much school – most of Years 7 and 8 and 9 – but now I feel like I've caught back up. I've made it right.

"My dad can't believe it. My mum and step dad can't either. They've seen my stuff and I think they're proud of me. I'm actually really proud of myself. I'm achieving what I need."

Adults

3. Adults and parents have a different set of issues. For example, a key priority is to ensure financial security. Parents need to see their children grow and develop, and help their elderly relatives to stay healthy. Technology can help families with many of the challenges that they face. However, those families already at a disadvantage and who experience the most difficulty achieving these aims are also the most likely to be digitally excluded. This means they are missing out on opportunities technology can provide, from homework help to helping to organise their parents' care. Key issues include:

    - **Employment and finance:** research shows that there is a 3-10 per cent wage premium for jobs involving computer/Internet use.[23,24,25,26] Many jobs are now advertised solely online and recruitment processes are increasingly electronic. Ninety

[22] Inclusion Trust. *Notschool.net* www.notschool.net/inclusiontrust.org/NS-overview-notschoolhome.html

[23] Jenkins, Andrew, Greenwood, Charley and Vignoles, Anna. (2007). *The Returns to Qualifications in England: Updating the Evidence Base on Level 2 and Level 3 Vocational Qualifications* London: Centre for the Economics of Education. ISBN 978-0-85328-192-4. cee.lse.ac.uk/cee%20dps/ceedp89.pdf

[24] Kirk, J. and Kirk, G. (2002). *Evaluation of 3- and 6-hour courses, Stage 2*. London: Learning and Skills Development Agency, www.lsneducation.org.uk

[25] Goodison, Terry et al. (2004). *Study of clients using UK online centres*. Department for Education and Skills, Research Report RR534 www.dcsf.gov.uk/research/data/uploadfiles/RR534.pdf

[26] Citizens Online on behalf of Becta, (2008). *Meeting their potential: the role of education and technology in overcoming disadvantage and disaffection in young people*.

per cent of new jobs require ICT skills.[27] Digital skills assist in effective job searching, increased employability and business start-up. Access to digital technologies also opens up opportunities for flexible employment and self-employment allowing people to balance work and family life more effectively.

Improving employment opportunities through ICT

David

Greenwich Online – Abbeywood Community Learning Centre

Ex-serviceman David, 47, a self-confessed techno-phobe, was rendered disabled by a stroke in 1995. When he recovered as much as he was going to, he threw himself into being a house husband and dad to his three step kids. As they got older, he realised they didn't need him at home as much, and it was time to try something new.

David decided if he'd proved he could learn how to walk and talk again, and learned how to run a household, he could learn how to get back to work. That meant computer skills, and David went into the Abbeywood UK online centre. Learning about computers and the Internet gave David's confidence a massive boost. Using his new word-processing skills, he tentatively began working on a CV. His hard work quickly paid off – David now has a part-time job at a finance company, where his new ICT skills are being put to good use.

"Before I never really imagined I'd be back in work – going into the centre has made such a difference to every area of my life. I smile more and I feel there's more worth to me now than there was before. We're better off financially and the whole family is just so much happier. I can finally see a future for me, as a husband and a father, but more importantly, as an individual."

- **Easy access to information, advice and services:** the Internet, and particularly social networking sites, enables access to support and advice on many different issues which affect families. Whether it's coping with a young baby or getting support on bereavement, the Internet can provide vital information and interaction. Technology plays an increasingly important role in keeping parents in touch with their child's education. For example, Ministers have made clear that all secondary schools by 2010, and all primary schools by 2012, will report online to parents on their child's attendance, behaviour and attainment, and special needs. Easier access to public services through online services such as paying tax online or applying for schools online can help people manage busy lives – this can be particularly important for example, for people juggling work and caring responsibilities, and single parents. It can benefit people to be able to transact and engage with public services online outside working hours.

[27] Hampshire County Council www.ehampshire.org/introduction/c-106.html

The British Library Business and IP Centre

The Business and IP Centre (BIPC) supports *small and medium-sized enterprises (SMEs)* and *entrepreneurs* from the first spark of inspiration to successfully launching and developing a business. The Centre is unique in offering free access to business and intellectual property information in one place, with impartial experts to guide users to the information they need; this is complemented by our partners and marketing associates who help users make the most of the information in the Centre through relevant workshops, advice clinics, events and referrals.

The Library has been working with Significan't and the SignVideo Contact Centre to provide on-demand access to *British Sign Language (BSL) interpreters*, using the latest *video conferencing technology*. This means that deaf entrepreneurs attending a workshop or events in the Business and IP Centre can how have a sign language interpreter available in minutes.

To support the skills, confidence and knowledge of users the BIPC has developed a programme of *e-learning courses* in partnership with Nelson Croom that takes aspiring and existing business owners step-by-step through the protection and development of their idea. The aim is to provide the information and processes which will equip entrepreneurs with sufficient knowledge to progress an idea (their intellectual property) from the simplest notion through to a possible tangible asset. The courses are available free online.

- **Visual impairment and other forms of disability:** The Government estimates there are over 10 million disabled people in Britain[28] and in 2007 the Disability Rights Commission reported that of all people in Britain without any formal qualifications, over one-third were disabled, and that of all people of working age out of work, 40 per cent were disabled.[29] Many assistive technologies can help to ensure older people and people with disabilities can participate equally in society, engage directly with others and receive equal levels of service delivery. For example, at a One Stop Shop in Islington, the 'Sign Video Call Centre' offers on-demand sign interpretation for deaf visitors. There are also software packages which convert speech to text.
- **Offenders:** There is a high level of operational churn in prisons, with approximately 80,000 offenders being released each year against a current population of 83,399 (as at 17 October 2008). At any one time around 190,000 offenders are subject to supervision by the Probation Service. The current reconviction rate for offenders leaving prison is approximately 67 per cent. The financial cost to Government of reoffending by ex-prisoners is huge, estimated to be at least £11 billion per year.[30] The opportunities to consider extending more IT-enabled services, within security constraints, to offenders within institutions in order to help tackle reoffending rates are considerable – from the use of serious gaming technologies used to prepare offenders for release, to online, email and text messaging based 'remote' cognitive behaviour therapy for those with addictions.

[28] Office for Disability Issues (2007) *User Guide to Disability Definitions* www.officefordisability.gov.uk/docs/disability-definitions.pdf

[29] Disability Rights Commission (2007) *Creating an Alternative Future* edit.equalityhumanrights.com/en/aboutus/history/disabilityagenda/Documents/overview.pdf

[30] Office of the Deputy Prime Minister. Social Exclusion Unit. (2002) *Reducing re-offending by ex-prisoners. Report by the Social Exclusion Unit*. www.cabinetoffice.gov.uk/~/media/assets/www.cabinetoffice.gov.uk/social_exclusion_task_force/publications_1997_to_2006/reducing_report%20pdf.ashx

Working with prisoners

The British Library's exhibitions often tackle challenging topics. **Sacred: Discover what we share** was the British Library's most ambitious exhibition to date and ran in 2007. It proved the most successful, both in terms of visitors, and of the overwhelmingly positive reaction from press and public alike. On display were 150 texts including a Dead Sea Scroll, a Qur'an all written in gold, and the world's oldest complete Bible. As part of the exhibition programme, **Sacred into Prisons** was run as a joint venture between the British Library and Wandsworth Prison. This focused on delivering an exhibition and creative workshops for prisoners exploring the links between the Abrahamic faiths. Ten prisoners were picked by the prison's World Faith Chaplaincy Team, and they then led art workshops with groups of 20 inmates per session. Prisoners were given the opportunity to produce their own sacred text on the subject 'What is sacred to me'. Three of the Sacred texts, one Christian, one Jewish and one Islamic, were digitised for the exhibition[31] and a learning interactive[32] was used offline in prisons as part of the Sacred into Prisons experience.

Older people

4. Although improvements in health services are such that many older people are much more active and healthy than previous generations, the issues associated with longer life expectancy mean that digital technologies will have a considerable role to play in meeting the needs of older people. Older people face a number of problems which technology can help to address. These include:

   - **Independent living:** the number of people of pensionable age is projected to increase from 11.4 million to 15.3 million by 2031.[33] An increasingly aging population will mean a significant increased cost in the provision of health care. Digital technologies are now being used to provide 'telecare' (for example, through personal alarms and preventative technologies) to support older people to continue living independently in their own homes. There can also be economic benefits of this approach which, among other things, can help to reduce direct care costs and reduce delays to discharges from hospital.

   - **Volunteering and work:** studies have suggested that one million more active older people who are not currently in *paid work* could be, adding up to £30bn to annual economic output.[34] Also, approximately five million people over the age of 50 take part in unpaid *voluntary work*[35], with an increasing reliance on digital technologies. Research has shown that older workers are far more likely to use the Web for learning than younger employees.[36]

   - **Social isolation:** technologies can help older people to stay in touch with families and friends who may be spread around the world through relatively cheap and increasingly sophisticated forms of communication, such as Skype and social networking sites. The growth of online services also provides ready access to goods and services that may be unavailable or difficult to reach for older people, particularly those living in rural communities – having groceries delivered to the door for example, or accessing a bank account online where local high street amenities are unavailable.

[31] British Library. *Sacred stories*. http://www.bl.uk/learning/cult/sacred/stories/
[32] British Library. *Elements of the Abrahamic Faiths* www.bl.uk/onlinegallery/features/sacred/wheel/kioskMain.html
[33] National Population Projections 2004 – based. National Statistics ©Crown Copyright 2006, Table 3.2
[34] Meadows P, Cook W, (2004). *The Economic Contribution of Older People*. Volterra Consulting and Age Concern England, London
[35] As above.
[36] Ofcom (2007) *Communications Market 2007* <www.ofcom.org.uk/research/cm/cmr07/cm07_print/>

Silver Surfer of the Year – 2007

Joan, 75, of East London, began learning how to use the Internet and email in 2004 by taking part in her housing association's Digital Unite[34] project. Joan says: "My daughter had tried to show me how to use the computer but then got impatient when I couldn't use the mouse immediately, so I gave up on myself. When our Digital Unite trainer came to our community lounge, I shocked myself with how quickly I could learn. I'm quite persistent, and I just sat in front of the computer every afternoon that I could, fiddling around."

Joan became a Digital Ambassador to encourage other tenants to use the computers. Her knowledge of IT has helped her neighbours; in her own sheltered scheme she is the focal point of information and assistance. She has also participated in four launches of computer training projects within other Genesis sheltered accommodation in East London and Essex. She demonstrates the Internet, talks about what it can do and answers questions. "People are often frightened of making fools of themselves; they worry about breaking the machine, about the dangers they hear about, how youngsters get trapped into looking at unsuitable sites or making unsuitable friends. I just reassure them and say "it's your choice! And you can't break it, have a go!"

Lisa Down, Community Development Officer for Genesis Housing, says: "I am constantly amazed at the transformation in Joan's personality. She plucked up the courage to stand for the Customer Association and now she is Vice Chair. She helps spread the word that you are never too old to learn and be involved; she is a real asset to the Genesis community, a support for me and a good friend to us all. I'm convinced that learning how to use a computer was a big turning point for Joan".

Benefits for communities

Technologies can also help to improve communication at a local community level, enhancing the wellbeing of communities, increasing proactive social activity and making general improvements to quality of life for participants and their peers.

- **Empowering Communities:** Technologies, particularly multimedia applications, can provide powerful platforms to help people express their views and understand the views and experiences of others, but, as set out in *Communities in control: real people, real power*, the Empowerment White Paper, *'Citizens often feel powerless because of a lack of information. Too much jargon can alienate, confuse and frustrate. More accessible and open information is a pre-requisite to community empowerment.'* Initiatives, such as the Big Lottery funded Head Spaces in 20 public libraries is providing new community spaces for young people, designed, developed and run by young people and offering free IT access points.
- **Rural Communities:** Technology has an important role to play in supporting strong rural communities, in tackling isolation, delivering improved services to remote areas and increasing opportunities for small and medium enterprise.
-

[37] Digital Unite (www.digitalunite.net) developed and manages the annual Silver Surfers' Day campaign. The Digital Unite training programme within Springboard sheltered housing was run by Genesis Community.

- **Sustainable Communities:** There is increasing evidence[38] to suggest that technology will be a vital tool in tackling climate change and environmental degradation. Home and mobile working enabled by ICT can have a significant effect on transport needs, and thus transport emissions. Buying, selling or exchanging goods on the Internet can encourage waste prevention, greater use of the Internet for a whole range of transactions, especially commercial transactions, can substitute for paper transactions, and the greater availability of environment information made available through a range of digital channels encourages the uptake of energy saving measures. However, it is important to remember that the benefits which we gain from technology and the progress that these drive do come at a price. ICT is a major user of energy and natural resources. The re-use and disposal of computers, servers and printers has to happen in a sustainable way. We have to ensure that the very systems that improve the lives of millions of people do not also have a negative impact on the environment.

Effective public services for everybody

5. A particular issue faced by all groups is access to **better public services**. As more and better services are available on digital channels – from road tax to local issues such as reporting vandalism – there are more compelling reasons for citizens to use digital technologies.

Directgov (www.direct.gov.uk) is the primary government website for citizen facing information and online services. Extending the reach through digital TV and mobile phones is an important element of Directgov's channel strategy. Directgov's TV service is currently available on Virgin Media and Sky with a Freeview and analogue TV version to launch early 2009. Directgov TV customer research from March 2008 has shown that its core audience is different to that of its web users with viewers tending to be older, not working and non internet users. Mobile internet usage is a growth area with current penetration at 22 per cent (Deloitte Digital Index). Action on digital inclusion would help increase the reach of Directgov. There is currently no telephone or face to face equivalent of Directgov, although the individual public services are separately accessible through telephone, post and face to face services. The Contact Council is working on a range of strategic plans for aggregation across these channels.

NHS Choices aims to empower the citizen to take charge of their own health. By opening up information and access to services to all Internet users, the website aims to reduce health inequalities. There is evidence that shows links between poor health and digital exclusion which means those people who could benefit most from the services the most are at risk of missing out. A channel strategy is being developed to help to increase the reach of NHS Choices to address this.

[38] ITU/MIC Japan Symposium on ICTs and Climate Change, Kyoto, 15-16 April 2008 (2008) *ICTs and Climate Change: ITU background report* www.itu.int/dms_pub/itu-t/oth/06/0F/T060F0000070001PDFE.pdf

Conclusion

9. We have tried to set out here why there is an urgent need to address the problems of those individuals and communities who may have lack the awareness, the means, or the skills to achieve an equal opportunity to participate in community and economic life. For those working in more deprived communities, and who see the daily impact of technology on people's lives, the links between digital and social equality appear self-evident. However, we *must* focus on building the business case for digital inclusion *quantatively*, as well as qualitatively. More of the evidence about the problems and opportunities is set out in Chapters Three and Four of this document.

Question 2: How far do you agree with the analysis set out above? Is there other evidence we should consider as to why digital inclusion is an important social issue?

Chapter Three

Direct benefits: who is missing out and why?

"It is neither morally acceptable nor economically sustainable to leave millions of people behind, unable to use information and communications technologies to their advantage."
– Viviane Reding, EU Commissioner for Information Society and Media (November 2007)[39]

As stated earlier, digital inclusion has two strands.

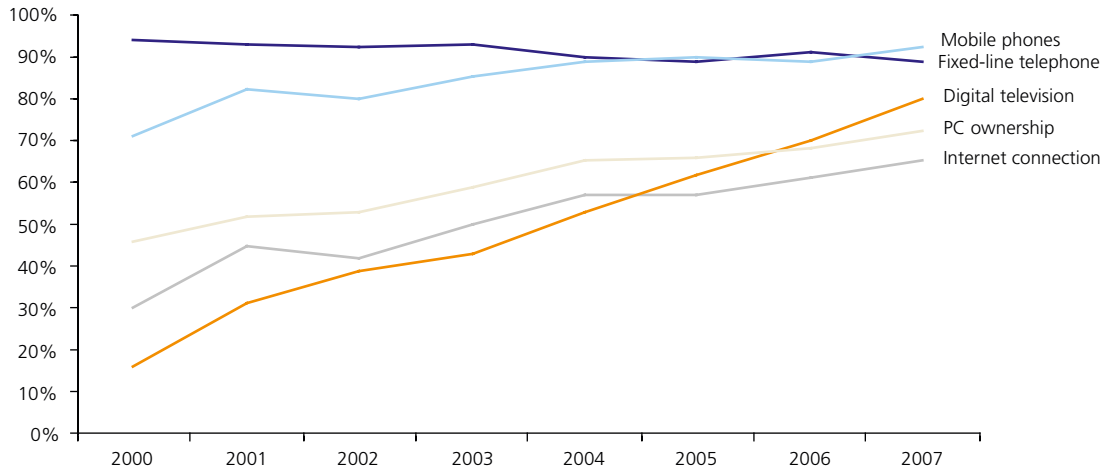
i) Ensuring that all citizens enjoy the **direct** benefits which digital technology has to offer, through access to technology and the skills, motivation and confidence to use it

ii) Ensuring that the **indirect** benefits of technology to improve all aspects of service planning and delivery are fully exploited for all citizens and communities

This chapter presents a summary of evidence about citizens' **direct** use of technologies, while the indirect benefits are considered in Chapter Four. The Research Reports, published alongside this paper, provide more detailed evidence.

