BT and Digital Inclusion

Better World
BT's Social & Environment Report

BT

BT and Digital Inclusion

We believe that access to information and communications technology can improve people's lives. By opening doors to things that really matter – education, employment, entertainment and contact with friends and family – communications technology is an important feature of modern life.

But not everybody has access to communications technology or the necessary skills to exploit that access.

For this reason we undertake a range of activities to promote digital inclusion and spread the benefits of our technology as widely as possible.

In order to achieve this goal, the technology must be of the right sort, people need to know how to use it and it must deliver useful information, advice and content.

All these three issues must be addressed if communications technology is to deliver the services people require:

• Connectivity – access to communications technology
• Capability – the ability of groups and individuals to use technology
• Content – the type of communication and the way it is used for social and economic benefit.

This section contains a range of information and perspectives on the BT approach to digital inclusion:

• A table setting out BT's business activities, policy influence and social investment that contribute towards the connectivity, content and capability dimensions of digital inclusion.
• A 'Hot Topic' paper from Simon Zadek and Peter Raynard (published in 2001) to provide an independent commentary on BT's approach to the digital divide.
• A more recent paper from Maya Forstater, Peter Raynard and Simon Zadek (published in June 2003) to provide commentary and analysis on progress made by BT subsequent to the 'Hot Topic'.
• Our digital inclusion campaign.
• The relationship between broadband and digital inclusion.
• BT's position statement on the digital divide.

BT activities

Our core business activities, policy influence and social investment each contribute towards the connectivity, content and capability dimensions of digital inclusion in the UK.

The table below highlights some of our key initiatives and policies, which are introduced in more detail in the case study boxes which follow.

	Core Business	Capacity building & policy influence	Social investment
Connectivity (access to comms technology)	Providing connectivity Rolling out broadband Trialing new technologies and products	Working with Regional Development Agencies to make rural broadband access achievable Contributing to the public debate	Working with Citizens Online to get 'Everybodyonline' Providing free PCs and connection to community groups and charities
Content (the ability of groups and individuals to use comms technology)	Creating and Enabling Commercial Content Enabling the development of e-learning	Contributing to the public debate	Supporting voluntary sector content Recognising good practice through the eWell-Being awards
Capability (the type of information accessed)	Working with Regional Development Agencies to make rural broadband access achievable Enabling the development of e-learning	Enabling the development of e-learning	Working with Citizens Online to get 'Everybodyonline' Providing free PCs and connection to community groups and charities

Providing connectivity

Our main impact on digital inclusion in the UK is through the provision of access to the Internet for consumers and small businesses through a number of key routes:

BT Openworld – BT's mass-market internet division is one of the UK's leading Internet service providers, delivering broadband and narrowband services to more than 1.75 million customers in the UK. A range of access packages has been developed including high-speed broadband, unmetered narrowband, and pay-as-you-go services.

BT Wholesale – BT wholesale provides the telephone networks through which other telcommunications companies and internet service providers can deliver internet connectivity to their customers.

BT Retail

• Phone lines – BT provides phone lines to 19 million residential customers. This remains the main route by which residential users access the Internet with 80% of internet users continuing to access the Internet using regular dial-up services.
• BT Broadband – since July 2002 BT has been marketing to BT Retail customers a low-cost, easy-to-install broadband product, which is integrated within people's existing telephone bill.
• Developing a home network, computer and support package to make getting a computer and getting online trouble-free.
• BT Retail also delivers connectivity and IT services to small and medium enterprises (SMEs) and larger organisations in the private and public sectors.

Over the past two years, prices for broadband and narrowband internet access have fallen, further incentivising connectivity.

Rolling out broadband

Broadband is a key strategic focus for BT. Moving towards greater availability of broadband is not the same thing as closing the digital divide – though it can be very important to social inclusion issues, especially in rural areas.

We have a roadmap in place to extend broadband availability to 90% of homes and small businesses by 2005. By March 2003 we had upgraded 1,167 exchanges, making broadband available to 67% of UK households. Work is currently under way at a further 247 exchanges to enable them to offer ADSL.

