GOVERNMENT RESPONSE TO THE RECOMMENDATIONS OF THE SECOND ANNUAL REPORT OF THE BROADBAND STAKEHOLDER GROUP

INTRODUCTION

The Government welcomes this report, the second annual report of the Broadband Stakeholder Group to Government. The work of the BSG is invaluable to the Government in determining its broadband policy, providing an unparalleled opportunity for Government to work with Industry on the broadband agenda. The recommendations made by the BSG in this report provide a useful addition to this development of our broadband strategy. We are happy to accept either in full or in part all of the recommendations in the report, as outlined in the responses to the individual recommendations set out below.

Last year, the Government accepted all but one of the BSG's recommendations contained in its first report to Government and we have worked throughout the year on implementing those 14 that we did accept. We are gratified that in this second report the BSG consider that the Government has taken action on all of these recommendations. We have striven to incorporate them in our strategy and have made progress against them all, something we hope to repeat in taking forward actions from these new recommendations.

Currently, the Government's strategy centres around ensuring a competitive market, engendering consumer choice and low prices in those areas where broadband is available, and stimulating the market to roll broadband out in those areas presently devoid of mass-market solutions. Over the past year we have worked with this aim in mind, as well as towards our overall target - for the UK to have the most extensive and competitive broadband market in the G7 by 2005. Although we recognise that there is a way to go yet, we are confident of achieving our aims. This is backed up by the facts – for example in take up and coverage. As of February 2003, there were 1.5 million broadband users in the UK, a figure which is rising at a rate of 32,000 new users each week. 71% of the population now has access to broadband via ADSL, cable modem and/or wireless.

Over the past year Oftel has continued to promote competition within a regulatory framework that is conducive to further broadband roll-out, acting as one part of a cross-Governmental approach to broadband strategy, which has seen many Departments and Agencies working together in developing policy. DTI now has the lead on broadband, having taken on this mantle from the Office of the e-Envoy last Summer, while other Departments have overseen the development of policy in their particular fields. Many of these Departments will be responsible for a share of the £1 billion to be provided over 2003-06 for broadband connectivity in the public sector.

Perhaps the high point of 2002 however was the joint DTI/BSG conference at which the new UK Broadband Task Force was launched. The Task Force is composed of regional broadband co-ordinators led by a DTI-based

management team and procurement advisors based at the Office of Government Commerce. The principal focus is on the aggregation of public sector demand and thereby stimulating broadband roll out across the UK. We are confident that the Task Force will start to deliver observable results soon.

The effort of the Task Force's activity at the regional and devolved level is mirrored by the work the RDAs and devolved administrations are involved with to help develop and promote broadband networks and services. Many projects are underway in this regard from which lessons can be learned to apply all over the UK. Information on these projects and activities is summarised in an annex to this report.

GOVERNMENT RESPONSE TO RECOMMENDATIONS

There are fifteen main recommendations in the BSG report, many of which have been broken down into sub recommendations. This section of the response addresses each of the main recommendations and sub recommendations in turn. Contributions have come from across Government, reflecting the varied nature of the broadband programme.

RECOMMENDATION 1

DTI to appoint a dedicated programme manager with overall responsibility for coordinating the implementation of the broadband strategy across Government

Government Response: The Government accepts this recommendation.

Action: DTI to appoint an individual to take overall responsibility for co-ordinating the implementation of the Government broadband strategy.

Making broadband a 'must have' service

RECOMMENDATION 2

The BSG should continue to focus on researching and articulating the wider benefits of broadband

Government Response: We agree that the BSG should participate in the functions outlined in the recommendation, as this will help to build up a necessary evidence base for the development of future policy. Government will also undertake these activities, through, for example:

Investigating Local Projects

- DTI routinely monitors projects funded under the £30 million UK Broadband Fund and receives regular progress reports from the RDAs and devolved administrations about these. See Annex on regional activity.

- The Countryside Agency have commissioned a study looking at broadband projects being run in rural areas with a view to identifying how these are proving beneficial and how the approaches they take might be adopted elsewhere in the UK.

- The study of best practice in the stimulation of demand for and provision of broadband will form part of the UK Broadband Task Force's remit.

Case Studies

- As part of its e-business strategy, DTI collates case studies of SME use of broadband and ICT; and the BSG and DTI have collaborated in identifying

key case study elements and working towards identifying case studies that make persuasive "business benefits" cases

Action:

DTI to monitor progress against Broadband Fund projects on a quarterly basis and post results on DTI website.

The Countryside Agency survey will be completed by end April 2003.

DTI to continue to collate case studies.

RECOMMENDATION 3

Industry stakeholders must continue the aggressive promotion of broadband services to accelerate take-up

Government Response: We agree that it is predominantly for industry to promote the benefits of their products and services. Government is heartened by the effort and commitment that industry has shown in the past year to promoting broadband and to finding attractive price points, which have driven take-up to the current levels of over 1.5 million subscribers and still rising at over 32,000 per week.

Action: Government will assist in promoting broadband services – see response to recommendation 4.

RECOMMENDATION 4

Government must continue to assist in the promotion of broadband services

Government Response:

UK Online Centres

On 19 November 2002 the Prime Minister announced that the target to have 6000 UK online centres across England had been achieved six weeks ahead of schedule. Over half of the UK online centres are based at libraries; 85% of libraries will have broadband through the Peoples Network, overseen by DCMS.