Current status of access to technologies

Figure 1: Trends in ownership of technologies among UK consumers



Source: Ofcom 2007a. Base: 700+ individuals per month

1. As illustrated in Figure 1, over the last few years, ICT ownership has broadly increased across all traditional platforms, apart from fixed line telephones. Growth in ownership appears to have been driven by older people, although this age group are still the least likely to own a mobile phone, digital television or an Internet subscription.

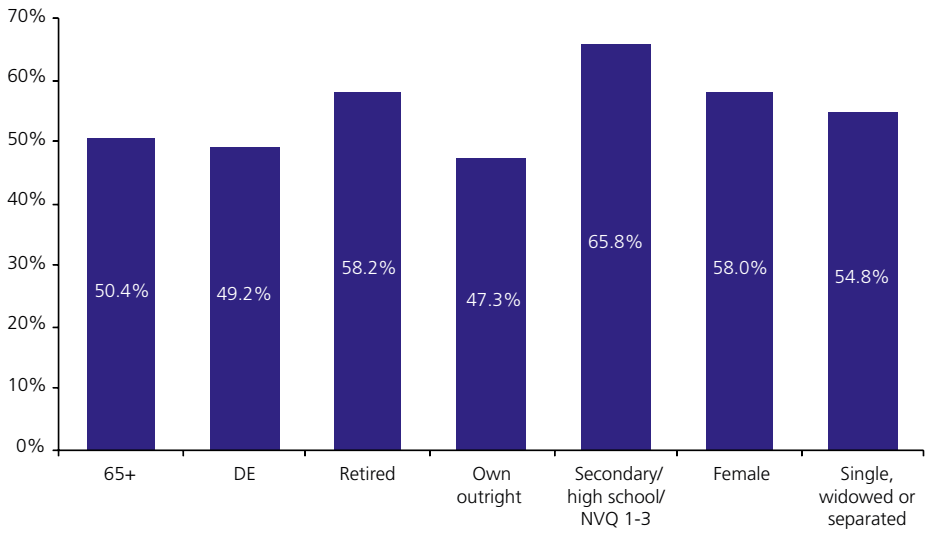
[39] europa.eu/rapid/pressReleasesAction.do?reference=IP/07/1804&format=HT

Profile of non-users of the Internet

2. Of course, the issues around digital exclusion extend far wider than ensuring access to Internet. But given the large and growing role of the Internet in everyday life, an analysis of the take-up of the opportunities provided by the Internet is of central importance.

3. For all the talk of 'silver surfers', Internet usage decreases with age, with only 37 per cent of those aged over 65 having Internet access at home against an all-adult average of 67 per cent, and dropping to 22 per cent for those aged 75 or older. But people aged over 65 who do make use of the Internet spend 50 per cent more time online per day (90 minutes) than the UK average of one hour. This underlines the opportunities around encouraging older people to make increased use of digital technologies. It is also interesting that amongst older age groups gender plays a far greater role in determining Internet usage –29 per cent of the time spent online by over-65s is accounted for by women.[40]

Figure 2: Key profile figures of those without Internet access at home or elsewhere



Source: ICM & UK online centres. Base: 7655 (weighted)

4. The profiles shown in Figure 2 show that:
   - Just over half of non-Internet users are over 65
   - Just under half are from the DE social band (the lowest socioeconomic band)
   - 66 per cent of non-Internet users lack higher education.

5. Further analysis of the overlap between these groups shows that those who were both over 65 and of the DE social class count for 28 per cent of all people without Internet access; four times that of any other similar combination. This suggests that interventions should focus on engaging older people and people in the DE social band. Recent research commissioned by Communities and Local Government[41] provides more evidence of the links between social and digital inclusion; and a new mapping website[42] made available alongside this report also provides further analysis of these overlaps and relationships.

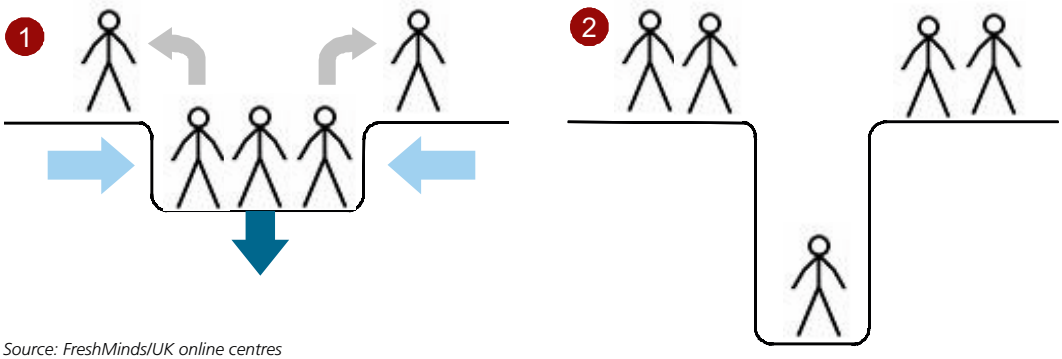
[40] Ofcom (2008) *The UK Communications Market 2008*.

[41] Dutton, W. & Helsper, E. of the Oxford Internet Institute on behalf of Communities and Local Government (2008). *Digital Inclusion – An Analysis of Social Disadvantage and the Information Society*.

[42] *Community maps: Digital and Social Geographies of Great Britain*. For further information email mapping@digiteam.org.uk

6. The divide is multi-dimensional. As Figure 3 illustrates, digital exclusion is not just about the *width* of exclusion, which we can think of as the quantitative difference between those who are using technologies (see 1) and those are not, but also about the *depth* (see 2). As more people are using digital technologies the digitally excluded risk falling further behind the rest of society. The severity of their exclusion will deepen, meaning that they risk suffering higher cost of living, denial of access to certain services and discounts, less integration into society, and have less chance of finding employment.

Figure 3: The social risks of digital inequality



Source: FreshMinds/UK online centres

7. Moreover, 20 per cent of the population suffer three or more significant social disadvantages and could be classified as being socially excluded. New research published alongside this report, undertaken by the Oxford Internet Institute, examined national databases to measure and evaluate the evidence about how digital inclusion may be linked to or contributing to the poor outcomes experienced by different disadvantaged groups. This research has identified a strong, statistically significant association between the social disadvantages an individual faces and their inability to access and use digital services. Those who are most deprived are also least likely to have access to digital resources. One in ten of the adult population, amounting to 4 million people, suffer 'deep' social exclusion, a severe combination of social disadvantages, and have no significant engagement with Internet-based services.[43] The correlation between social and digital exclusion applies not just to individuals but to place. Evidence from the Scottish Household survey[44] indicates that households in the least deprived 20 per cent of communities are more than twice as likely to have Internet access as those in the most deprived communities. We know that as social inequalities increase, Internet use reduces – around 3 per cent of the population suffer deep and persistent exclusion, with five or more disadvantages, and 89 per cent of these do not use the Internet.[45]

8. What is crucial, and most successful, is that engagement programmes focus on the **individual needs of participants**; the actual applications and their benefits rather than the ICT itself. Focus must lie on **specific targeted benefits** for the most excluded and resistant, as well as more general awareness raising campaigns for those who are inclined towards becoming digitally included.

[43] Dutton, W. & Helsper, E. of the Oxford Internet Institute on behalf of Communities and Local Government, (2008). *Digital Inclusion – An Analysis of Social Disadvantage and the Information Society*.

[44] Scottish Executive (2007). Digital Inclusion in partnership. www.Scotland.gov.uk/Resource/Doc/167938/0046198.pdf

[45] Andersson, Edward et.al. *Localism and the information society*. www.knowledgepolitics.org.uk/KP_Localism.pdf

Access to broadband

9. Broadband is a technology that enables both businesses and the public to access a wide variety of new ICT based services. The UK has one of the most extensive broadband markets in the world with over 99 per cent of households able to access broadband. Many have a choice of technologies and suppliers. Around 59 per cent households now have access to broadband at home and this has increased from around 5 per cent in 2002. Based on this foundation, the policy focus has now very much shifted to how and when Next Generation Access (NGA) to broadband can be delivered in the UK.

10. NGA has the potential to deliver much higher upload and download speeds and improved qualities of service. This will improve the delivery of existing applications and services. It will also create the potential for the delivery of new innovative services, which may generate economic and social benefit to the UK.

11. Government policy is to ensure a strong, competitive, market-led approach to NGA roll-out. Francesco Caio recently led a review on NGA for Department for Business, Enterprise and Regulatory Reform (BERR) and the Treasury[46] which was published in September 2008. This focused on the barriers to industry investment in rolling out NGA. Ofcom has also been working to develop a regulatory approach and environment that supports both investment and competition. As part of this process Ofcom published a consultation on "Delivering super-fast broadband in the UK"[47] on 23 September.

12. The Caio review found that there is no compelling evidence as yet that people are missing out on essential and universal public services as a result of infrastructure differences in communities. The review did, however, recommend that the Government should establish a structured, permanent benchmarking process to monitor the development of NGA in the UK and in relation to other countries, including an assessment of the evolution of both supply and demand in the UK. The Government will be responding to the Caio Review shortly.

Tackling access issues: Project Access in Cumbria

Project Access is the result of the North West Development Agency's (NWDA's) goal to enable all organisations and households in Cumbria to have access to the same level of broadband service at the same price as urban areas. Until now, broadband capability in Cumbria has been limited due to the high costs of installing new networks in rural areas, limiting the availability of high bandwidth services for larger businesses and restricting small and medium enterprises (SMEs) to dial-up services.

Broadband Wireless Access offers a cost-effective solution for customers in rural regions like Cumbria. The scheme is funded through £20 million investment from NWDA to provide broadband coverage to areas which would otherwise be unable to receive the technology. New applications and services such as e-commerce and real time video conferencing help businesses increase growth potential and enhance productivity and efficiency. Another major benefit is increased employee satisfaction due to the flexibility broadband provides in how and where they work. For example, remote working allows employees to conduct business from home. Not only will this drive more business and economic growth opportunity into rural areas like Cumbria, but it provides the opportunity for a better work/life balance and quality of life.

[46] Caio, Francesco. (September 2008) *Review of Barriers to Investment in Next Generation Access: Final Report*. www.berr.gov.uk/files/file47788.pdf Department for Business, Enterprise & Regulatory Reform.

[47] Ofcom. *"Delivering super-fast broadband in the UK". Consultation published 23 September 2008, consultation closes 02 December 2008*.www.ofcom.org.uk/consult/condocs/nga_future_broadband/

13. It is often noted that access alone is not enough. People still need motivation and skills to use technology. It is still common for a household to have broadband access and for members of the household to be non-users of the Internet, thereby being digitally excluded. Advanced media literacy skills are imperative and public services such as libraries, museums and archives could have a stronger role in supporting media literacy building on the role they already have in supporting library users to get on line.

Summary of issues facing the direct use of digital technology

14. As well the review of literature and research evidence which has informed this paper[48], qualitative research and analysis has been undertaken into the experiences of community and third sector organisations involved in initiatives aimed at opening up digital technologies to excluded communities.

RNIB Cymru 'ATIC' project

RNIB Cymru's Accessible Technology in Communities (ATIC) project is designed to address the issue of poor ICT access for blind and partially sighted people in Wales. Eighty organisations have received a tailored accessible technology training package to enable them support the ICT accessibility needs of blind and partially sighted people. The training covers the use of speech and magnification products and highlights the barriers that blind and partially sighted people face in accessing ICT.

ATIC has recruited and trained volunteers known as 'Digi Champions' who provide one-to-one support to blind and partially sighted people in their local community by mentoring and supporting them in the use of ICT. 80 per cent of the Digi Champions have sight loss themselves. ATIC also established an Accessible Technology Information Line that provides tailored advice and guidance regarding accessible technology to blind and partially sighted people and organisations.

RNIB Cymru has produced an accessibility toolkit distributed to 1000 organisations which has provided them with every day solutions on making their services and training accessible to blind and partially sighted people. A research-based report – 'Progressing digital inclusion through community ICT'[49] was published in May 2008, and highlights the difference that ATIC is starting to make in supporting the accessible technology agenda across Wales. The project has been fully funded by the Welsh Assembly Government, Communities @ One initiative.

15. The main barriers to direct engagement which emerge from this analysis are set out below and provide a summary of the policy issues.

[48] FreshMinds on behalf of Communities and Local Government (2008). *Understanding digital exclusion*.
[49] www.rnib.org.uk/xpedio/groups/public/documents/PublicWebsite/public_waltech.hcsp

Issues due to individual lack of awareness or confidence	1. Without a clear picture of the benefits, or a clear and simple presentation of the benefits to them, many excluded people are not **motivated** to invest time and effort in the exploration and mastery of digital technologies. 2. Digital technologies are perceived as youth-oriented or work-oriented; those without exposure over-estimate their **complexity** and subsequently underestimate their ability to master the use of devices. 3. An allied issue is the concern about the perceived high cost of devices and a perception that they are **fragile**; the fear of causing damage is a major barrier. 4. Many excluded groups have **no familiarity** with screen-based devices (other than TV) and keyboards; linked to this is the multi-functionality of many digital devices; many excluded groups are more comfortable with single purpose devices.
Lack of skills	5. Digital technologies often require a **broad range of skills**, and the ability to make connections between different channels/media and input devices (text, sound and vision; keyboard and mouse; symbols and language; etc). 6. Even when people have already mastered one component skills (for example using a keyboard), they experience **frustration** when they cannot use a mouse or trackball device.
Lack of support	7. For many excluded groups, support needs to be more pro-active and include **outreach activity**; it needs to come to the potential user, rather than wait for them to act. 8. Many people are not connected into supporting organisations or networks; often they cannot even **identify support sources**, let alone access them. 9. Support often is perceived as too focused on **IT skills** rather than life-skills; the lack of user-focus can create a further alienating effect.
Areas where the market may not be reaching the digitally excluded	10. Availability of **infrastructure**: Potential constraint on access to services provided by the public, private and third sectors. 11. **Design** inequalities: user interfaces which are unsuitable for older or disabled people; lack of clear and readable instructions; websites which do not comply with DDA and other usability standards. 12. **Marketing** inequalities: marketing campaigns which over-promote high cost and most-up-to-date products aimed at high value customer segments create misconceptions about benefits and costs.

Question 3: How far do you agree with the analysis of the main barriers which prevent individuals and communities from engaging in digital technologies?

Question 4: What are the most effective ways to remove these barriers and ensure that all individuals can exercise an empowered choice about their use of digital technologies?

Question 5: What are the risk factors and benefits for different communities associated with current and next generation access?

Question 6: What should be done to empower communities and local partnerships to address these risks and benefits?

Question 7: How far do you agree with the summary of issues around the direct use of technology presented in this chapter? Are there any other important issues we have not mentioned?

Chapter Four

Indirect benefits: realising the opportunities

"It is possible to extend opportunity to the least advantaged so that they enjoy more of the choices, chances and power that the rest of society takes for granted."
– Reaching Out: Action Plan on Social Exclusion, September 2006[50]

Chapter Four sets out evidence and explores issues and opportunities around the indirect use of technology to deliver social outcomes, improve service effectiveness and promote sustainable development. The two key areas of opportunity are:

- using digital technologies to understand the problems faced by socially disadvantaged people
- better service planning and delivery

The Annex and Research Reports, published alongside this paper, provide more detailed evidence.

1. Socially excluded individuals and deprived communities have multiple difficulties which are deep-seated and difficult to address. These have been set out in reports by the Social Exclusion Task Force (SETF, formerly the Social Exclusion Unit) and particularly in their Action Plan, *Reaching Out*.[51]

2. The indirect benefits of utilising technology to address these needs are broad – from gaining efficiencies to the way public sector programmes might be managed and implemented, to how organisations can use and manage information to achieve better results. These are things which can be enabled through the smart use of technology that will allow better opportunities for socially excluded individuals and their communities.

3. The key areas of risk and opportunity are around:

   - **understanding the problem:** using digital technologies to gain a better understanding of the needs and problems of excluded citizens and groups, by bringing together information from different places about overlapping problems
   - **better service planning and delivery:** delivering better services through exploiting the opportunities of digital technologies to address the needs of deprived groups, target resources where they are needed, improve front line and back office support

Understanding the problems

4. A great deal of research and analysis has helped government and society to understand and be able to address more appropriately the needs of socially excluded groups and individuals. Over recent years the government has improved its understanding of social exclusion through analysis of cohort studies and longitudinal surveys. For example, analysis of the Families and

[50] Cabinet Office (2006) *Reaching Out: An Action Plan on Social Exclusion*.
[51] Cabinet Office (2006) *Reaching Out: An Action Plan on Social Exclusion*.

Children Survey (FACS) for the SETF's Families at Risk review[52] has helped to uncover the compounding effects of multiple disadvantages within the family on children's lives.