In June 2002, we announced the introduction of a new broadband registration system that enables consumers who cannot get ADSL services to register their interest. The registration scheme covers the whole of the UK and we have set a trigger level for over 800 exchanges at which it would become economically viable to broadband-enable the local exchange.

In January 2003, we announced changes to our registration scheme, following a review of the costs of enabling exchanges. This review has enabled us to reduce the trigger levels at 388 exchanges and to set trigger levels for a further 87 exchanges. We have also announced plans to streamline the broadband demand registration scheme, speeding up the time taken to upgrade an exchange.

Over 320,000 people have now registered their interest and over 44 exchanges have been broadband enabled.

Promoting broadband

We have a target of attracting one million wholesale broadband customers by the summer of 2003. In support of this, we have launched a major advertising campaign to increase awareness of broadband in 2002, to some effect. Oftel recently concluded that, "It is likely that the recent BT advertising campaign has impacted greatly on broadband awareness."

Trailing new access technologies and business models

BT is developing new technologies and marketing approaches to reach new markets and extend uptake of ICTs.

• **Community Broadband** BT has confirmed it will go ahead with the full national launch of its pioneering project to bring high-speed broadband technology to small local communities. Following successful trials in eight sites across the country in England, Wales, Scotland and Northern Ireland, 'ADSL Exchange Activate' will be available commercially from July 2003. The scheme involves a sponsoring body that has a social, development or commercial interest in bringing broadband to specific areas. The sponsor pays a lump sum to get groups of 30 customers connected to asymmetric digital subscriber line (ADSL) equipment for a three-year period.
• **Midband BT** announced in April 2003 its new high-speed internet service, BT Midband. Designed to meet a need for higher-speed internet access for customers living in areas where broadband is not yet available, the Midband service will start on 1 June 2003 and be available to 97% of the UK population. BT Midband is an interim alternative, high-speed (128k) internet access solution for instances where broadband (ADSL) is not yet available in customers'' local exchange area, or if they live over 5.5 km away from it.
• **BT Home Computing** (www.bt.com/homecomputing) – is a complete package covering PC choice, installation by a BT engineer and ongoing support. It aims to help customers get the most out of home communications without needing to be technology experts.
• **Internet kiosks** (www.payphones.bt.com) BT operates 77,000 payphones, the largest network in the UK. There are currently more than 1,200 BT internet kiosks offering internet access, e-mail and text messaging as well as phone calls, with a total of 20,000 planned by 2007.

Working with Regional Development Agencies to make rural broadband access achievable

To enable more SMEs to benefit from ADSL technology, BT is working with several public and private bodies to develop demand-led projects to bring broadband to regions of the UK where deployment would otherwise be uneconomic.

One key example of this approach is the ACTNOW (www.actnowcornwall.co.uk) partnership in Cornwall, involving Cornwall Enterprise, BT, South West Regional Development Agency, Cornwall College, Cornwall County Council and Business Link. EU Objective One funding has enabled the partnership to offer subsidised packages to SMEs ranging from a line connection and advice to integrated business solutions through to complete networked solutions.

Working with Citizens Online to get 'Everybodyonline'

In partnership with the charity Citizens Online we have established a programme initially working in four pilot sites in under-privileged areas where Internet usage is low and deprivation high. Other criteria for selection include commitment to strategic partnership by local government and the voluntary sector in addressing the digital divide, and enthusiasm by prospective local partners for the project.

The project aims to increase the use of communications technologies and skills in these communities, enhance the quality and level of ICT knowledge amongst new and existing users and deepen understanding of digital exclusion both locally and nationally.

An 'eEverybodyonline' project officer has been appointed in each location. Their job is to:
- map local access points, training providers, potential partners and key issues;
- establish a steering group to design a locally-owned action plan;
- facilitate activity to improve awareness of ICT and its benefits; and
- capture data, case studies, examples of good practice and feedback.