5. However, there is a continuing need to understand the nature of overlapping problems, how they occur and for how long, and to gain a better understanding of the number and type of people experiencing various forms of exclusion. By enabling a more systematic approach to longitudinal data and understanding the patterns of deprivation and exclusion which affect individuals or communities, we can help drive our understanding of how and why some households remain locked in poverty and underachievement from one generation to the next, and try to take earlier, more preventative action.

King's Fund predictive modelling

An innovative example of how data can be used to improve the lives of those most at risk of adverse outcomes and also help save taxpayers' money is predicting and preventing hospital admissions. Hospital admissions are very expensive and can in many cases be prevented if at-risk individuals are identified early and treated in the community instead.

The King's Fund has produced two ground-breaking predictive models – Patients At Risk of Re-hospitalisation (PARR) and the Combined Predictive Model[50] – that help primary care trusts (PCTs) predict the risk of emergency re-admission and first-time admission to hospital by identifying patients who are at risk of, but who have not yet entered, a spiral of emergency admissions.

The models have in a short time enabled PCTs to reduce emergency re-admission rates and save costs in hospitals across the country. Croydon has been using the Combined Predictive Model in its *virtual wards* project whereby people identified by the model as having a very high risk of future hospitalisation are put on a 'virtual ward'. These people are provided with preventive care in their own homes by a multi-disciplinary team who use the systems, timetable and staffing of a hospital ward but without the physical building.

Admission to the virtual ward is determined solely by the output of the Combined Predictive Model. Patients' risk scores are monitored over time and can be used to prompt the virtual ward staff to discharge patients when appropriate – and offer admission to a patient at higher risk.

6. We also know that deprivation tends to concentrate in specific **places**, where several problems of health, worklessness, crime, and poor environment can significantly overlap. As part of the National Strategy for Neighbourhood Renewal, a large range of new information was made available through the Office of National Statistics' Neighbourhood Statistics. Tools such as the Indices of Multiple Deprivation[54] and the Floor Targets Interactive[55] website allow us to map overlapping problems in deprived neighbourhoods, and how progress is being made, both over time and by comparing areas to other similar places. The important element of this approach is its focus on small areas of around 1400 people in neighbourhoods. Similar approaches to mapping are used to understand individual issues such as crime or worklessness. Figure 4 presents an example of such analysis and shows the changing patterns of benefits claims and educational achievement over time in the North East.

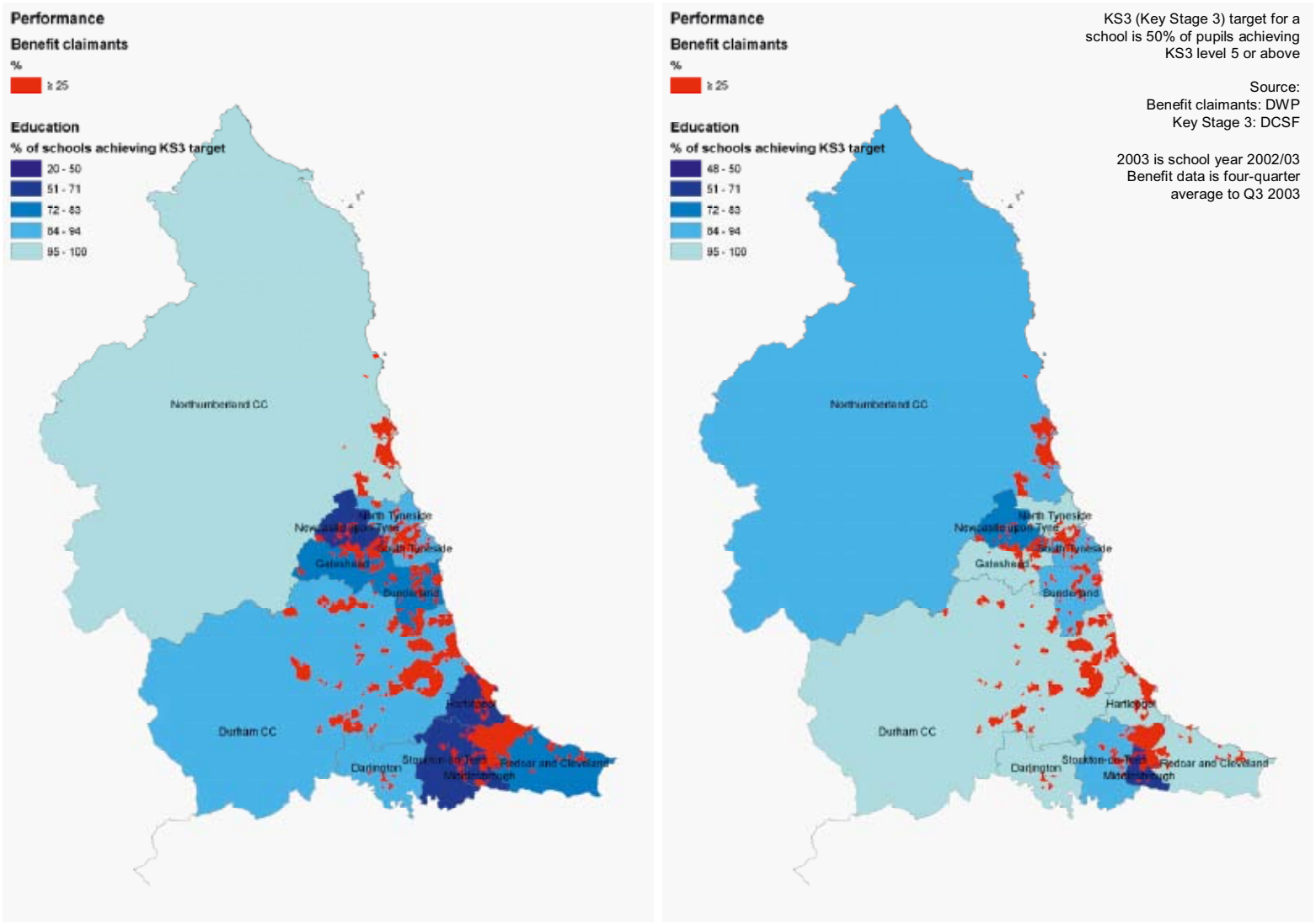
[52] Cabinet Office, Social Exclusion Task Force, (2008) *Families at Risk Review*. www.cabinetoffice.gov.uk/social_exclusion_task_force/families_at_risk.aspx

53 The King's Fund. *Combined Predictive Model*. www.kingsfund.org.uk/current_projects/predictive_risk/combined.html

54 www.communities.gov.uk/communities/neighbourhoodrenewal/deprivation/deprivation07/

[55] Communities and Local Government. *Floor targets interactive*. www.fti.communities.gov.uk/fti/

Figure 4: Chart showing changing patterns of benefits claims and educational achievement over time



2003 North East 2007

Produced by Performance Analysis Team, Regeneration Performance and Digital Inclusion

Better service planning and delivery

7. With better analysis, visualisation, and presentation of information, local people, local leaders, and those delivering local services can use it to improve the quality of life in neighbourhoods through mechanisms such as Local Information Systems. The London Borough of Newham has found their Newham Information Management System[56] beneficial as it collects a wide source of local strategic information from strategic partners who have a direct role and impact on the lives of the socially excluded. This has allowed that information to be used collectively for the benefit of improving performance and service outcomes. It contributes to identifying the demands of the local communities through providing evidence, which then enables partners to react and plan how to address those local needs.

8. As part of this, we can develop more efficient and effective mechanisms for exchanging and sharing information among those who need it – generating a shared understanding locally between partners in the local authority, health authority, police, and voluntary sector of the areas where problems overlap, or are improving or worsening.

Providing access to unique material: The British Library

The British Library provides a leadership role in the provision of digitised content. Researchers travel from around the UK and across the world to London to use the British Library's collections, which number some 150 million items. The advent of the Internet and the ability to digitise large quantities of text and images and make them available over the Web has transformed the access possibilities.

Over the past two decades, the British Library has undertaken a number of focused digitisation initiatives. More recently, it has entered the world of mass digitisation in partnership with external funding bodies and technology providers. Through digitisation, it is creating a valuable and enduring resource for scholars and the public alike. For example, in spring 2007, the British Library launched a nationwide competition to put *historic treasures held by public libraries across the UK* online using its award-winning Turning the Pages 2.0™ software, developed in collaboration with Microsoft to showcase its new Vista operating system.

The competition generated 82 entries from across the UK, ranging from maps and illuminated manuscripts to diaries, photographs and engravings. Visitors to the *British Library's website* can now 'turn the pages' of the winning entries, bringing treasures of local, national and international significance to a worldwide audience.

Hidden Treasures[57] has helped to highlight the importance of providing digital access to the unique material held in public libraries as a critical part of supporting cultural heritage, history and diversity. It is a component of the British Library's ongoing digitisation programme, which aims to increase the accessibility of collection items and to meet the needs of the 21st century researcher from the academic to the family historian.

[56] www.newham.info
[57] www.bl.uk/ttp2/hiddentreasures.html

9. **Geographical Information Systems** (GIS) are used to capture, analyse and visualise administrative information and to combine it with other useful geographic data. The Jobcentre Plus tool is an example of such a system that can be used by Jobcentre staff, but also shared with other organisations such as Local Strategic Partnerships (LSPs). Liverpool LSP has used this tool to map out areas where there is a high incidence of incapacity benefit claimants, assisting in the development of a strategy to tackle unemployment. Kent County Council has employed this technology to target single parent hotspots, whilst in Birmingham the COSMOS system provided the intelligence to drive a 25 per cent reduction in crime in the area.

10. A key element of this is sharing information around different issues which affect the same communities or groups. This can be the exchanging of **anonymised** data where there can be no link made to any individuals.

11. Programmes like the South West Observatory information exchange or the cross government Data Interchange Hub for National Indicators are beginning to provide tools to share anonymous information in this way. The biggest benefit to such schemes is easy access to data. The most up to date data can be made available to all partners who need it, bringing a sharp reduction in administrative effort in finding this data which can allow more time to be spent on analysis.

12. There are also opportunities in relation to the **appropriate sharing of personal data** to address need. These are of different types:

    - **Transformational services:** Where government at a local or national level focuses on the needs of citizens rather than the structure of departments, it can share information securely to bring together different services dealing with different aspect of a person's needs (housing, social services, benefits, etc). Here the Service Transformation Programme is driving improvements aimed at providing much more integrated services in relation to citizens' needs – for example, the Tell Us Once project, which is exploring ways to make it easier for citizens to notify government only once about life events like births or death, or making applications for benefits such as free school meals more streamlined. Technology can pull together different items of data which are already known to government, locally or nationally, and thus reduce the need for the citizen to provide the same information multiple times. This has benefits for all citizens, particularly the most excluded.

    - Joining up information proactively around **risk or service planning** and delivery, not necessarily prompted by a citizen's request. Recent research on the costs and benefits of sharing personal information at the Local Strategic Partnership (LSP) level[58] has shown some of the more innovative service improvements introduced by some local government partnerships driven by this approach to actively sharing information.

[58] Office of Public Management on behalf of Communities and Local Government (2008) *Research and recommendations on the costs and benefits of personal data sharing at local partnership level*.

Remote assistance for rural older people: VITAL

Derwentside District Council's ICT and EU experience is once again being put to good use in a new EU funded research project called VITAL. They are working with a number of European partners to develop a set of technologies, platforms and applications aiming to provide remote assistance to older people using the concept of Total Assistance. Total assistance is assistance anytime, anywhere, through access to domestic terminals for specific services. VITAL targets anyone over 60 who is in reasonably good physical and mental condition, able to operate the most common functions of a TV set using a remote controller and simple applications on a mobile phone. The system will also take into account physical limitations associated with age such as hearing loss, visual impairment, slow responsiveness, and any difficulty in accessing user friendly technologies. By using existing infrastructures and domestic terminals, VITAL is designed to deliver advice, assistance, information, education, entertainment and inter-personal communications to older people using advanced user interfaces over readily available domestic terminals that are specifically designed (ie TV and mobiles) and to offer personalised information and services in an active way using speech understanding technologies.

13. Reducing the number of times someone has to tell Government the same thing not only saves time and money, it also reduces error from re-keying data and reduces the risks associated with unnecessary handling of personal data and information. However there are also risks around any handling, storage and sharing of personal data. These are risks that all businesses whether private or public sector have to manage – modern businesses cannot function without handling, storing and moving personal data. The Government takes these issues very seriously and its report on data security[59] sets out the steps being taken to ensure personal data is kept safe and secure and to **make sure that the public sector adheres to the highest standards**.

14. Equally, however, there are risks to **not** sharing personal data appropriately. These can be either direct risks to the safety and security of individuals and groups, such as children at risk, or risks in terms of the failure to address problems in a positive, structured manner across the various partners who may be dealing with the same individual or community. The recently published Data Sharing Review[60] sets out recommendations on data protection and data sharing which the Government is considering. A response is due to be published shortly.

15. There is also potential for **service delivery improvements** focused on the specific needs of disadvantaged people. One key principle of Transformational Government is developing customer-focussed services. Transformational services help focus the provision of services on the needs of the user, offering a choice of access routes wherever possible. There is, as part of this, a clear need to address the particular needs of the most excluded groups and communities.

16. The better integration of technology to improve the delivery of services to these groups was one of the outcomes of the last Digital Strategy.[61] Following a "Digital Challenge" competition with 79 competing local authorities in England, the City of Sunderland was successful in its bid to become a world class digital city by 2010, and the digitally-enabled approaches to the strategic and delivery planning of services for disadvantaged groups and communities are now being fully integrated to Sunderland's wider community strategy and Local Area Agreement process.

[59] Cabinet Office (2008) *Data Handling Procedures in Government: Final Report*
[60] Thomas Richard and Walport Mark (2008) *Data Sharing Review*
[61] Cabinet Office/DTI (2008) *Connecting the UK*

17. In addition the winner and nine runners up of the Digital Challenge competition have formed the DC10plus group to develop and roll out excellent local services which exploit technology, focusing on economic opportunity, environment, service transformation and social inclusion.

18. The type of benefits and service improvements driven by authorities include better support for front line staff, more integrated back office services focused on excluded clients, and the provision of digitally enabled services which are bundled up to deliver added value. For example, Barnet Council Children Service saved £380,000 by introducing mobile communications technology to social workers.

Delivering the potential of digital technology

19. Although much is being done, and many lessons are being learned from the evaluation of innovative projects, there remains a lack of skills and awareness on the part of some local, national and regional delivery partners about the potential of digital technology to deliver social and economic benefits to the most disadvantaged local citizens and communities.

20. There are many cross sector initiatives to address this, from which more value can be driven in relation to better services for the more disadvantaged citizens. These include:

    - Communities and Local Government's Digital Inclusion and e-government projects such as DC10plus and the Digital Challenge
    - Improvement and Development Agency for local government (IDeA)[62] work on Front Office Shared Services (FOSS)
    - Good practice websites and toolkits like www.esd.org.uk, which supports local authorities with electronic service delivery
    - the clear commitment in the government's Service Transformation Agreement to develop a user-focused approach across government, supported by technology
    - the investment of over £600 million in the local e-government programme

21. Nevertheless the fast pace of developments provides new opportunities to build the evidence base of delivery of more effective and efficient services for these groups, building on experience and investments to date.

Conclusion

22. When considering work towards digital inclusion, the use of technology on behalf of citizens and community can offer powerful benefits. These are sometimes overshadowed by debate about citizens' direct use of technology, particularly the Internet. If it is to be effective, action on digital inclusion needs to help realise both the direct and indirect benefits of technology. To achieve the indirect benefits, we must break down silos between social policymakers and technology professionals – across all sectors – so that the capability of technology to tackle disadvantage can be fully exploited.

[62] Improvement and Development Agency for local government (IDeA). www.idea.gov.uk

Question 8: How far do you agree with the assessment of the risks and opportunities around the indirect benefits of technology?

Question 9: How can we raise awareness of the indirect benefits of technology for service design, planning and delivery across all sectors?

Question 10: Does the way in which services, particularly public services, are currently delivered adequately support individuals and groups who are socially disadvantaged? What more could be done to ensure they do?

Chapter Five

Action for digital inclusion

Chapter Two examined social problems faced by specific groups and began to explore the use of digital solutions to these social problems. **Chapter Five** looks at these same groups and sets out key actions being taken to address these issues. It also includes future challenges and opportunities which are being explored by Departments. For ease of reference, an overview of central government action is set out in the table in this chapter and set out in greater detail in the Annex *Delivering Digital Inclusion: Public Sector Use of Information and Communications Technologies to Support Social Equality* which is published by government as a review of digital inclusion activity across central government.

1. There is a considerable amount of public, private and third sector activity which is helping to realise the benefits that digital technology can bring – the social, economic, and increasingly, the environmental benefits – as well as addressing the interaction of social and digital inclusion.

2. In terms of recent policy direction, the Digital Strategy, *Connecting the UK* (Cabinet Office/DTI) was published in 2005 and outlined actions to tackle digital exclusion. These included the Digital Challenge – cited above – and the Computers for Pupils programme. An internal review of this strategy in 2007 recommended coordinated government leadership to address digital inclusion. This led to the establishment of a Digital Inclusion Minister and a Ministerial Committee in early 2008, supported by a Cross-Government Digital Inclusion Team.

3. As well as the improved coordination of Digital Inclusion work there is also an increasing amount of work going on across Government.[63] The information below is a significant, though not fully comprehensive, set of government programmes, policies and initiatives which are most relevant to socially and digitally excluded people, groups and communities. Many are targeted to specific groups of disadvantaged individuals. However, many socially and digitally excluded people have multiple disadvantages and increasingly Government is striving to take a more joined up approach, capable of addressing complex needs. Core to improving this coordinated approach is the recognition of the vital role the public, private and third sectors play in this area, and that actions for delivering digital inclusion are being taken across all sectors.

Young people

4. Enabling young people to have access to computers and the Internet has a direct impact on both their academic potential and likely life outcomes. Equally, harnessing technology enables those working with young people to deliver more effective and targeted services to disadvantaged individuals and groups. This is particularly key when young people are not yet in employment, education or training (NEETs) or have special educational needs

[63] Government actions are often in support of government Public Service Agreements, in particular: Improve the skills of the population, on the way to ensuring a world-class skills base by 2020; Maximise employment opportunity for all; Raise the educational achievement of all children and young people; Increase the number of children and young people on the path to success; Increase the proportion of socially excluded adults in settled accommodation and employment, education or training; Tackle poverty and promote greater independence and well-being in later life; Promote better health and well-being for all; Ensure better care for all; Build more cohesive, empowered and active communities.

(SEN) where lack of access to facilities and services makes it more difficult for them to realise their potential or get started in employment.

5. Internet safety for young people is, of course, always a concern and following the Byron Review which considered this matter, the Byron Review Action Plan[64] is being implemented and the new UK Council for Children's Internet Safety has been created to take this forward.

6. Government is taking action to ensure young people **achieve their potential** both by the use of technology directly, including proposals for home access for all families with children (5-18) and support for its use in the home, and indirectly with the Harnessing Technology national e-strategy for learning and children's services (Becta). The Creative Economy Programme, as set out in *Creative Britain; New Talents for a New Economy*[65] will also encourage employers to create new apprenticeship places for young people and support the creative industries. Looked after children, who are in the care of local authorities, are one of the most vulnerable groups of young people. Currently eMentoring is being trialled to improve the support which looked after children receive.

7. **Computers for Pupils:** through local authorities, is providing computers and connectivity for up to 100,000 pupils and their families in the most disadvantaged households in England.

8. Under its **Home Access** initiative the Department for Children, Schools and Families aspiration is for every household with young people aged five to 18 to have appropriate access to computers and the Internet. At the moment, there are over a million children with no access to a computer and the Internet in the home. These children are disproportionately from disadvantaged backgrounds, and their limited access to technology reinforces attainment gaps. Taking forward the recommendations in the Ministerial Taskforce Report[66], the DCSF Home Access programme will target the one million learners from seven to 18 and their families who do not have computers and Internet access, encouraging adoption with a national campaign to raise awareness of the benefits of ICT access at home for all learners and families and providing financial support for families with low incomes to gain access to this valuable technology. This is to encourage universal access and will bring benefits to all learners by increasing the opportunities and potential for extending and improving learning. The programme will also focus help for all learners, parents and teachers to make the most of the technology.

9. Technology-based opportunities may enable ways for delivering alternative provision that will allow and encourage young people to **learn in their own way and at their own pace**. Use of alternative platforms such as set top boxes and games consoles present both opportunities and challenges.

Adults

10. Adults who are digitally disadvantaged miss many opportunities which are open to others. This can have a profound impact on their ability to support themselves or their families financially, gain access to jobs, have easy access to information and advice, stay in touch with family and friends or take part in local community initiatives. As more

[64] Department for Children, Schools and Families, Department for Culture, Media and Sport, and Home Office, (2008). *Byron Review Action Plan*. www.dcsf.gov.uk/byronreview/pdfs/byron_action_plan.pdf

[65] Department for Culture, Media and Sport, Department for Business Enterprise & Regulatory Reform and the Department for Innovation, Universities & Skills, (2008) *Creative Britain: New Talents for the New Economy*. www.culture.gov.uk/images/publications/CEPFeb2008.pdf

[66] Becta (2008). *Extending opportunity: Final Report of the Minister's Taskforce on Home Access to Technology* www.about.becta.org.uk/content_files/corporate/resources/news/2008/september/home_access_report.pdf

people use digital technologies the digitally excluded risk falling further behind the rest of society.

11. Enabling access to technologies such as the Internet, can increase their likely success in gaining **employment**, both in terms of widening exposure to job opportunities, increasing their skills and enabling more flexible ways of working. Government activities in support of employment include Job Centre Kiosks, Job search via Digital TVs and Homeshoring Pilots. Government is currently exploring extending the reach and content of information available on Job Centre Kiosks.

12. Digitally excluded people living in low income households, including many one parent families, may find themselves unable to access or to make the most of mainstream **financial services**, many of which are necessary to participate fully in society and the economy. Financial exclusion can carry real and rising costs for those already on a low income. The Government's financial inclusion work seeks to ensure that everyone has access to a range of financial services – especially a bank account to manage their money effectively and securely. The key technological challenge for the future will be new delivery systems for banking and payments (ie Internet banking, mobile banking). For many people these may make banking and other financial services easier and more attractive. However, there is also a danger that they could marginalise groups of people who are less comfortable with digital technology and prefer to access financial services through more traditional means.

13. Government provides opportunities for disadvantaged people to enhance their learning and skills through the independent learning advice and careers service, learndirect courses and centres and the UK online centre programmes. In addition Government is supporting further development in this area with the consultation on the future of informal adult learning, the Next Generation Learning campaign (Becta) and the Technology strategy for further education, skills and regeneration: implementation plan 2008-2011 (Becta). Future challenges which are being explored include IT training and media literacy towards the European Union (EU) Target to reduce by half by 2010 the digital literacy gap between the EU population and specified disadvantaged groups.

14. UK online centres and myguide: the 6000-strong independent network of UK online centres is a unique public asset which incorporates the People's Network of Internet-connected computers in public libraries. It was launched by the Government in 2000 to overcome the 'digital divide' and now opens up ICT to millions of people each year. The centres attract a high proportion of people from disadvantaged social groups: over 70 per cent of centre users are affected by at least one indicator of social exclusion and half of UK online centre users have no formal qualifications. Forty per cent of new UK online centre users progress into work, volunteering, job search, or formal learning. The network is involved in a number of cross-government initiatives, notably supporting the rollout of myguide[67] (www.myguide.gov.uk), a simple introduction to email, the Internet and the wider applications of digital technologies such as online public services, on behalf of the Department for Children, Schools and Families. They also support increased awareness of NHS Choices among socially excluded groups through a network of community champions. However, as has been suggested in the Varney Review[68] and the National Audit Office report[69], UK online centres could play a stronger role in supporting the take-up of online public services, by targeting deprived areas not currently reached and increasing use by citizens.

[67] www.myguide.gov.uk
[68] www.hm-treasury.gov.uk/pre_budget_report/prebud_pbr06/other_docs/prebud_pbr06_varney.cfm
[69] www.nao.org.uk/publications/nao_reports/06-07/0607529.pdf

myguide is both a website and a service. It combines available technologies and accessibility solutions with carefully developed and tested design solutions, resulting in a 'radically simple' step-by-step tool for using the Internet. Launched in 2007, the site offers a free, easy to use email service and web search facility from a clean, simple homepage which can be personalised to the individual. It is designed to be either used by an individual or supported by intermediaries, particularly staff in UK online centres who help make sure people's first steps onto the Internet are a positive experience.

The vision for myguide is to make the Internet available and accessible to those who have never used it before whether because of lack of motivation, skills or confidence, and particularly for 'hard to reach' and excluded audiences. Guidance modules help people to benefit from the Internet by using online public services, search for jobs or shop or bank online. Already 86 per cent of users say it has had a positive impact on their lives.

For example, when Vanessa, 60, lost everything in a business venture, she found herself living in a car in Chester. She discovered the Harold Tomlins Centre, part of Chester Aid for the Homeless, who gave her a chance to rebuild her life. Vanessa has brushed up on her rusty ICT skills with myguide, built a CV and found both a job and somewhere to live. She's now using the Internet to sort out her citizenship, benefits and pension, and she's even started to try and rebuild something of the business she lost.

"Being thrown on the scrapheap makes you realise quite how easy it is to get there and quite how hard it is to get back up again. Without the resources at the centre, I don't think I would have stood a chance. You can have all the will in the world, but sometimes you just need support, both practical and emotional. The Internet has been a vital tool for me."

15. Access to digital technologies can also enable disadvantaged people to have **easy access to information, advice and services**. For example, helping them to claim benefits and pensions which they are entitled to, improving their lives and those of their families. Current government initiatives in this area include benefit advisers available online, benefit enquiries, changes of circumstances and claims online being developed, online services being developed for a third party (eg Citizens Advice Bureau[70]) access, Local Service (Pension, Disability and Carers Service) using technology to provide a more holistic visiting service for vulnerable customers. Future developments might include extending services to mobile devices and using more proactive techniques such as text messaging and email alerts/information.

[70] CitizensAdvice www.citizensadvice.org.uk/

Northern Ireland Government Initiatives

Government believes that every citizen in Northern Ireland, irrespective of personal circumstances, should be able to access low cost and convenient computing and internet technology. Digital inclusion is also about providing citizens with the skills to interact with relevant technology and make it work for them. Through the work of the Department of Finance and Personnel's Digital Inclusion Unit the public, private, voluntary and community sectors have joined together to deliver a range of innovative projects – one of which was the Internet Made Easy project. Every household in Northern Ireland received an 'Internet Made Easy' CDROM to promote the benefits of technology for everyday life and work – providing information on how to use computers, how to use the Internet for simple tasks like shopping, booking a flight and banking, and how to protect themselves and their computers online. Led by the Digital Inclusion Unit the project was a joint partnership with the Educational Guidance Service for Adults (EGSA), and was sponsored and supported by a range of public, private, voluntary and community sector organisations including Tesco, easyJet, Ulster Bank, Microsoft, Northern Ireland Council for Voluntary Action (NICVA), BBC, Ofcom and the Consumer Council.

To complement this, the CDROM is also accessible to everyone through the "START" menu on all computers within the Northern Ireland library network, as well as at a range of community centres and training providers. The annual Silver Surfers Day also makes use of the CDROM in the training of 1000 citizens by over 250 business volunteers, and it is also used in Internet taster sessions provided by Citizens Online and UFI. Details have also been provided of local, free Internet access points for those without access to a computer at home or work. This fully searchable information database includes location details, opening times, contact details, accessibility and the availability of ICT training. Users can also find their nearest Internet access point by calling EGSA or sending a text message to a dedicated government number.

16. Public and private-sector bodies including the Department for Innovation, Universities & Skills (DIUS), the Department for Children, Schools and Families (DCSF), Directgov, Becta, Campaign for Learning, Talktalk and Ofcom will also support a campaign **Get online day** led by UK online centres held first on 24 October 2008 to motivate and support families to use computers and the Internet. This is planned to become an annual event.

17. **Transport** is a key public service. The Transport Direct[71] website provides a journey planning service which helps people find the quickest, cheapest or lowest CO_2 option for their trip. The service is also available via digital TV set top boxes for those with the appropriate equipment and service provider. The challenge now is to consider extending the reach of Transport Direct, either directly or through enabling third party access to back office processing, so that all can benefit from it.

18. Many **disadvantaged groups** experience health inequality, often linked to deprivation. Digital inclusion can reduce health inequality by providing access to better health information for the public and for health professionals. Current services provided include NHS Choices, Connecting for Health, HealthSpace, eClinics proof of concept, NHS Lifecheck, Information Prescriptions and Health Information Kiosks. For people who require the help of mental health services, the Improving Access to Psychological Therapies (IAPT) programme provides improved access to psychological therapies.

[71] www.transportdirect.info/web2/Default.aspx?repeatingloop=Y

19. Research into attitudes and uses of ICT-enabled services among excluded groups, published alongside this report[72] [73] [74] [75] has developed 'digital profiles' which set out the triggers and barriers to using digital technologies and will also assist those who deliver local services in understanding how to improve their reach to excluded groups.

20. Many **offenders** are from socially and digitally excluded groups and often have multiple disadvantages. Government digital activities supporting rehabilitation include Offender Learning and Skills Service (OLASS); Learning Journey includes basic ICT, learndirect centres are currently in approximately 20 prisons, 'Virtual campus' in two testbed regions, Prisons ICT Academy (PICTA) established in 20 prisons and Digital Switchover in Prisons. The future challenge will be to increase access to Internet-based services that can reduce the risk of reoffending while working within the security and public safety limitations.

21. **Visual impairment and other forms of disability:** There is work going on across government on e-inclusion which supports our work towards the European Union's 'Riga Declaration'[76] (June 2006); particularly the priority objective to 'ensure accessibility, affordability and equal participation for disabled users in the digital economy.' For example, the Department for Business, Enterprise & Regulatory Reform lead a group which draws together Government, industry and third sector to explore and understand issues of e-accessibility and develop and share best practice across all sectors. Government has also helped develop the use of technology to support those living with disabilities through individual funding commitments and pilots. These include the work with significan't to develop 'sign video'. Significan't is a Government funded deaf and sign language led social enterprise providing 'SignVideo', an instant and high quality sign language interpreting via the videophone.[77]

22. **Social housing** is also an important element in successfully supporting socially excluded people. We now need to consider how digital inclusion might best be embedded in housing policy. The wider challenge for the future will be to consider how digital technology can be better designed into new build and incorporated into existing social housing.

Older people

23. Digital technologies offer significant opportunities to increase the quality of life of older people and their carers. Technology can support independent living, reduce the impact of visual and other disabilities, help people engage with the community through volunteering or employment and reduce social isolation both directly and through enabling more services to be delivered to home. However many older people remain socially and digitally excluded, not benefiting from the opportunities offered by technologies.

[72] Citizens Online and the National Centre for Social Research on behalf of Communities and Local Government. (2008) *Digital Exclusion Profiling of Vulnerable Groups: Ex-offenders – a Profile*.

[73] Citizens Online and the National Centre for Social Research on behalf of Communities and Local Government. (2008) *Digital Exclusion Profiling of Vulnerable Groups: Adults with learning disabilities – a Profile*.

[74] Citizens Online and the National Centre for Social Research on behalf of Communities and Local Government. (2008) *Digital Exclusion Profiling of Vulnerable Groups: Adults with mental health problems – a Profile*.

[75] Citizens Online and the National Centre for Social Research on behalf of Communities and Local Government. (2008) *Digital Exclusion Profiling of Vulnerable Groups: Young people not in education, employment or training – a Profile*.

[76] The Riga Declaration set the target that, to convincingly address e-Inclusion, the differences in Internet usage between current average use by the EU population and use by older people, people with disabilities, women, lower education groups, unemployed and "less-developed" regions should be reduced to a half, from 2005 to 2010.

[77] www.significant-online.co.uk/

24. Government activities to improve social care and **independent living** for older people and people with disabilities includes telecare programmes which enable people to summon help and can also monitor changes in the environment, for example fire, gas and flooding. These include Telecare: Preventative Technologies Grants and the Telehealth: Whole Systems Demonstrator Programme. With the proportion of older people likely to increase challenges to Government remain significant, potentially including the replacement of obsolete equipment, development of interoperable equipment that deliver complementary Internet services and exploring the retail market for self-install equipment for family and friend carers.

25. In order to ensure that older people and disadvantaged adults are not left behind without support by developments in digital technologies, the Digital Switchover Help Scheme has been established to provide practical help for those people who might be expected to have the most difficulty in making the switch to digital TV. There may be potential for future help scheme set top boxes to offer access to a range of home-based services for 75+ and disabled people and, outside the range of the Help Scheme, for services to be made more widely available.

26. **Social isolation:** local government has been at the forefront of developing innovative digital solutions to some of the problems faced by older people. Excellent examples include Leicestershire County Council's Leicestershire CareOnLine[78] and the YourNextBus[79] service in the South and West Yorkshire. CareOnLine is a comprehensive website and chatroom facility developed to help reduce social isolation for vulnerable adults and older people and supported by personal one to one training in citizens' own homes. YourNextBus service allowes citizens to get real time information on their local bus routes through their digital televisions. The service uses satellite technology to track the location of the bus during its journey so people can wait in the safety and comfort of their home instead of waiting outside and it has proved particularly important for residents in rural areas that rely solely on public transport.