The local audits have revealed that many opportunities and facilities already exist for ICT training and internet access and the emphasis for 'Everybodyonline' is on developing life skills and targeting those who are most daunted by the prospect of using new technology. Once they have taken the first steps they are signposted to established training providers. In some cases the barriers to access have been about poor bus services or lack of child care facilities and the 'Everybodyonline' project officers have taken the initiative to overcome these.

These are demonstration projects and the end result will be a toolkit that could be used by any community to promote and encourage ICT and Internet access as part of a regeneration or community development process. The project is developing indicators to identify local and nationally recognised improvements in order to demonstrate to government and others the social and economic benefits of this programme.

Providing free PCs and connection to community groups and charities [www.communityconnnections.com]

BT Community Connections offers community and voluntary groups and organisations the opportunity to connect to the Internet. The awards scheme, in its second year, is giving out more than 1,700 internet-ready PCs to community groups across the UK. Past winners have included city farms, disabled dance groups, local history groups and silver surfers shopping online.
Award winners receive an Internet-ready PC and a contribution of £180 towards cost of Internet access.

Creating and Enabling Commercial Content (www.btopenworld.com)

BT hosts third-party content as BT Global Services and BT Openworld and also provides content under the BT Openworld banner. Examples include:
- **BT Openworld** has launched five sites aimed at computer gamers, music fans, sports and betting enthusiasts and travellers: www.gamesdomain.co.uk, www.dotmusic.com, www.btopenworld.com/classical, www.btopenworld.com/sport and www.btopenworld.com/travelclub. These provide a mix of free and subscription-based services.
- **BTclick&buy** (www.btclickandbuy.com) Over the last two years, advertising revenues on the Internet have been decimated. European businesses with premium online content have been faced with the task of generating profitable revenue streams. Our new micro-payments scheme launched in September 2002 provides consumers with secure access to Internet content, without needing to give out credit card details. Eventually it will enable people to purchase premium content online and pay for it through their phone bills.

Enabling the development of e-learning

BT education has developed a range of content on the Internet aimed at teachers, parents and kids, including:
- **Connected Earth** (www.connectedearth.org) Launched in 2002, this Museum on the Internet is now one of the largest virtual museums in existence, providing access to the history of telecommunications.
- **BT Toolbox** – resources for teachers, parents and children on communication skills – including animated tutorials, quizzes and classroom activities.
- **BT Learning Centre** (www.btopenworld.com/thelearningcentre) an online learning subscription service for home users, tailor-made for specific age groups. This new service provides pupils with the same or similar content to that available in schools to help give them a step up the educational ladder. We have also been working with leading education content providers including Actis, Netmedia Education, Cyber Mind and Granada Learning to aggregate a wide range of education titles into the service. Free content is available to both subscribers and

non-subscribers, alongside links to other educational sites such as GridClub, NGfL, museums and others.
In addition, we are involved in pushing forward development and innovation in the field of e-learning – for example, we support the ICT in Education awards which identify and promote best practice.

The majority of our education products, services and activities focus on formal education through schools and colleges. However, we are also beginning to support some informal learning projects such as the Real Bus with Glasgow City Council, which has created an IT-enabled learning centre on a bus to bring internet taster sessions to people in community settings such as mother and toddler groups and shopping centres.

Enabling public sector content

In recent years we have worked with both local and national government to develop a number of high-profile projects:
- **Leeds Learning Network** (www.leedslearning.net/), formed by BT and Leeds City Council to connect schools, libraries and museums throughout Leeds on one single network, offering the whole community an invaluable educational resource.
- **NHSnet with C&W** (www.nhsia.nhs.uk/nhsnet/pages/about/intro/nhsnet.asp) BT Health is the main service provider for NHSnet, the world-class secure intranet for the health service. Introduced in 1995, the multi-media resource is transforming the way that health professionals work, enabling them to deliver electronic healthcare, more efficient administrative processes, and giving them the capability to deliver on the government's ambitions for electronic patient records. The network has been rolled out to all Health Authorities, to 98% of NHS Trusts and to more than 80% of the country's GP practices.