Communities

27. Digital technologies are being used by government to support **citizen empowerment** particularly by support for innovation in new technology around community and social media and debate. For example: the Digital Dialogues[80] project promoting dialogue between government and the public; the Building Democracy Innovation Fund[81] supporting innovative community engagement[82]; the creation of a programme for Digital Mentors, as announced in *Communities in control*,[83] to enable local communities to make better use of social media; and, by the use of e-petitions for local government. Government will pilot the Digital Mentors scheme in deprived areas. These mentors will support groups to develop websites and podcasts and use digital photography and online publishing tools to develop short films and to improve general media literacy. The Digital Mentors will also create links with community and local broadcasters as part of their capacity building, to enable those who want to develop careers in the media to do so. Depending on the success of these pilots, this scheme could be rolled out to deprived areas across England.

[78] Leicestershire CareOnLine www.leicsonline.org.uk/

[79] DiGiTV. *YourNextBus Boosts Dgital TV Services in Yorkshire*. www.digitv.gov.uk/site/content/view/94/60/

[80] www.digitaldialogues.org.uk/

[81] www.buildingdemocracy.co.uk/

[82] An example of a project from the Building Democracy Innovation Fund fund is www.fixmystreet.com which enables people to report, view, or discuss local problems e.g. graffiti, fly tipping, broken paving slabs, or street lighting etc.

[83] Communities and Local Government, (2008). *Communities in control: real people, real power*, (Cm 7427). ISBN 9780101742726. www.communities.gov.uk/publications/communities/communitiesincontrol

28. There are also potential opportunities for government around the London 2012 Games to use hosting the Games to inspire greater uptake of digital access for information and coverage of the events.

29. The Governance of Britain[84] website provides information on the Government's programme of **constitutional reform**; this includes the Constitutional Renewal Bill, the Youth Citizenship Commission and the Statement of Values. It is an interactive site allowing visitors to post comments and engage in online discussions on various aspects of the British constitution.

30. **Rural communities** can greatly benefit from the use of digital technologies. Government initiatives aimed at specific sectors include the: Whole Farm Approach, Environment Agency electronic transactions – applications for permits, guidance and monitoring returns; the Rural Payments Agency strategy for greater customer self-service online; and, the Natural England Environmental Stewardship online Entry Level Scheme.

31. However, technology changes rapidly and it will be challenging to ensure that rural communities and the farming industry continue to benefit from innovations in service delivery. Rural areas particularly suffer from poorer quality of access to first generation broadband meaning that average speeds are often lower or in some cases there is no access at all. There are risks that some rural and deprived urban communities may fall further behind with the advent of next generation broadband. Ensuring that rural communities and deprived urban communities keep pace with digital infrastructure requirements and don't become increasingly digitally excluded in terms of the quality of their digital offer is a matter of concern for the government.

32. Communities and Local Government and the Department for Environment, Food and Rural Affairs will be conducting an analysis of the potential risks for communities or places around emerging high-speed internet services and applications to evaluate whether the UK, or parts of the UK, will be at a disadvantage.

33. Also Ofcom is considering how best to promote both investment and competition as it develops its regulatory approach for next generation broadband, and the Government is looking at the implications of convergence for access to services in the future. Future challenges which government will need to consider are the extent to which the need to deliver public services is being met and the EU Target to increase the availability of broadband in under served locations – to reach at least 90 per cent of the EU population by 2010.

34. In terms of existing rural broadband provision, there are some excellent examples of local community based solutions around rural broadband provision in the UK. These include Switch on Shropshire[85] and Nynet[86].

35. The government seeks to promote **sustainable communities** and to promote responsible approaches to the environment. The use of digital technologies is important in providing information to communities and groups alongside encouraging sustainable approaches to digital equipment, both in its use and disposal. Current initiatives include the Act On CO_2 Carbon Calculator, environment and greener living content on digital TV and mobiles, the Waste Strategy for England 2007[87] and the Environment Agency NetRegs online service. In July the Government set out a strategy for reducing the

84 governance.justice.gov.uk/

85 www.switchonshropshire.org.uk/

86 www.nynet.co.uk/

87 DEFRA (2007) Waste Strategy for England. www.defra.gov.uk/environment/waste/strategy/strategy07/pdf/waste07-strategy.pdf

environmental impact of our computer systems – *Greening Government ICT: Efficient, Sustainable, Responsible*[88]. The strategy has two aims: to make energy consumption of our ICT systems carbon neutral by 2012, and to make them carbon neutral across their lifetime (including manufacture and disposal) by 2020. Future opportunities being explored are to ensure greater reach and access to innovative environmental services and communications and to consider the environmental implications of digital inclusion work and to ensure coherence with the Government's Chief Information Officer-led strategy Greening Government Strategy.

Effective public services

36. Many disadvantaged groups are the heaviest users of public services, so that improvements in public services will have an important and disproportionate positive effect on the outcomes for these groups.

37. **Directgov**, which is the official government website for citizens, aims to provide easy access to public services and the information people need and to build capacity to allow citizens to transact with government safely and securely.

38. Public libraries through the **People's Network** provide access to Directgov as part of their role in connecting communities to local and central government services. The 'Enquire' service on the People's Network is a 24/7 enquiry service in which people can get real time answers to any enquiry. Looking forward, Government is exploring increasing and widening take-up of the Directgov service which may positively impact on socially and digitally excluded people.

39. The Government's **Service Transformation Programme** focuses on designing services around the needs of people and businesses, rather than the needs of government, and by doing so reduce the frustration and stress of accessing them. Government activities are currently focusing on the customer – not the supplier of public services – using customer insight and journey mapping as the basis for service improvement.

40. Joining up across government will reduce wasteful duplication and enable greater personalisation of services, will enable a reduction in the number of contacts people need to have to access services, will lead to rationalisation and better coordination of the channels through which citizens access services and better engagement with frontline staff to drive service improvement. The result will be services that are better for the customer, better for front line staff and better for the taxpayer. Examples of service transformation projects are the 'Tell Us Once' and 'Online Free School Meals' projects.

41. 'Tell Us Once' is looking at the feasibility of citizens being able to inform Government just once about a change in circumstances. Initially focusing on registering a birth and reporting a death, it will expand later to include changes of address. Different aspects of a potential service are being trialled, and different channels – face to face, telephone and online through Directgov.

42. The 'Free School Meals' service currently has paper-based applications. The parent or guardian has to "prove" they are on benefits, which can take weeks to accomplish. Too often people abandon their claim half way through; and their child misses out on what they are entitled to. The ambition is for an online service where if a parent/carer makes an application and is eligible then the child will be able to receive a free lunch within 48 hours.

[88] www.cio.gov.uk/greening_government_ict/

43. There is a wide programme of activity across government, summarised in individual government department service transformation plans which will continue to be developed.

44. Future challenges include considering how to develop the Power of Information[89] Programme[90] to promote innovative ways of providing all sectors of the public with better information about public services including considering further transformation projects under the Service Transformation Agreement.

45. For disadvantaged groups, transformation and radical changes to services can often be more beneficial than incremental changes to existing services that are failing to adequately meet their complex needs. Technology is an important driver of innovation and transformation. Innovative uses of ICT can help address the problems facing socially and digitally excluded people in an efficient and cost effective manner.

46. To encourage innovation in public services, current government-funded activities include Innovation Nation, 'The Key' and the Power of Information 'Show us a better way' competition which is gathering ideas from the public about how publicly-owned information could be harnessed and made more useful, and presented in more effective and creative ways. There is an opportunity to build innovation capacity and capability and direct it at disadvantaged people and groups and also to exploit the role of 'serious games' which have a social purpose, to reach out to excluded groups and to use in government communications.

47. Improving **local service delivery** is being taken forward with current initiatives including: the Digital Challenge and DC10 plus; the Digital Inclusion Team identification and rollout of digitally enabled services for excluded groups and places; the Communities and Local Government National Indicator Data Interchange Hub to reduce burdens on local authorities and to increase use of information for driving outcomes; and, the Connected Neighbourhood Forum Digital Charter and Framework.

48. Government also recognises the importance of regional engagement and is currently raising awareness of digital inclusion issues and opportunities among Government Offices (GOs), Regional Development Agencies (RDAs) and Regional Improvement and Efficiency Partnerships (RIEPS), so that they can assist **local authorities** in England interested in proactively promoting digital inclusion in their communities. Future opportunities might include embedding principles around digital inclusion into Local Area Agreements (LAAs) and Multi Area Agreements (MAAs).

49. Further work in this area will include Digital Inclusion Advisers within Regional Improvement and Efficiency Partnerships, guidance on effective data sharing within Local Strategic Partnerships (LSPs) and guidance on digitally enabled service delivery for all 198 National Indicators, focusing on deprivation.

50. **Justice** is another key priority for government and the public. ICT and the use of innovative technologies are imbedded within many Ministry of Justice policies to deal with criminal processing through the courts, the consequences of crime and the rehabilitation of offenders. Current developments include Virtual Courts, Prison Video Links, Juror and Witness DVDs, public legal education via digital channels and Democratic Engagement Strategy/Digital Dialogue pilots. These can save citizens time, reduce the burden on taxpayers and help citizens to understand and engage with the legal process.

89 Mayo, E. and Steinberg, T. (2007). *The Power of Information: An independent review by Ed Mayo and Tom Steinberg*. www.cabinetoffice.gov.uk/publications/reports/power_information/power_information.pdf

90 Cabinet Office (2007) *The Government's Response to The Power of Information: An independent review by Ed Mayo and Tom Steinberg*. www.official-documents.gov.uk/document/cm71/7157/7157.pdf

Future topics for exploration include disseminating good practice around democratic engagement, evaluating engagement activities to gauge impact and investigating multi-channel engagement techniques to reach more people.

51. Most of the action highlighted above are being led or coordinated by central government, but as this paper has made clear, digital exclusion is a complex, cross sector issue which Government cannot address alone. The actions of the **wider public sector**, as well as the **private and third sectors** are key to the delivery of many programmes for realising the potential benefits to be gained for digital inclusion.

Wider public sector actions

52. The **BBC** is already committed to improving digital inclusion in the UK. Its remit in this area is articulated within the sixth purpose of the BBC as set out in the Royal Charter. The BBC *"should work with other UK bodies to end the 'digital divide' between those who enjoy the benefits of digital technologies and those outside that group."* To date, the primary focus has been to help close the digital divide in television and radio. Looking forwards the BBC believes that it could also improve digital inclusion by helping drive demand in the UK. It could contribute in a number of areas including delivering engaging content on new devices and platforms, increasing awareness of this content and of the wider benefits of broadband and promoting media literacy to overcome the barriers to adopting new technology. The BBC is therefore an important partner in helping to end the digital divide and promote media literacy. It is currently exploring a number of opportunities involving partnership with other organisations around the UK and will publish a consultation with proposed initiatives in Autumn 2008 as part of its engagement in Ofcom's review of Public Service Broadcasting. The cross-government Digital Inclusion Team will work with the BBC to identify potential partnership opportunities with government initiatives.

53. The **British Library** sets out its drivers and priorities for digitisation in its Digitisation Strategy 2008–2011[91]. Specifically to open up access to content in the British Library's collection, to create a critical mass of digitised content, to facilitate the interpretation of their content by others for new audiences, to transform discoverability of their content and make the content more visible.

54. **Public libraries** are established and trusted venues situated in local communities. Internet access is available in all libraries and known collectively as the People's Network. Individuals and communities are able to use the technology in places close to where they live, and at a time and pace convenient to them, including Sundays. Library staff provide support for users who may lack the skills or confidence to use the technology effectively. The **People's Network** is already well used by both formal and informal learners, and libraries often target ICT sessions at families, particularly inter-generational themes. Some mobile libraries provide access to Internet through wireless technology. The Museums, Libraries and Archives Council has published an Action Plan for Libraries which has Digital Issues as a central theme.

55. **Museums** are promoting digital inclusion by working to create a comprehensive online record of the nation's cultural heritage and by developing innovative online services which present this information to diverse audiences. This digital cultural content provides a resource for education, for lifelong learning and for self-directed research and is instrumental in developing skills and confidence in using technology. Many museums now also provide onsite computers with either open Internet access or access to information about the museum's collections.

[91] www.bl.uk/aboutus/stratpolprog/digi/digitisation/digistrategy/index.html

57. **Archives** are promoting digital inclusion by developing online union catalogues which support research into family history as well as a broad spectrum of public and economic life. This is an active and growing area of public and media interest, and the past few years have seen significant increases in the usage of these systems for research and personal development. Many archives now provide access to computers in their public reading rooms, some with full Internet access, which provide an opportunity for people to develop skills and confidence in using technology.

58. Museums, libraries and archives have a lot of resources to offer teachers and parents that are very useful both educationally and socially. For instance www.show.me.uk is a showcase of museum, library and archive online games for children which is safe, fun, free, and educational.

59. The **Office of Communications (Ofcom)** is the independent regulator, with statutory duties under the Communications Act 2003 that relate to digital inclusion. Ofcom's overarching duty is to further consumers' and citizens' interest, including specific duties to:

    - secure the availability throughout the UK of a wide range of electronic communications, television and radio services
    - ensure certain proportions of programmes have sub-titling, audio-description and sign language
    - ensure the availability of equipment that is easy to use
    - promote media literacy

60. This statutory role is important, because any regulatory framework will have a direct bearing on action to promote digital inclusion. Ofcom's duties help promote digital inclusion by reducing barriers to people using those services and by identifying clear evidence that will increase awareness and understanding of the problems people face.

61. Ofcom works in partnership with a wide range of public, private and voluntary sector organisations, and actively promotes collaboration and sharing of best practice. This collaboration is important, because in some areas Ofcom's non-competition powers are limited in relation to its duties. A more detailed description of the work undertaken by Ofcom in delivering its statutory duties can be found in the Annex to this report.

62. Ofcom's remit is UK-wide. Under the Communications Act, it has established Advisory Committees for each of the UK nations, who advise on particular issues, including access issues, in England, Wales, Scotland and Northern Ireland. Citizens and consumers, including the nations, are also represented on the Ofcom Consumer Panel, which is appointed by Ofcom and which has a given role for advising Ofcom and others on communications issues in general, but which has a particular responsibility for advising on access and inclusion.

Private and third sector actions

63. There are also numerous private and third sector examples of good practice, notably:

    - BT's Internet Ranger programme
    - Microsoft's Digital Literacy Curriculum
    - the e-Learning Foundation's work to increase home access to computers and the Internet for school-age pupils and their families
    - Citizens Online/BT's Everybody Online programme

- Citizens Online/Talktalks' Innovation in the Community Awards
- Digital Unite's Silver Surfers' Day and ICT training programmes for older people
- Age Concern's Digital Inclusion Network and Silver Surfers' Week
- Help the Aged's ICT taster courses for older people in their regional centres
- AbilityNet's Switched on Communities programme
- Ofcom's media literacy programme (later in 2008 Ofcom will publish a statement of priorities for its media literacy work for the next three years)
- StartHere
- Slivers of Time
- Ruralnet

Third sector case study: Signposting to better information

StartHere, a national charity, has developed an independent signposting service that provides users with a single starting point from which they can access clear, reliable and up-to-date information and resource on a range of health and social issues. Through an accessible, simple-to-use interface, StartHere connects citizens to the most relevant services – local and national, statutory and voluntary sector – to meet their needs.

Joe left prison having served his sentence for drugs offences. Family relations had broken down, and with nowhere to go on his release, Joe found himself in the Ellison House Probation Hostel. There he had access to regular support, help with finding training for work, and access to drugs counselling. Joe was feeling more positive and getting ready to move on from the hostel when he heard that his father died. Joe was subsumed by guilt and anger and unresolved emotions, and the probation staff were worried that he would seek comfort in his old ways.

His Senior Probation Officer had recently overseen the installation of the StartHere signposting service on a touchscreen in the hostel, and, looking at the section on bereavement, found the Waterloo Community Counselling Centre which offers bereavement counselling to local people. He commented: "Residents here often will have no knowledge that there could be help locally for them. Since we have had StartHere available in the rest area I have seen a number of the residents looking for help finding jobs and housing advice. Staff actively encourage residents to use the touchscreen to find answers for themselves, as they are sometimes reluctant to talk about really sensitive issues to people in here".

64. There are thousands of projects led by **local and national charities** to tackle digital inclusion, a small number of which are set out in this paper. As highlighted in the case study below, some of the most successful examples are when sectors or organisations work together to find digital solutions to social problems. It is vital that we harness and build on what works at grassroots level and find a way to give a more powerful voice to express the needs of disadvantaged individuals and communities in relation to digital inclusion.

Case study: Switched on Communities

AbilityNet aims to help disabled people unlock their potential and start a course of study or even get a job for the first time. Their work focuses on adapting technology to change lives.

Switched on Communities is a project run by AbilityNet with the support of DSGi (owners of PC World and Currys.digital). The project has four charity partner organisations: Age Concern, the Hope Foundation, Keyring, and Leicester Centre for Integrated Living. It also involves a network of community partner organisations across eight different parts of the UK. AbilityNet provides partners with training and resources so that they can support community and voluntary sector IT provision in their region. It is a three-year programme.

The project aims to have an impact on the lives of thousands of disabled people, bringing within easy reach everyday tasks such as banking, shopping, communicating, education, volunteering and work opportunities.