Supporting voluntary sector content

We provide support to a number of voluntary sector initiatives that provide online services and web-based resources. Examples include:
- CancerBacup (www.cancerbacup.org.uk) to develop an interactive cancer information service on the Internet for people affected by cancer and for health professionals.
- The development of the Time Bank www.timebank.org.uk website which matches volunteers' time and skills to local organisations.
- The redevelopment of the National Council for Voluntary Organisations' website to provide a comprehensive online resource for large and small voluntary organisations.

We have teamed up with ik.com www.ik.com to make free, simple-to-build websites – www.communitykit.ik.com – available for UK charities and community groups. This is an extension of our existing work with UK schools – more than 4,000 whom have already created some excellent new sites that are developed and maintained by pupils and teachers.

Recognising good practice

We sponsor SustainIT's (www.sustainit.org/ewell-being/ewb_awards.htm) E-Well-Being awards which identify and promote organisations and initiatives which use ICT to create environmental, economic and social benefits. The awards are an important part of our commitment to digital inclusion. We recognise the vital role that communications technology is playing in providing tangible social, environmental and economic benefits, and hope the projects highlighted will inspire other organisations to enter the awards in future.

Contributing to the public debate

An example of our contribution to the public debate on digital inclusion is our active membership of the Broadband Stakeholder Group (BSG) (www.broadbanduk.org) the government's multisector advisory group on broadband. Although the BSG has largely focused on the issue of extending broadband coverage and competition it is now also recognising the need to accelerate demand and create compelling commercial and public service content.

Everybodyonline

We have launched a digital inclusion campaign to support the government's aim to give all citizens online access by 2005 and demonstrate how communications can help improve society.

A key element of the campaign is the 'everybodyonline' programme, which has been established in partnership with charity group Citizens Online www.citizensonline.org.uk and is initially focused in a few pilot locations:
- Walker in Newcastle-upon-Tyne
- St Stephen in Restormel (Cornwall)
- Broad Green in Croydon
- Audley & Bignall End in Newcastle under Lyme.

Project aims

The specific aims of the project are to:
- Increase use of communications technologies and skills in communities where income and adoption rates are amongst the lowest in the UK.
- Increase opportunities for access for groups within these communities identified as excluded or marginalised by reason of –
    - Age
    - Gender
    - Ethnic background
    - Disability
    - Previous educational opportunity
    - Employment status.
- Enhance the quality and level of ICT knowledge amongst new and existing users.
- Deepen understanding of the causes and effects of the digital divide and how they may be addressed nationally.

Information and data on this page has been verified by Lloyd's Register Quality Assurance Ltd.

Information and data on this page has been verified by Lloyd's Register Quality Assurance Ltd.

The campaign aims to increase access to communications technology in underprivileged areas and to deepen the understanding of the causes and effects of the digital divide and how they may be addressed nationally.

Each pilot area has different social and geographic issues, but all the locations chosen have the common factors of low internet usage and a 'high' ranking in the government's index of deprivation. The local authorities in each area have actively welcomed the initiative and are working with us to ensure optimum benefit.

Local project managers have now been recruited to work in these communities. Their role is to map existing facilities, identify community needs and develop local partnerships.

The project will use a unique measure set to identify local and nationally recognised improvements in order to demonstrate to government and others the benefits of this programme.

Broadband

Broadband (www.bt.com/broadband) is an 'always on' high-speed connection to the Internet. It's called broadband because it has a much larger capacity to send and receive data than a standard telephone connection – indeed, up to 10 times faster.

Broadband is expected to bring a range of economic, social and environmental benefits.

Indeed, the UK Government has set the target for the UK to have the most extensive and competitive broadband market in the G7 group of countries by 2005.

BT has established the target of one million broadband connections by summer 2003 and five million by 2006.

Digital inclusion

Broadband roll-out raises a number of issues for the digital inclusion agenda. Specifically, these include:
- Connectivity – the availability and uptake of broadband
- Content and capability – use of broadband to deliver social, economic and environmental gains.

Examples of the potential benefits include:
- Enhancing the productivity of individual enterprises, industrial sectors, regions and the economy as a whole
- Increasing opportunities for teleworking that reduce the need to travel
- Remote diagnosis and in-home care bringing health benefits
- Increased access to learning materials in the education sector.

Connectivity

BT is determined to spread the benefits of broadband as widely as possible.

At 31 March 2003 the ADSL 'footprint' of broadband-enabled exchanges covered 67% of all UK homes and small businesses. We have also set out a roadmap that will see broadband reach more than 90% of the country.

Critical to the delivery of these goals will be co-ordinated action through partnerships with both

government and industry to make broadband accessible to the wider community.

Partnerships are essential for broadband to reach parts of the country where a commercial case could not otherwise be made. Indeed, such partnerships can generate more interest and take-up than industry marketing on its own.

Partnerships

An example of cross-sector partnership in action is the ACTNOW initiative in Cornwall (www.actnowcornwall.co.uk/).

ACTNOW is a partnership between BT and key public sector bodies, including Cornwall County Council, the South West Regional Development Agency (RDA), Devon & Cornwall Business Link and Cornwall College.

The initiative will provide business support packages to 3,300 businesses using broadband technology.

By February 2003, 13 Cornish exchanges had been enabled and over 1,000 businesses and households signed up to broadband.

BT now has regional initiatives in an additional eight areas. Together these are expected to enable 100 additional exchanges and make broadband available to a further 48,000 businesses.

Each region has its own challenges driving demand for broadband. Prominent themes include improving competitiveness, tackling social exclusion, delivering government targets and improving skills and education.

In Wales, 10 exchanges have been enabled under an EU Wales Programme and BT is now a partner in Opportunity Wales (www.opportunitywales.co.uk) a broadband demand stimulation programme targeted at 'Objective 1' areas where the GDP is less than 75% of the average.

Registration scheme

A barrier to the further expansion of broadband is the lack of demand to 'enable' every exchange.

Therefore, BT has launched an innovative registration scheme to identify the exchanges where sufficient demand exists.

By March 2003, trigger levels had been established at over 800 exchanges with trigger levels for a further 759 exchanges already planned for the 2004 financial year. More than 320,000 registrations had been made, 44 exchanges had been enabled and a further 247 were in the process of being enabled.

The 'trigger levels' are cost-based and set at 200-750 registrations.

Assessing and stimulating demand in rural areas will be critical to enabling more exchanges and BT is encouraging greater take-up – for example, working with rural bodies such as the Countryside Agency and local pressure groups to advance sign-up to the registration scheme.

We are also hopeful that the purchasing power of the public sector could drive demand even faster. For example, government plans to enable schools and GP surgeries with broadband would benefit the whole community if

implemented in a way that helps reduce 'trigger levels' in non-enabled exchanges.

Community broadband

BT has announced that, in July 2003, we will launch nationally a pioneering project to bring broadband ADSL technology to small exchanges where previously it was not commercially viable.

Following successful trials in eight sites across the UK, BT Wholesale will make 'ADSL Exchange Active' available commercially. The scheme involves a sponsoring body that has a social, development or commercial interest in bringing broadband to specific areas. The sponsor pays a lump sum to get groups of 30 customers connected to ADSL equipment for a three-year period.

These sponsors during a trial period were the Highlands and Islands Enterprise; Gwynedd County Council; Denbighshire County Council, together with consultants The ITC (UK) Ltd; the East of England Development Agency; the New Forest Business Partnership; and Omagh District Council.

The sponsoring organisation will team up with an internet service provider of their choice to aggregate demand, source funding and deliver service.

Alternative solutions

We believe that other innovative technological and business model advances – such as satellite, wireless broadband and mesh radio – can play their part in increasing the number of households who live in broadband-enabled areas.