The programme provides organisations with:

- training showing how to adapt computers to meet the needs of disabled users
- resources that offer alternatives to using a keyboard and mouse
- software to support struggling readers and CD-Roms with further information
- help and support to identify the access needs of learners – including the use of an online assessment tool.

65. Government values the role of the voluntary and community sector (third sector) and has put in place schemes such as the Catalyst Awards, Capacity Builders and Innovation Exchange, to help the voluntary sector make best use of technology for the benefit of service users (many of whom are socially and digitally excluded), staff and volunteers. Going forward, Government will consider the challenge of ensuring we support and harness the potential of the third sector to deliver digital inclusion, particularly focusing on the role of volunteers.

Towards a digitally inclusive Europe

66. Finally, there are European Union commitments and international comparisons which highlight opportunities and help develop good practice across Europe. Ministers of the European Union (EU) Member States and accession and candidate countries, European Free Trade Area (EFTA) countries and other countries adopted a Declaration on e-Inclusion in June 2006 at Riga. That has provided the political guidance for the subsequent actions by Member States and the European Commission to achieve an inclusive digital society, including an awareness campaign for 2008.

67. In the Commission's view, ICT must provide freedom of choice and be designed for use by everyone regardless of their personal or social situation, so reducing social disparities.

68. ICT and the digital divide is one of the themes for innovative employment and skills projects within the new 2007-2013 European Social Fund programme. A call for proposals will be launched in late 2008. Further details of international evidence and EU programmes are at Appendix Three.

The table below is an important, though not fully comprehensive, set of **government programmes, policies and initiatives** which are most relevant to socially and digitally excluded groups and communities and includes future challenges and opportunities which are being explored but are not firm funded commitments.

Policy Area	Current Initiatives	Future challenges, opportunities and aims
Children and families	• Initiative to increase home access to technology for all learners and support for its use in the home • Harnessing Technology national e-strategy for learning and children's services (Becta) • eMentoring trials for looked after children • Functional ICT skills pilots • Next Generation Learning Campaign (Becta)	• Delivering home access for most disadvantaged and hard to reach • Supporting schools and families to get the most from home access • Technology based opportunities for delivering alternative provision • Use of alternative platforms – set top boxes and games
Learning and skills	• learndirect advice service[92] • learndirect courses and centres • Consultation on future of informal adult learning • Next Generation Learning campaign (Becta) • Technology strategy for further education, skills and regeneration: implementation plan 2008-2011 (Becta)	• Exploring IT training and media literacy training • EU Target: Reduce by half by 2010 the digital literacy gap between the EU population and specified disadvantaged groups
Digital Inclusion	• myguide • UK online centres • Get Online Day	• Targeting deprived areas not currently reached • Increase ICT use by citizens and widen support by government

[92] From the 1st October 2008 the web and telephone based careers advice functions managed by Ufi transferred to the Learning and Skills Council in readiness for the establishment of the Skills Funding Agency with responsibility for the Adult Advancement and Careers Service. Web access is now via direct.gov at www.careersadvice.direct.gov.uk

Policy Area	Current Initiatives	Future challenges, opportunities and aims
Health	• NHS Choices • Summary Care Records as part of the NHS Care Records Service • HealthSpace • Whole Systems Demonstrator Programme • Improving Access to Psychological Therapies (IAPT) • eClinics proof of concept • Information Prescriptions • Health kiosks	• Ensuring that the most disadvantaged and hard to reach benefit from innovations in health information and service delivery
Employment	• Job Centre Kiosks • Job search via Digital TVs	• Extending the reach and content available on kiosks
Benefits and Pensions	• Benefit advisor available online, benefit enquiries, changes of circumstances and claims online being developed • Online services being developed for third party (eg CAB) access • Local Pension, Disability and Carers Service (PDCS) using technology to provide more holistic visiting service for vulnerable customers	• Extending services to mobile devices and using more pro-active techniques such as SMS and email alerts/information

Policy Area	Current Initiatives	Future challenges, opportunities and aims
Transformational Government	Transformation Programme delivering: • A focus on the customer – not the supplier of public services – using customer insight and journey mapping as the basis for service improvement • Joining up across government – to reduce wasteful duplication and enable greater personalisation of services • A reduction in the number of contacts citizens need to have to access services • Rationalisation and better co-ordination of the channels through which citizens access services • Better engagement with frontline staff to drive service improvement • Specific service transformation projects such as 'Tell Us Once' and 'Online Free School Meals' Projects • A wide programme of activity across government, as summarised in individual departmental service transformation plans which will continue to be developed over the Comprehensive Spending Review (CSR) period	• Ensuring, wherever possible, that services offer choice as to how citizens access services, taking account of the needs of the user. • Ensuring that all, including the most disadvantaged people and communities, benefit from the huge potential of ICT enabled public service transformation. • Meeting Riga Targets for accessible government web sites and local access facilities to online government services • Developing the power of information programme to promote innovative ways of providing all sectors of the public with better information about public services • Further transformational projects being considered under the Service Transformation Agreement
Directgov	• Directgov available via Internet, mobile and digital TV channels	• Increasing and widening take-up

Policy Area	Current Initiatives	Future challenges, opportunities and aims
Digital infrastructure and markets	• Government to respond to Caio review of barriers to roll-out of next-generation broadband • The Government is looking at the implications of convergence on access to services in the future • Smart Energy Metering Trials • Supporting creative industries – particularly UK games industry • Digital Britain	• The extent to which public services are delivered inclusively through a mix of available communications infrastructure • EU Target: increase the availability of broadband in under served locations – reach at least 90% of the EU population by 2010. • Accounting for digital inclusion agenda in taking decisions regarding smart metering • Exploit role of 'serious games' to reach out to excluded groups and in government communications
Local service delivery (Communities and Local Government)	• Digital challenge, DC10 plus and Digital inclusion team identification and rollout of digitally enabled services for excluded groups and places • Communities and Local Government national indicator Data Interchange Hub to reduce burdens and increase use of information for driving outcomes • Connected Neighbourhood Forum Digital Charter and Framework	• Digital Inclusion Advisers within Regional Improvement and Efficiency Partnerships • Guidance on effective data sharing within LSP partnerships • Guidance on digitally enabled service delivery for all 198 National Indicators, focusing on deprivation
Third Sector	• Catalyst Awards • Capacitybuilders • Innovation Exchange • Social Enterprise Network	• Ensuring we support and harness the potential of the third sector to deliver digital inclusion – particularly volunteers
Innovation	• Innovation Nation • 'The Key' Innovation Showcase	• Building innovation capacity and capability and directing it at disadvantaged groups and the problems they face

Policy Area	Current Initiatives	Future challenges, opportunities and aims
Transport	• Transport Direct – available via the Internet, digital TV set top boxes and mobiles	• Extending the reach of Transport Direct, either directly, or through enabling third party access to back office processing, so that all can benefit from it
Information sharing	• Data sharing guidance • New local network of advisors	• Achieving balance between intrusion into privacy whilst realise the clear benefits for improved service delivery
Citizen empowerment	• Power of Information Programme • Digital Mentors • Support for innovation in new technology, especially around community and social media and debate and deliberation • E-petitions for local government • Democratic Engagement Strategy/ Digital Dialogue pilots • The Governance of Britain website • Digital Dialogues • Building Democracy Innovation fund	• Evaluating impact and sustaining/ scaling digital mentors • Disseminate good practice around democratic engagement • Evaluating engagement activities to gauge impact • Investigating multi-channel engagement techniques to reach more people
Justice	• Virtual Courts • Prison Video Links • Juror and Witness DVDs • Public legal education via digital channels • Digital audio recording in Crown and county courts	• Ensure that access to justice is provided as quickly as possible and at the lowest cost consistent with open justice • Ensure citizens have greater confidence in, and respect for, the system of justice.

Policy Area	Current Initiatives	Future challenges, opportunities and aims
Reoffending	• Reducing Reoffending Through Skills and Employment: Next Steps. • Offender Learning and Skills Service (OLASS); Learning Journey includes basic ICT • Learndirect centres are currently in approx 20 prisons • Polaris Project in eight prisons and allows controlled web access • Prisons ICT Academy (PICTA) established in 20 prisons • Digital Switchover in Prisons • 'Virtual campus' being trialled in two test bed regions	• Increasing access to Internet based services that can reduce the risk of reoffending, while working within security limitations.
Culture, Media and Sport	• Digital Switchover Help Scheme • Creative Britain; New Talents for a New Economy • BBC Charter Public Purpose around emerging technologies and digital switchover	• Convergence between the Internet and TV (IPTV); entertainment possible anchor tenant for home Internet access • Potential for future help scheme set top boxes to provide access to a range of home based services for 75+ and disabled people. • Potential opportunities around the London 2012 Games to inspire greater uptake of digital access to information and coverage of events.
Internet Safety	• Byron Review	• Byron Review Action Plan to be implemented and Council created

Policy Area	Current Initiatives	Future challenges, opportunities and aims
Integrated Health and Social Care	• Telecare: Preventative Technologies Grants • Telehealth: Whole Systems Demonstrator Programme • Technology Strategy Board Assisted Living Innovation Platform • Innovation Exchange Independent Living workstream	• Replacement of obsolete equipment • Development of interoperable equipment that deliver complementary Internet services • Explore retail market for self-install equipment for family/ friend carers
Rural communities	*Initiatives include:* • Whole Farm Approach • Environment Agency electronic transactions – applications for permits, guidance and monitoring returns. • Electronic livestock monitoring • Electronic animal health alerts • Rural Payments Agency strategy for greater customer self service on line • Natural England Environmental Stewardship on-line Entry Level Scheme	• Ensuring that rural communities and the farming industry benefit from innovations in service delivery • Ensuring that lead policy departments understand that an infrastructure gap should not translate to a service quality, economic and social gap between rural and urban areas • Support for Rural UK Online Centres
Environment	*Initiatives include:* • Act On CO_2 Carbon Calculator • Environment and greener living content on digital TV and mobiles • Waste Strategy for England 2007 • Environment Agency – NetRegs online service	• Ensuring greater reach and access to innovative environmental services and communications • Consider environmental implications of digital inclusion and coherence with Chief Information Officer-led strategy for Government on green ICT
Social Exclusion	• Innovation Exchange • Innovation proof of concept projects for social exclusion PSA groups • Customer insight research for social exclusion PSA groups	• Supporting the development of innovative solutions to the needs of excluded people

Policy Area	Current Initiatives	Future challenges, opportunities and aims
Regional engagement	• Awareness raising among Government Offices (GOs), Regional Development Agencies (RDAs) and Regional Improvement and Efficiency Partnerships (RIEPs) of issues/ opportunities.	• Embedding principles around digital equality into Local Area Agreements (LAAs) and Multi Area Agreements (MAAs)
Financial Inclusion	• Ensuring that everyone has access to a bank account and can use their account to manage their money effectively and securely	• New delivery systems for banking and payments (ie Internet banking, mobile banking) may make banking and other financial services easier and more attractive to vulnerable groups of people. • New delivery systems may also marginalise some traditional ways to deliver financial services, which could serve to exclude some groups.

Conclusion

59. As can be seen above, there is no shortage of activity which is in different ways impacting on digital inclusion. However, there are **further opportunities for coordination, partnership and a set of common goals and objectives** which would enhance the impact of this work. Chapter Six proposes action to address these.

Question 11: Are you aware of any other examples of good practice not mentioned in this chapter?

Question 12: What aspects of previous or current digital initiatives and strategies have been most successful in tackling digital exclusion?

Question 13: What actions need to be taken to support better partnership approaches?

Question 14: What should be the extent of Government's intervention in tackling digital exclusion?

Question 15: How else can the impact of current activity be maximised?

Chapter Six

Next steps and consultation for a shared vision

"The Web will have a profound effect on the markets and the cultures around the world: intelligent agents will either stabilise or destabilise markets; the demise of distance will either homogenise or polarise cultures; the ability to access the Web will be either a great divider or a great equaliser; the path will either lead to jealousy and hatred or peace and understanding."

– Sir Tim Berners-Lee (1997)[93]

To recap what has been said so far, the main issues are that:

- 17 million people in the UK are not using the Internet
- there are strong links between social and digital exclusion – 75 per cent of socially excluded people are also digitally excluded
- there are opportunities to provide more effective and better targeted services to excluded groups and communities using technology
- considerable work is being done by government, public, private and third sectors to promote digital inclusion, but there are still gaps and opportunities

One of the opportunities is for government leadership which provides a clear set of principles and a framework for action to ensure that all sectors are clear about their roles and how they can contribute to strategic goals.

But what should any such principles and framework for action focus on and how should they be carried forward? This chapter sets out proposals to:

- introduce a **Charter for Digital Inclusion** creating a framework that will facilitate conversation and understanding between the various players and encourage positive cross-sector engagement on this agenda;
- appoint a **Digital Inclusion Champion** who will develop, embed and promote the Charter, support the digital inclusion needs of the most disadvantaged citizens and communities, maintain a strategic oversight of the issues from the point of view of the excluded citizen and work with all sectors to identify the evidence of emerging issues and options for actions to address those issues;
- establish **an expert taskforce** with representation from all sectors to support the role of the Champion; and,
- maintain a **cross-government coordination team**, to complement the work of the Champion and support the valuable and ongoing role of the Cabinet Committee (MISC34).

[93] Berners-Lee, Tim. (2007) *Realising the Full Potential of the Web*. Based on a talk presented at the W3C Meeting, London, 3 December 1997, www.w3.org/1998/02/Potential.html

The need for a shared vision and leadership

1. This document has emphasised the considerable work that is being carried out by government to tackle digital exclusion, and drive the digital inclusion agenda. The Caio Review has reported positively on the UK's digital infrastructure – identifying it as one of the most developed internet economies in the world. In getting where we are today, government has been working in partnership with other players, and consequently we have highlighted some of the myriad activities that the third and private sectors are carrying out to deliver on this agenda.

2. But despite these achievements it is evident that opportunities are still being missed to use technology to its full potential to improve the lives of all citizens, and that there is still work to do to close the digital divide. *What is needed now is* **clear direction and leadership** *in taking forward work in hand and driving out the further benefits of digital inclusion which are there to be taken*. We have developed many excellent pilots and prototypes, but it is now time to ensure that these are rolled out widely and used effectively.

3. This need for clear leadership and direction on this agenda has been recognised within Government with the creation of a Minister for Digital Inclusion and the establishment of a Ministerial Committee, to continue this essential partnership working. But, the Government cannot, and should not, try to deliver this agenda on its own.

4. There is, however, a clear role for government to take a lead in creating a structured and concerted effort to bring players together and create positive cross-sector engagement, and to do this we are proposing the establishment of a **Digital Inclusion Charter** and a **Digital Inclusion Champion**.

The Charter

5. We suggest this Charter could be based around the following three socially orientated principles. The reasoning behind this is set out below, but this statement of intent will be made more powerful if it can achieve truly cross-sector buy in, so we are keen to consult as widely as possible.

Proposed Charter Principles

Direct Benefits

Citizen and community empowerment: Assist and motivate the most disadvantaged citizens and communities to achieve increased independence and opportunity through direct access to digital technology and skills.

Indirect Benefits

Effective Services: Promote, across all sectors, the more efficient and effective use of digital technology to support the design, delivery and personalisation of services around the needs of the most disadvantaged groups and communities.

Sustainable Benefits

Sustainable development: Monitor and evidence the risks and opportunities of emerging digital technology for excluded groups and communities and minimise the environmental impact from these technologies.

6. These principles support the Government's aims set out in the Cabinet Report *Excellence and fairness: achieving world class public services* published in June 2008.[94]

7. In that document the Prime Minister stated: "Our first objective for reform must be to combine excellence with fairness. Everyone has a right to expect a first-class service, wherever they live and whatever their background. It is unacceptable that those in our most deprived communities too often experience our worst public services, or that hard-working families cannot always rely on the services they depend on." The principle of **service effectiveness** will promote this in relation to digital inclusion.

8. The second objective is "to respond to people's rising aspirations for high-quality services that are shaped by them, available when they need them and tailored to meet their individual circumstances". The principle is at the heart of the strategy and in particular the **citizen empowerment** principle.

9. The Prime Minister's third goal is "to unleash a **new professionalism** in our public services". We suggest below that a **Digital Inclusion Champion** is appointed who will support this goal by providing a valuable challenge to ensure that the professional training of delivery managers and service planners includes an awareness of the importance and role of digital technologies in addressing the needs of disadvantaged groups.

10. The report also expects government to provide **strategic leadership** focusing on the broad overall view. This Action Plan, in setting out the evidence and current actions relating to digital inclusion, seeks to provide a clear vision of the key issues and the next steps, which will be carried forward by the Minister for Digital Inclusion and the Cross-Government Digital Inclusion Team which supports him.

Strategic actions to take forward the principles

11. In considering how best to deliver on each of the Charter's principles we suggest below a number of specific actions which could be considered for immediate work by the Cross-Government Digital Inclusion Team, and again we are seeking views on these.