To achieve this advance in digital inclusion BT is pioneering a number of new technologies:
- Improving the range of existing enabled exchanges. Technology advances will increase the exchange reach within an enabled area from 94.5% to 97.5% and has the potential to increase broadband access to a further 3% of the population.
- Satellite.

Broadband satellite has some technology and price limitations but is available throughout the UK and has the potential to increase broadband access to a further 1% of the population.
- Midband products.

BT Midband connects to the Internet using ISDN technology and switches between 64k per second and 128k, enabling users to surf the net and make calls at the same time. BT Midband is available to 97% of UK homes.

Health and education

Broadband enables users to 'do things differently' rather than just 'doing things more quickly'.

But the benefits of doing things differently require compelling content, which itself drives broadband take-up.

The Prime Minister has promised that every school and every doctor's surgery in the UK will have a broadband connection by 2006. However, technological innovation

must be accompanied by innovative exploitation of bandwidth if the full social and environmental benefits are to be realised.

Health

Shorter waiting times and more efficient patient care will result from a £168 million agreement between BT and the NHS Information Authority.

The agreement will involve BT upgrading the existing NHSnet infrastructure to a broadband platform, linking more than 7,000 NHS sites throughout England including hospitals, GP practices and NHS Trusts.

This broadband upgrade supports the new NHS National Strategic Plan for IT, underpinning three of its major projects:
- electronic booking systems – allowing GPs to book consultant appointments for patients online
- integrated care records – ensuring patients' details and treatment are available immediately to all appropriate healthcare staff
- electronic transfer of prescriptions – providing an integrated system to allow the transfer of patient medication records between GPs, nurses, hospitals, pharmacists, dentists and the patient.

The broadband upgrade will give doctors access to the information necessary for fast and accurate diagnosis.

For radiology departments, the broadband upgrade is a key first step towards allowing medical information to be sent and received electronically, for example, the sharing of x-rays between radiology departments.

For specialists, such as dermatologists (skin specialists) or ophthalmologists (eye specialists), the network will support online diagnosis using imaging or video-conferencing technologies. A consultant would be able to examine quality digital images of an injury or skin problem from the office and diagnose without the patient attending for an appointment – which may have taken weeks to book.

Similar technology will allow staff at small hospitals and health centres to treat patients locally, with guidance provided online by experts located anywhere in the country.

The upgraded network will also make it possible for GP practices to access centrally updated guidelines on the management of disease such as heart disease and cancer. This will ensure consistent care guidelines are available throughout England.

Education

The increased bandwidth resulting from broadband connections has the potential to deliver high-quality curriculum materials to all pupils.

Two new high bandwidth services that will help the government achieve its vision of delivering the national curriculum online have been launched by BT.

BT's LearningStream 8 and LearningStream 34 services have been designed specifically for educational purposes. They can be used by schools, colleges, and public learning centres to create online learning communities, share and exchange resources and enjoy fast download speeds.

These services can be used to build learning communities by linking schools, colleges, libraries, the University for Industry, Learning Centres and Citizens Advice Bureaux.

Material for online lessons is currently being developed by a variety of commercial and public organisations.

However, until now there has been no affordable connection powerful enough to make it possible for schools to work online at speeds that make it a realistic and attractive option.

This is an example of how broadband can contribute to desirable educational objectives by 'doing things differently'.

**See Also:**
• BT Education

Reducing congestion

Broadband can help the government in its objective to reduce congestion on the UK's roads.

For example, taking the estimate of the Telework Association – that 15% of the UK workforce will become teleworkers by 2006 (either full homeworkers, mobile workers or occasional homeworkers) – then this would result in a 10% reduction in work-related miles.

Indeed, if the trend towards teleworking continued then this could reach a 15% reduction in work-related miles by 2010.

Similarly, by facilitating a better online shopping experience, broadband could produce an estimated 10% fall in shopping miles, according to NOP.

These figures are summarised by the following estimates of the National Economic Research Associates (NERA):
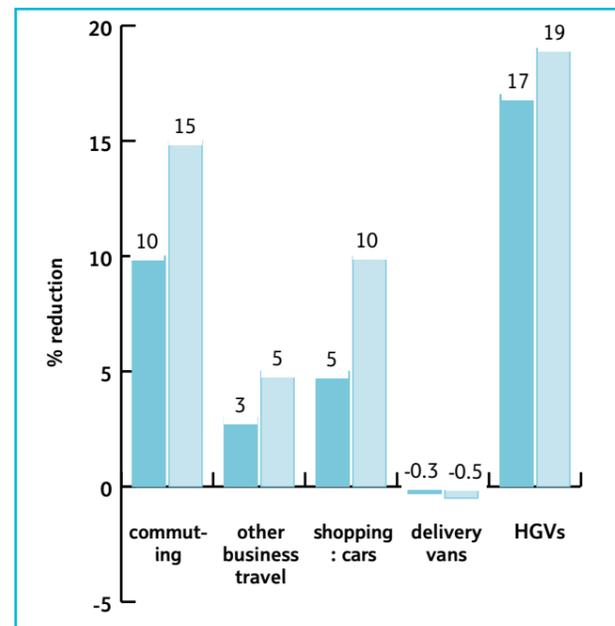
It is further estimated by BT that a total 6% drop in car and taxi miles would result in an annual seven million tonne reduction in carbon dioxide (CO_2) emissions and a 40-50% reduction in congestion.

NB. These figures are estimates and have not been verified by our independent assurers, LRQA.

BT position statement on digital inclusion

BT and digital inclusion...
Over the past couple of years the term 'digital divide' has become widely used to embrace issues of social and economic exclusion within certain sectors of society, caused by the lack of access to telecommunications technology, and the lack of necessary skills or motivation to exploit that access.

The UK government has demonstrated a great deal of interest and concern about the communications technology aspect of social exclusion. The establishment of an 'e-envoy' and the project to put all government services online are part of a wider government commitment to digital inclusion and e-commerce. A variety of schemes are under way to progress this access, including new UK Online centres, all UK libraries being furnished with Internet access, the work of the Social Exclusion Unit and specifically the various Policy Action Teams including PAT 15 which reviewed the role of information and communication technologies in tackling social exclusion in the UK's most disadvantaged neighbourhoods.

BT is an active partner in the UK Online process to make government services available to all on-line, and participated in the PAT 15 initiative. The challenges and solutions learnt as part of this process have informed our over-all approach to digital inclusion.

BT's position...
In BT we believe that information and communications technology can improve people's lives. But access to this technology is not an end in itself. It is only useful if it can open doors to the things that really matter to people, such as education, jobs, entrepreneurial innovation, entertainment and contact with the people we care about.

In order to achieve these goals the technology must be the right sort, people will need to know how to use it, and it must deliver useful information, advice and content. All these three issues of connectivity, capability and content must be addressed if technology is to deliver the services and changes people really need. Of these challenges, connectivity can be the most straightforward to manage as it often relates to macro infrastructure. The issues of skills (capability) and relevant content will need individual engagement with everyone who wants access.

In the developed world most of the telecommunications infrastructure necessary for basic (modem) digital access is already in place. In the UK, more than 95% of households have access to fixed telephony. Contrary to some reports, the overall picture of access in the UK puts us in a better position than much of Europe.

We support the principle of universal service. But the market has changed beyond recognition since BT was privatised. Over 250 companies now operate in the UK market and many more are poised to enter. Universal Service regulation needs to evolve to reflect this and be seen as an industry-wide issue rather than just a BT one. A fund supported by the whole industry to provide a reasonable service at a reasonable cost to all those who want and need it would be a sustainable alternative, bringing us into line with much of Europe and the United States.

The core of the Universal Service Obligation is to combat social or economic exclusion from fixed line telephony, important because this is now a service the majority of people use. There are often innovative solutions to this challenge, such as when we adapted our 'incoming-only' service into a more useful 'pre-pay' service, suitable for people worried about running up a large or unpayable bill.