Citizen and community empowerment

- promote direct action where, for example, someone without work needs to gain ICT skills to get a job or a child needs to be digitally engaged with education, as well as enabling action where training and digital mentoring can be made available to those who wish to benefit
- build on the approaches set out in the Power of Information programme and the empowerment White Paper, *Communities in control: real people, real power,* to bring the benefits of such approaches to those currently digitally excluded
- promote digital opportunities and a thriving market for people taking advantage of individual budgets in service provision
- put in place a programme of research and evaluation to quantify the different benefits arising from direct access to meet specific needs.

[94] www.cabinetoffice.gov.uk/~/media/assets/www.cabinetoffice.gov.uk/strategy/publications/world_class_public_services%20pdf.ashx

Effective services

- promote evidence-based solutions to improve the efficient and effective delivery of outcomes for excluded groups (for example through the better planning, design and delivery of services)
- explore the emerging opportunities for more effective exchange and analysis of data to address the problems of multiple social disadvantage among groups and in communities
- introduce common and transparent benchmarks to measure how digital technologies are improving the quality of public service delivery, including service planning, data management, data sharing, and frontline services
- explore options to improve opportunities for training and awareness raising in digital technologies relevant to the needs of disadvantaged groups, targeting strategic planners, expert practitioners, frontline workers and other intermediaries from the private, public and voluntary sectors
- gather evidence of the impact and cost effectiveness of indirect use of technology to improve services to disadvantaged people and communities
- develop and disseminate **self-assessment and development tools** to enable digital inclusion to be embedded in policy, programme and service design. To review actions across central government enabling customer insight and data systems to shape and promote services for key groups.

Sustainable development

- review emerging and converging channels with users and the ICT industry to spot risks and opportunities
- explore the net environmental impact of ICT proliferation and usage in communities, particularly those which are most disadvantaged (for example Homeshoring etc)

12. An important action to underpin these actions will be considering the introduction of a set of **baseline measures** for digital inclusion so that progress can be effectively monitored. We invite views on what form this might take but we envisage this encompassing measures on the availability of digital communications services, how technology is being used to achieve indirect benefits through service design, planning and delivery, as well as consumer research measures on the direct use of technology. Ofcom already collects data on a number of issues connected to digital inclusion. Possible key metrics related to direct use of technology include:

    Ownership and access

    - Take up of communications services at home (including internet services, broadband, mobiles and digital TV)
    - Use of internet services elsewhere
    - Active use of communications services, eg used in the last three months (for each of mobile, Internet, broadband and digital TV)
    - Intention to take up communications services (for each service as above)
    - Voluntary non-ownership of communications services (for each service as above)

- Involuntary non-ownership of communications services (for each service as above)

Attitudes and experience[95]

- Claimed breadth of use of communications services (for each service as above)
- Claimed difficulties using communications services (for each service as above)
- Claimed confidence in using communications services (for each service as above)

The Champion

13. To establish and drive this cross-sector vision, engagement and leadership we will establish a Digital Inclusion Champion. This post will be independent of, but very close to, the Government. It will create synergies and provide strategic leadership and expert advice across all the sectors involved. It will provide a clear channel of communication between the Government, industry, the third sector and the client group to ensure all available expertise and resource is harnessed in pursuit of a shared understanding of digital inclusion.
14. This is a position that will work alongside the Minister for Digital Inclusion and the Cabinet Committee and with the Cross-Government Digital Inclusion Team, so that together they complement each other and engage right across the digital inclusion landscape, creating clear lines of communication between all sectors to ensure a holistic approach to digital inclusion.
15. The Champion will need to be a high profile public figure who can raise the profile of the agenda and build deep-seated and consistent recognition of the Digital Inclusion Charter across all sectors. They will need to achieve buy-in from industry, the third and public sectors, and across central and local government, while maintaining their independence.
16. The role and responsibilities of the Champion, and the objectives of the Digital Inclusion Charter, will form part of the consultation following publication so that the views of stakeholders can be taken into account; however there are certain principal activities that it is proposed the role should include. The first of these will be to work closely with the Digital Inclusion Minister to establish an expert Taskforce, representing the views and ideas of the public, private and third sectors and drawing on the best expertise available. The second will be to work with Government and the Taskforce to draw together the findings of the consultation work and publish the Digital Inclusion Charter.
16. In addition to promoting the strategic actions within the Charter we set out below some of the key areas of work we would expect the Champion to undertake, but we welcome comments on the remit of this role.

[95] With measures that are more subjective or based on personal perception (eg confidence, perceived difficulties) it will be important to carefully consider the sources of data (eg question wording and methodology) and to be aware that data is more likely to vary over time due to the nature of the type of question.

The work of the Digital Inclusion Champion

Cross sector working

- Aim to secure support and practical commitments from all sectors, including leveraging financial support from the private sector
- Consult with key stakeholders to ensure emerging issues and innovations are being considered and discussed. To be fed into the Taskforce, and where relevant fed into government departments
- Promote opportunities and best practice within and across sectors

Cross-government working

- Work with the Cross-Government Digital Inclusion Team on the implementation of the consultation findings from this process
- Maintain good working relationships with all government departments, at both official and Ministerial level so that digital inclusion actions are seen to help them develop and implement policy rather than hamper it
- Feed in key findings from new digital inclusion research to help departments develop new policies
- Act as a trusted and impartial adviser, or critical friend, to individual Government departments to support policy development and implementation plans
- Disseminate best practice on digital inclusion strategy and actions including across Europe
- Work closely with the Digital Mentors and the Digital Advisers to draw out synergies and improve understanding of "what works"
- Explore the use of standards, guidance or legislation to tackle digital inequality
- Propose a set of "success criteria" which describe how we would be able to measure whether progress was being made towards reducing and eliminating digital inequality
- Report openly to Government, including on progress against existing targets that Government has agreed through the Declaration on e-Inclusion in June 2006 at Riga

Awareness raising

- Host and/or commission national events such as an annual conference, or annual digital inclusion awards
- Organise regular seminars and workshops around the country, dealing with key issues and designed to bring digital inclusion into the awareness of policy makers and practitioners
- Organise consultation with stakeholders on key issues or ideas
- Carry out stakeholder public relations (PR) so that digital inclusion is recognised as both an issue and an area where progress is being made
- Carry out stakeholder communications and management for key influencers (eg local authority Chief Executives, all political parties)
- Promote successes and good practice to stakeholders
- Ensure all the work of the digital champion and taskforce is clearly visible via the Internet, using (for example) blogs and wikis, and to engage all of the sector in online debate
- Advocate for communities and those who are socially excluded to make sure that their voice is heard. To do this, the Champion needs to hear first hand from the people who live and work England, and from the organisations that support them

Research

- Commission and publish research to both build the evidence base as well as test new hypotheses; and to fully understand the needs of the most disadvantaged groups
- Host research seminars with researchers/academics working in the sector

Hosting of the Champion and Taskforce

17. In order to deliver against this broad and challenging agenda the Champion and the Taskforce will need to be supported by a small permanent secretariat and research team. To give the role the independence and expert support it needs quickly, this would need to be an existing organisation separate, or certainly at arms length from, the Government. This approach would also deliver improved value for money. The work is still ongoing to establish where best this function would sit, but it could be within an organisation not only with research and strategic expertise in this field, but also with frontline delivery experience. It is essential that the disadvantaged client groups remain at the centre of the digital inclusion agenda and the focus of the Champion's work.

18. There are many issues to be considered and weighed in the appointment of a Champion, but also in the establishment of a Digital Inclusion Charter. The Cross-Government Digital Inclusion Team will initially take responsibility for driving forward the Action Plan and consultation work. To support this, and to make the best possible use of the consultation period, they will be hosting two cross-sector workshops. These will engage people from across industry, the third sector, consumer and stakeholder groups, umbrella organisations and local government and the independent regulator Ofcom. This work will be particularly focused on the establishment of the Charter and on further developing the specific actions that will support these principles.

Other key actions to drive digital inclusion

19. The previous chapter set out an extensive range of activities which are positively driving forward digital inclusion. The section below summarises a number of immediate **key digital inclusion actions** of particular relevance in helping to realise the benefits of digital technologies. The *Digital Britain Report*[96] to be published in spring 2009, will add further actions for Government and industry to support the development of the UK's digital economy.

Citizen and community empowerment

20. As recently announced in *Communities in control: real people, real power*, Government will pilot a **Digital Mentors scheme in deprived areas**, to enable local communities to make better use of social media. These mentors will support groups to develop websites and podcasts and use digital photography and online publishing tools to develop short films and to improve general media literacy. The Digital Mentors will also create links with community and local broadcasters as part of their capacity building, to enable those who want to develop careers in the media to do so. Depending on the success of these pilots, this scheme could be rolled out to deprived areas across England.

21. Communities and Local Government and the Department for Environment, Food and Rural Affairs are announcing a new action to conduct an **analysis of the potential risks for communities or places** around emerging high-speed internet services and applications to evaluate whether the UK, or parts of the UK, will be at a disadvantage.

Young people and parents

22. **Computers for Pupils:** through local authorities, this provides computers and connectivity for up to 100,000 pupils and their families in the most disadvantaged households in England.

23. Under its **Home Access initiative** the Department for Children, Schools and Families' aspiration is for every household with young people aged five to 18 to have appropriate access to computers and the Internet. At the moment, there are **over a million children with no access to a computer and the Internet in the home**. These children are disproportionately from disadvantaged backgrounds, and their limited access to technology reinforces attainment gaps. Taking forward the recommendations in the Ministerial Taskforce Report, the **DCSF Home Access programme will target the one million learners from seven to 18 and their families who do not have computers and Internet access**, encouraging adoption with a national campaign to raise awareness of the benefits of ICT access at home for all learners and families and providing financial support for families with low incomes to gain access to this valuable technology. The target is to encourage universal access and will bring benefits to all learners by increasing the opportunities and potential for extending and improving learning. The programme will also focus help for all learners, parents and teachers to make the most of the technology.

24. There will be a communications campaign on **Internet Safety** as announced in the Byron Review Action Plan and lead by DCSF with the Central Office of Information (COI)[97].

[96] Department for Culture, Media and Sport and Department for Business, Enterprise & Regulatory Reform. (2008). Digital Britain – the future of Communications. Joint DCMS/BERR press release. 106/08. 17 October 2008. www.culture.gov.uk/reference_Library_Media_releases/5548.aspx

[97] www.coi.gov.uk/

25. Public and private-sector bodies including the Department for Innovation, Universities and Skills, DCSF, Directgov, Becta[98], Campaign for Learning, Talktalk and Ofcom will support a campaign **Get online day** led by UK online centres to be held on 24 October 2008 to motivate and support families to use computers and the Internet. This is planned to become an annual event.

26. **Myguide[99]** – which makes the Internet more accessible to those who have never used it before and to those who are excluded – will be developed to provide more guidance modules and will be promoted more widely to the digitally excluded, for example via adult learning providers from August 2008.

Effective public services

27. **Local authorities** will be supported through a bank of **Digital Inclusion and Data Sharing Advisers** who will build on the success of the Neighbourhood Renewal Advisers but with a specific focus on supporting digital technology-led solutions and innovation among local authorities and Local Strategic Partnership partners to deliver better outcomes.

28. In partnership with the City of London's Digital Inclusion Team, De Montfort University and ESD tool kit, Communities and Local Government is making available a new tool which illustrates how **local delivery partners** have used **digital technology** to **improve outcomes** in an efficient and effective way using technology. The tool, to be launched shortly, allows users to search for examples for any of the **National Indicators for local government**.

29. There is also a new **mapping tool**[100] which allows social and technology data to be segmented by locality. In addition, the DC10plus website will be relaunched to develop and share good practice in local digital equality initiatives.

30. **Research** into attitudes and uses of **ICT-enabled services among excluded groups** will be published to coincide with the Digital Inclusion Action Plan launch undertaken by Citizens Online and the National Centre for Social Research for Communities and Local Government[101 102 103 104].

31. A new study will be published by Communities and Local Government and the Oxford Internet Institute[105] which explores the social implications of exclusion from the information society by examining the best empirical data available for the UK in 2008. The findings indicate that technological forms of exclusion are a reality for significant segments of the population, and that, for some people, they reinforce and deepen existing disadvantages.

[98] www.becta.org.uk

[99] myguide.gov.uk/myguide/myguideHome.do

[100] *Community Maps: Digital and Social Geographies of Great Britain*. For further information email mapping@digiteam.org.uk

[101] Citizens Online and the National Centre for Social Research on behalf of Communities and Local Government. (2008) *Digital Exclusion Profiling of Vulnerable Groups: Ex-offenders – a Profile*.

[102] Citizens Online and the National Centre for Social Research on behalf of Communities and Local Government. (2008) *Digital Exclusion Profiling of Vulnerable Groups: Adults with learning disabilities – a Profile*.

[103] Citizens Online and the National Centre for Social Research on behalf of Communities and Local Government. (2008) *Digital Exclusion Profiling of Vulnerable Groups: Adults with mental health problems – a Profile*.

[104] Citizens Online and the National Centre for Social Research on behalf of Communities and Local Government. (2008) *Digital Exclusion Profiling of Vulnerable Groups: Young people not in education, employment or training – a Profile*.

[105] Dutton, W & Helsper, E of the Oxford Internet Institute on behalf of Communities and Local Government (2008) *Digital Inclusion – An Analysis of Social Disadvantage and the Information Society*.

32. Communities and Local Government is also publishing **new research** to coincide with the launch of the Digital Inclusion Action Plan on the costs and benefits of **sharing personal information** at the **local strategic partnership (LSP) level**[106] and a business model and other tools to help LSPs address the indirect benefits of technology in delivering services to help socially excluded individuals and groups.

Conclusion and next steps

33. This chapter has set out a vision for establishing a framework for action to address digital inclusion. This builds on the considerable activity across all sectors already being undertaken and highlighted throughout this report. The proposals here for a Digital Charter, Digital Champion and expert Taskforce are designed to take us to the next stage of creating a fully digitally engaged society which promotes excellence and fairness.

34. Having set out here an analysis of the problems and issues, and proposals for a digital Inclusion Champion and Charter, we are interested in your views on the questions set out at the end of each chapter and summarised at the end of this document.

35. We will hold a series of stakeholder workshops, and are launching a consultation website to enable an active debate around these questions. We will continue this discussion and consultation until **19 January 2009**, after which point we will announce the final decisions around these questions, and how this agenda is being taken forward.

Question 16: How far do you agree with the proposed principles outlined in the Charter? Are there others we should consider?

Question 17: How far do you support the actions which underpin the principles? Are there others we should consider?

Question 18: What issues need to be considered in determining a baseline measure for digital inclusion?

Question 19: What should be the brief of the Digital Champion role?

Question 20: What would be the single most effective thing government could do to drive its digital inclusion agenda?

Question 21: Are there any other issues you would like to raise in relation to this consultation?

[106] Office of Public Management on behalf of Communities and Local Government. (2008) *Research and recommendations on the costs and benefits of personal data sharing at local partnership level*.

Note on the Consultation

Consultation arrangements

This document raises some important questions on which we are seeking input now.

For ease of reference, all of the questions contained in the consultation document are summarised at the end of this document.

How to respond to the consultation

Please send your response, no later than **19 January 2009** to:

Digital Inclusion Consultation Team
Department for Communities and Local Government
E3/G10
Eland House
Bressenden Place
London
SW1E 5DU

Or by email to:

digital.inclusion@communities.gsi.gov.uk

More information is at www.communities.gov.uk/consultations

If you have any queries regarding the consultation please email the above.

The results of the consultation will be made public in Spring 2009.

The Code of Practice on Consultation

The Code of Practice on Consultation sets out the basic minimum principles for conducting effective Government consultations. It aims to standardise consultation practice across Government and to set a benchmark for best practice, so that all respondents would know what to expect from a national, public Government consultation.

It is centred around six key consultation criteria which are as follows:

The six consultation criteria:

1. Consult widely throughout the process, allowing a minimum of 12 weeks for written consultation at least once during the development of the policy.
2. Be clear about what your proposals are, who may be affected, what questions are being asked and the timescale for responses.
3. Ensure that your consultation is clear, concise and widely accessible.
4. Give feedback regarding the responses received and how the consultation process influenced the policy.
5. Monitor your Department's effectiveness at consultation, including through the use of a designated Consultation Coordinator.
6. Ensure your consultation follows better regulation best practice, including carrying out a Impact Assessment if appropriate.

Information provided in response to this consultation, including personal information, may be published or disclosed in accordance with the access to information regimes (these are primarily the Freedom of Information Act 2000 (FOIA), the Data Protection Act 1998 (DPA) and the Environmental Information Regulations 2004).

If you want the information that you provide to be treated as confidential, please be aware that, under the FOIA, there is a statutory Code of Practice with which public authorities must comply and which deals, among other things, with obligations of confidence. In view of this it would be helpful if you could explain to us why you regard the information you have provided as confidential. If we receive a request for disclosure of the information we will take full account of your explanation, but we cannot give an assurance that confidentiality can be maintained in all circumstances. An automatic confidentiality disclaimer generated by your IT system will not, of itself, be regarded as binding on the Department.

The Department will process your personal data in accordance with the DPA and in the majority of circumstances this will mean that your personal data will not be disclosed to third parties.