Some services, such as the Light Users Scheme (with over two million users), the free and subsidised services supplied to people with disabilities, and payphone provision in rural areas require maintenance without profit, but again we feel there should be a fair system of funding to provide them.

New technologies...
Broadband, the next wave of access technology, is now being introduced and, as with anything new, it will take time for it to be available to everyone who wants or needs it. We believe that there is not a 'one size fits all' solution to digital communications and often the challenge is to provide innovative bespoke solutions. Our work with schools serves as an example of this. Here we offer 'learningstream' – a very economical, high-speed service which can be made available even in areas which are not yet enabled for ADSL.

In the short term we plan to introduce broadband options in areas where the derived income provides the cash flow necessary to maintain and extend our capital investment programme. Providing broadband where there's no return on investment would drive up costs for all phone users, potentially reinforcing the very exclusion we seek to combat.

New technologies need to be given time to prove their worth, and potentially cheaper or more effective alternatives should not be prevented from flourishing. Barriers to Internet use are rarely about simple technology, especially as PC-modems in homes, schools and libraries, ISDN, satellite mobile, digital TVs and 'Internet access' mobile phones will cover most of the UK population. These, and other options, provide a variety of choices

relating to cost and need, making it easier for people to gain access in the way which suits them.

All three aspects of connectivity, capability and content must be engaged with rather than expecting a single technology to provide access. As we recently pointed out to the government, technology is no substitute to universal literacy, a target the UK still falls short of.

The power of up-to-date communications and information technology can have

a profound impact on the economic, educational and social life of communities. We work on a variety of local regeneration projects, including providing the infrastructure necessary for inward investment, offering efficient services to the regional development agencies and partnering with local councils (such as Edinburgh) to modernise government services. We also run award schemes to provide the connectivity, capability and content for small community groups.

BT believes that the government has the most significant role to play in overcoming digital exclusion. A small part of the £22 billion raised by the 3 G mobile spectrum auctions in the UK could be used in partnership with business to combat the connectivity, capability and content problems. Specifically on the issue of broadband, it would be beneficial for the government to encourage operators to build infrastructure co-operatively where it is uneconomical to do so independently.

The international aspect...
At their 2000 summit in Japan, leaders from the G8 countries launched the 'Dot Force' to address the digital North/South divide which threatens to further widen the economic gap between developed and developing worlds.

Responding to the tough economic climate in our industry, BT now intends to concentrate its activities in Europe. These commercial imperatives will take us away from focusing on developing countries in the foreseeable future.

We continue our support of the Commonwealth Telecommunications Organisation which undertakes a variety of training and consultancy for operators and administrators in emerging economies.

However, we agree with the Dot Force suggestion that 'many of the most crucial and difficult decisions and actions must be taken by national governments and societies themselves, with appropriate support and encouragement by other partners'. The private sector will be a critical partner, and whilst we may not be operating in these countries we will continue offering to share our experience on market liberalisation, ICT training/education and universal service obligations.

Information and data on this page has been verified by Lloyd's Register Quality Assurance Ltd.

Information and data on this page has been verified by Lloyd's Register Quality Assurance Ltd.

Our contribution…

We will continue to contribute to digital inclusion through constructive discourse with industry regulators in those countries in which we operate. We shall undertake this in a open and transparent way, such as publishing our response to relevant consultation papers on our website: www.btplc.com/regulatory/index.htm

We shall continue to devise innovative ways of supplying connectivity, capability and useful content to disadvantaged customers.

Through our social investment programme, which primarily takes place in those countries within which we operate, we will continue to support education and charities, particularly helping children gain the key communication and ICT skills to equip them for the digital age.

Whilst we don't intend to work directly in developing countries to any significant degree, we can continue to offer our many years of relevant experience to those bodies working on the international aspect of digital inclusion, such as the G8 Dotforce, the ITU, and the World Economic Forum.