If you are not satisfied that this consultation has followed the above criteria or you have any other observations about ways of improving the consultation process, then please contact:

Albert Joyce,
Communities and Local Government Consultation Coordinator,
Zone 6/H10, Eland House, Bressenden Place, London, SW1E 5DU;
or by email to:
consultationcoordinator@communities.gsi.gov.uk

Delivering Digital Inclusion

Appendices

The issues identified in the first three of these Appendices and the five separately published Research Reports are the result of research and evaluation gathered from organisations independent of Government. These do not necessarily represent the view of the Minister for Digital Inclusion or any other Government Department. Appendix 4 provides a summary of current government activity, augmented in the Annex.

Issues raised within the Appendices and Research Reports will be considered in line with Government policy and the wider consultation. In considering its response to the issues raised within the Appendices and Research Reports, and the wider consultation of the document as a whole, the Government will consider issues such as affordability and the need to ensure that the net additional cost to local authorities is fully and properly funded so there is no upwards pressure on council tax.

Appendix One

Technology Futures and Digital Inclusion

Taken from an independent report by Chris Yapp, CapGemini Ltd, which is published in full alongside this strategy. Note that this does not, consequently, represent government policy but rather the views of the author.

1. Many of the trends which will shape IT futures in the next decade have been in place for the last few decades. IT will continue to get smaller, cheaper, faster and more functional and integrated. It will also consume less power.
2. There are two underlying trends in the digital technology industries which are central to most of the key developments which can be foreseen in the next few years. These are *connectivity* and *convergence*.
3. The distinctions between user devices which individuals use to access technology – such as radio, television, computer, gaming technology – have significantly blurred and will continue to do so over the coming years. The idea of the convergence of computers and communications has long been a goal of the telecommunications and computer industries. With this digital convergence, there is a convergence also of the media industries of film, TV, music, print and publishing.
4. While the process of convergence has been in train for some decades, the outcome of convergence is fraught with uncertainty, notably in its impact on business models, but also on which devices and services the user and businesses will adopt in the converged world. This provides many uncertainties in the regulatory regime needed for the converged world.
5. Technology innovation is frequently associated with business model innovation. For instance, the emergence of the MP3 player and the Apple iPOD has changed the way in which users buy and consume music. It also has impacted the ability of the recording industry to protect its intellectual property. In turn, the impact on music retailing and distribution is highly disruptive.
6. Alongside this process, there has been a growth in *connectivity*. As consumers have moved from chemical to digital photography there has been a change in how we use these devices. Many, if not most, mobile phones are also digital cameras, both still and video. The use of a short-range wireless standard known as Bluetooth enables users to transmit pictures from a mobile phone to a computer. Some digital televisions have slots for the memory cards in digital cameras which enable digital photos to be displayed on a Television. A new consumer product has also been made possible, the digital photo frame. Many of the new generations of flat screen televisions, both LCD and Plasma, can be connected to a personal computer.
7. Further, there has been the emergence of the Internet and the World Wide Web (WWW). In little over a decade the Internet and the WWW have moved from an academic community to over a billion users worldwide. They have evolved from an online publishing medium to an increasingly interactive set of services, including retail, finance and travel, alongside many community building and social networking sites.

8. The Internet is a network of networks. In the past we have had separate communication networks for TV, radio, phone (fixed and mobile) and computers. Each network has used its own communications protocol. IP, the Internet protocol, is a global standard which has been developed and continues to develop with a goal which its advocates argue is "IP over everything, everything over IP". That is to say that whatever mechanism or technology on which media are carried, IP will support that medium and that whatever service can be delivered digitally can be carried over the Internet. One example of a service that this has enabled is VOIP, Voice over IP.

9. There are many competing services now which enable voice and video calls over the Internet. Another example is IPTV, or television over the Internet.

10. The Internet has evolved from its earliest manifestation as a publishing medium for static pages. It has acquired sound and image (still and motion) media. It has also allowed for pages to be constructed on demand to become a database driven medium. There are two areas of focus for its future development, known as Web 2.0 and Web 3.0. These developments can be misleading in that there is no formal definition of them. Broadly, Web 2.0 is a collection of facilities that create a network of people rather than a network of information. The aim of Web 2.0 is to support community building, online collaboration and information sharing. There are many different views of what Web 3.0 means but the common views include changes in the way applications are built to create greater flexibility, more artificial intelligence and increased semantic capabilities.

11. As the broadband network infrastructure has developed, new business models for software have become feasible. The IT industry uses two terms to describe these developments, Service Oriented Architecture (SOA) and Software as a Service (SaaS).

12. In SOA, the software industry is moving away from monolithic software products to software built around business processes. These processes in turn are loosely coupled to create modular reusable software components that can be tailored to build distributed computing systems.

13. With SaaS, instead of users having to install and maintain software on their own PCs and Servers, the application is hosted on the Internet and delivered with new business models, such as on demand pricing. One of the most well-known examples of this is www.salesforce.com which provides an on demand customer relationship management suite of software. This type of approach is widely expected to support small and medium enterprises, SMEs, as it reduces the upfront capital costs of computing and relieves small businesses from in house technical support. The growth of SOA and SaaS as approaches is expected to grow with the availability of high availability networks. This externalisation of the IT infrastructure from organisations is one of the disruptive changes expected within the IT industry over the next decade.

14. One feature of this approach to software is that many of the well known Internet applications, such as Facebook, Google and Yahoo have opened up their applications by publishing interfaces which allow for software developers to build their own applications on top of the software provided by the supplier.

15. In turn this modularisation allows users to mix services from multiple sources to create "mash ups". This means that from a user perspective a seamless interface can be created to support their needs even though the raw data and services come from different organisations. The increasing choice of personal devices combined with the ability to mix and match different digital resources is the technological infrastructure that provides support for the personalisation of services to individuals and communities.

A Framework for Digital Technologies and Services

User Devices	**Personal Services**	**Third Sector**
	Infrastructure Services	**Private Services**
	Network Infrastructure	**Public Services**

16. The diagram above provides a framework to explore how the technological developments of the next decade will change how information is created in digital media and distributed over networks. It also provides a way of analysing the services provided.

17. Rather than a focus on individual technologies, such as Radio Frequency Identification (RFID), the Internet or WiFi for instance, the impact of these technologies on society and the economy arises from their integration into the "information platform".

18. From the perspective of the individual, they use a computer, a mobile phone, a digital TV or DAB radio for instance to access information, entertainment and services provided by the digital infrastructure. These and other **User Devices** access a **Network Infrastructure** that may be, for example, a fixed communications network, a mobile network or a satellite network. Indeed from the user perspective they may be using multiple networks to access information and digitally-delivered services.

19. A number of technologies are required to provide **Infrastructure Services**. These services include: search, security, locality-based services, digital rights management and payment services.

20. Similarly there are a group of technologies which provide services for the individual. These **Personal Services** include privacy technologies, identity services, and accessibility features, particularly for personalisation of delivery and for various disabilities.

21. In turn, there are services delivered by the public, private and third sectors which can be accessed by the citizen and consumer by digital means. The underlying technologies in many cases are similar. It is useful to draw distinctions at this stage, because the pace of developments, resources available and the motivations for service developments in the three sectors mean that different combinations of technologies can be seen and different levels of maturity. In tackling digital exclusion it is useful to consider how experience in one sector might inform developments in other sectors.

Appendix Two

Community Perspectives on Digital Inclusion

Taken from an independent report by OPM (the Office for Public Management Limited) which is published in full alongside this strategy. Note that this does not, consequently, represent government policy but rather the views of the authors

As part of the independent research carried out alongside the preparation of this document, OPM Ltd carried out two workshops in Nottingham and London. These explored sector views on and expectations of a Digital Inclusion Action Plan. Key sector expectations are set out below and more detail is available in the research report made available alongside this document. Please note carefully, however, that the list below represents viewed expressed by the public as part of this independent research and does not represent government policy.

1. The Action Plan needs to be about people and how their lives will benefit from digital technologies rather than about the promotion of technology and technology skills.
2. It needs to be inspiring and aspirational. Success factors need to focus on life skills, confidence and empowerment, and the wider enhancement of quality of life, as well as key social outcomes such as improved health, education etc.
3. There should be a national promotional campaign to inspire people and organisations and to stimulate demand.
4. It needs a strong champion who can influence policy, public service delivery, private sector provision, and third sector support; at one of the workshops, the notion of a "Commissioner for Digital Equality" was proposed.
5. The national strategy needs to connect up different policy areas and ensure that digital equality is within the mainstream of all policy making.
6. It should not be prescriptive about implementation and instead encourage regional and local solutions; local delivery is seen as critical for the successful engagement of excluded communities.
7. The Action Plan needs to support innovation and risk taking, but not seek to regulate it; an innovation fund and a national learning exchange are needed.
8. Regional Development Agencies (RDAs) and Local Strategic Partnerships (LSPs) need to act as local coordinators and enablers, including brokers and providers of funding. They also need to demonstrate commitments to digital empowerment through better information sharing, workforce development, and strategic leadership.
9. Outreach is a vital element for the delivery of the Action Plan; third sector organisations are best places to engage excluded groups, and to provide innovative approaches; funders need to recognise the elements of outreach and innovation and need to be willing to fund them.
10. Evidence shows that digital technologies provide opportunities for new forms of volunteering, ranging from mentoring to training, and from home support to online shopping. There needs to be a national promotion and local campaigning to build up a cohort of digital equality volunteers, which will include opportunities to encourage children to engage in "reverse mentoring" of their parents and grandparents.

11. Local public services need to equip themselves and their workforces to be digitally enabled and empowering. Frontline staff are one of the key contact points for many excluded communities and therefore need to be motivated and equipped to champion digital technologies as part of their relationships with excluded groups.
12. The Action Plan needs to create clear delivery expectations of local public services and needs to hold them to account on joining up, promoting and implementing (or supporting the implementation of initiatives).
13. There needs to be a stronger influence on the private sector to address current market failures, including user-led design of the end-to-end experience of identifying, purchasing, installing and using digital technologies, the promotion of low price options, and universal access.
14. There is strong support for making broadband access a universal service obligation.

Appendix Three

An analysis of International Digital Strategies and European Union Actions

Paragraph 1 is taken from an independent research report commissioned from Tech4i[2] which is published in full alongside this strategy. Note that this paragraph does not, consequently, represent government policy but rather the views of the author. The rest of this appendix is a summary of EU actions.

1. The International Comparisons report sets out the analysis of how 26 other countries around the world are pursuing the development of digital strategies. An overall summary shows that the principle approaches are:

Strategic goals common among many of the 26 countries examined

Key International Policy Goals	Headline Statement
1 Accessibility for all	Accessibility to all technologies for citizens regardless of ability should be a goal
2 Digital equality	High speed minimum standards for home Internet access will enable all citizens to benefit equally from future advances in technology
3 Literacy and digital competence	Enhancing basic literacy and technological literacy will improve life chances and facilitate lifelong learning
4 Technology to enhance independence and ageing	The groups that probably have the most to gain from technology are the least connected
5 Technology for inclusion	Simplify the life of users and improve the efficiency of service delivery to all citizens

Summary of EU Measures:

2. In addition to the EU actions set out in Chapter Five, by the end of 2008 the Commission will also propose a communication on telemedicine and innovative ICT tools for chronic disease management, setting out actions to overcome the main barriers preventing wider deployment of telemedicine, in particular tele-monitoring and tele-homecare.

3. e-Accessibility legislation, similar to that of the USA, is also under consideration. The latest assessments conducted for the Commission show that accessibility of websites, communication terminals, TV sets and other ICT remains problematic, with lower-educated, economically inactive and elderly people at the greatest risk of being left behind.

4. On 2 July 2008, the Commission launched a consultation with stakeholders on possible measures towards an accessible information society. The goal is to improve the accessibility of ICT products and services, so that they are usable by a large range of potential users notwithstanding their disabilities or limitations. This also covers the possible introduction of e-accessibility features in the design phase of new ICT tools and services so as to prevent digital exclusion in future.

5. As part of the 2006 e-Government Action Plan, the Commission is supporting efforts by Member States to ensure that "by 2010 all citizens, including socially disadvantaged groups, become major beneficiaries of e-government". People who are socially disadvantaged for economic, geographic, physical or other reasons also tend to rely most heavily on public social services and have the most to gain from electronic public services. Yet they are less likely to be able to access e-government services directly, owing to multiple socially excluding factors. An inclusive, multi-channel approach is therefore of prime importance. To this end, current efforts focus on the exchange of information on multi-channel e-government initiatives and best practices and on support for pilot schemes among Member States and regions.

6. As part of the 2008 e-Inclusion Initiative, the European Commission has launched the first ever European e-Inclusion Awards. The Awards celebrate the best and most imaginative uses of Information and Communications Technology to reduce digital and social exclusion. The European e-Inclusion Awards are open to organisations in the public, business and voluntary sector or civil society. In 2008, there were seven competition categories:

   - Ageing well
   - Marginalised young people
   - Geographic inclusion
   - Cultural diversity
   - Digital literacy
   - e-Accessibility
   - Inclusive public services

7. Many regions of Europe are geographically remote. The European Union is committed to ensuring that the continent's more remote and economically disadvantaged regions get the support they need to share in the benefits of economic growth. Digital technologies such as broadband Internet access can play their part in narrowing disparities between regions and help to promote social and economic cohesion. In 2006, the Commission adopted a policy framework for "Bridging the Broadband gap", which seeks to harness relevant EU policies and budgets to improve broadband facilities in remote regions. The emphasis is on addressing issues related to access, speed, quality of service and price. The UK already exceeds the EU targets in this area.

8. Finally, the findings of the *"Development-oriented policies for a socio-economic inclusive information society, including access, infrastructure and enabling environment"* report, from the Eleventh Session of the UN Commission on Science and Technology for Development looked at the policies required to deal with future digital divides – in this case broadband. Although acknowledging efforts at an international level have been directed towards access and quantity of ICT provision, it stated: *"The debate over the future digital divide is now moving away from inequalities in basic 'quantity' and 'access' to include differences in 'quality' and 'capacity'. The emerging digital divide is between those who do have access to the advanced information and communications technologies and applications, and those who do not have such access."*[107]

[107] www.unctad.org/en/docs/ecn162008d3_en.pdf

Annex and Research Reports list

Annex	Delivering Digital Inclusion: Public Sector Use of Information and Communications Technologies to Support Social Equality. *Published by government as a review of digital inclusion activity across the public sector.*
Research Report	Understanding Digital Exclusion *Commissioned from FreshMinds*
Research Report	Technology: Futures and Digital Inclusion *Commissioned from CapGemini*
Research Report	Community Perspectives on Digital Inclusion: Qualitative Research to Support the Development of the Digital Inclusion Strategy *Commissioned from OPM (the Office for Public Management Limited)*
Research Report	An Analysis of International Digital Strategies: Why develop a digital inclusion strategy and what should be the focus? *Commissioned from Tech4i²*
Research Report	Online Social Networks *Commissioned from Clicks and Links Ltd*

Summary of consultation questions

Chapter One

Question 1: How far do you agree with the definition of digital inclusion and the nature of the problem set out in Chapter One?

Chapter Two

Question 2: How far do you agree with the analysis set out in Chapter Two? Is there other evidence we should consider as to why digital inclusion is an important social issue?

Chapter Three

Question 3: How far do you agree with the analysis in Chapter Three of the main barriers which prevent individuals and communities from engaging in digital technologies?

Question 4: What are the most effective ways to remove these barriers and ensure that all individuals can exercise an empowered choice about their use of digital technologies?

Question 5: What are the risk factors and benfits for different communities associated with current and next generation access?

Question 6: What should be done to empower communities and local partnerships to address these risks and benefits?

Question 7: How far do you agree with the summary of issues around the direct use of technology presented in Chapter Three? Are there any other important issues we have not mentioned?

Chapter Four

Question 8: How far do you agree with the assessment of risks and opportunities around the indirect benefits of technology presented in Chapter Four?

Question 9: How can we raise awareness of the indirect benefits of technology for service design, planning and delivery across all sectors?

Question 10: Does the way in which services, particularly public services, are currently delivered adequately support individuals and groups who are socially disadvantaged? What more could be done to ensure they do?

Chapter Five

Question 11: Are you aware of any other examples of good practice not mentioned in Chapter Five?

Question 12: What aspects of previous or current digital initiatives and strategies have been most successful in tackling digital exclusion?

Question 13: What actions need to be taken to support better partnership approaches?

Question 14: What should be the extent of Government's intervention in tackling digital exclusion?

Question 15: How else can the impact of current activity be maximised?

Chapter Six

Question 16: How far do you agree with the proposed principles outlined in the Charter? Are there others we should consider?

Question 17: How far do you support the actions which underpin the principles? Are there others we should consider?

Question 18: What issues need to be considered in determining a baseline measure for digital inclusion?

Question 19: What should be the brief of the Digital Champion role?

Question 20: What would be the single most effective thing government could do to drive its digital inclusion agenda?

Question 21: Are there any other issues you would like to raise in relation to this consultation?

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