Internet Training: Working in partnership with UfI, DCMS and the OeE, DfES are planning to test ICT taster sessions which we aim to pilot in May – August 2003.

Action: ICT taster session to be piloted in May-August 2003.

Benefits of broadband for SMEs

DTI will develop content and services for SMEs that raise their awareness of the business benefits of broadband through the UK online for business programme. This will be done in close collaboration with the Broadband Stakeholder Group. DTI delivers e-business support on-line and through telephone and face-to-face services. It will give greater prominence to broadband as an enabling technology, building on material made available at the "Building Broadband Britain" conference in November 2002. This includes a guide to broadband for businesses, case studies and a booklet answering frequently asked questions about broadband.

A range of content and services are in development, which will include the following:

- a web based guide to broadband availability that will enable businesses to check if they are able to get broadband access from a range of service providers; **Action: available through UK online for business website with additional services from companies being added.**
- An 'event in a box' presentation resource comprising material that local advisers can use for giving presentations and to meet local needs; **Action: available by end May 2003**
- A range of in-depth case studies illustrating the experience of companies in using broadband to achieve tangible benefits in their businesses. **Action: available by June 2003 via the UK online for business website**
- a mobile satellite demonstrator that will enable events taking place in venues that do not have ready broadband access to have a facility allowing them to have two way broadband access to the internet. **Action: available by May 2003**
- a "best broadband implementation" award will be included in the UK online for business e-commerce awards. **Action: First award will be given in October 2003**

In addition, DTI is running a high-profile campaign for during March and April on the business benefits of broadband, with publicity in national press, online, on radio, and on taxis operating in the London area.

Fiscal Incentives

Advice about all the tax incentives to promote the take-up of ICT is now available on the e-commerce pages of the Inland Revenue's web site, which has seen a steady increase in the number of hits. The information on the website has been passed on to other Government Departments to propagate as appropriate. In addition, there is a very high level of awareness of these incentives among accountants advising small and medium-sized business.

Action: The Inland Revenue will continue to provide information about all the tax incentives available for the take up of broadband and ICT generally.

RECOMMENDATION 5

BSG in conjunction with the DTI to continue its work to identify practical international solutions to rights management issues

Government Response: DTI recognises that digital rights management (DRM) is an important but also highly complex area. The Department has engaged a contractor, who is an expert in this field, to work exclusively on these issues in close association with the BSG's Digital Rights Management working group. One potential way forward would be to produce a report, coordinated and written by the DTI with input from the members of the group, ideally by the spring of 2003, to reflect the group's work. This would allow for a more objective and analytical treatment of the numerous issues and avoid ending up with a report that merely catalogued various sectoral viewpoints. An important feature of the report would be the consideration of the non-commercial management of content in the digital domain. A key focus, both of the group's work and hence of the report, should be the business dimension of content management. The business environment has to be reviewed in as broad a manner as possible and solutions developed that work for all the content provider interests.

In addition, The Patent Office is content with the commitment to continue to facilitate work in this area among the interested parties concerned. Patent Office is very active in the education agenda on IP issues and the legal framework for this area of rights management has recently been set by the WIPO Internet treaties and the copyright Directive, which is currently being implemented in the UK. How rights are actually managed in practice is a matter for the right owners concerned but Patent Office are happy to facilitate any discussion between them and others.

Action: DTI to publish DRM report by 31 May 2003. Patent Office to implement copyright directive Spring 2003.

RECOMMENDATION 6

Oftel together with the BSG to address issues related to broadband interconnect and interoperability

6.1 Interconnect and interoperability

Government Response: Oftel is happy to work with the BSG on this issue. It will be important to gain a better understanding of the issues relating to interconnection and interoperability that may impact on the development of the broadband market.

Action: Oftel to continue to work with BSG.

6.2 Linking broadband with the Digital TV Action Plan

Government Response: The Broadband and Digital TV Action Plans are run by teams from within the same part of DTI. The two teams work closely together and will continue to do so. For example the two teams are working together on commitment 2.28 of the Digital TV Action Plan for a study of the

satellite market in a wider context, including broadband. Further collaboration between the two Stakeholder Groups where their remits come together would be useful and we welcome their continued discussions.

RECOMMENDATION 7

Oftel together with the BSG to keep broadband Quality of Service issues under review

Government Response: Oftel recognises that quality of service is important to consumers and that as take-up of broadband services increases, operators will need to ensure that quality does not suffer. This recommendation was made in the last BSG annual report and Oftel will continue to monitor this issue, welcoming the assistance of the BSG in doing so.

Action: Oftel to monitor Quality of Service issues on regular basis.

RECOMMENDATION 8

The BSG will publish a report on the opportunities and barriers to the use of broadband in education (in conjunction with the DfES) by February 2003

Government Response: The Government is committed to developing broadband for use in education. We have set a target for all schools in the UK to be connected to broadband by 2006, at 8Mbps for secondary schools and 2Mbps for primary.

DfES welcomes the initiative of the Education sub-group of the BSG in putting together a report on the opportunities and barriers to the use of broadband in education. We agree with the potential recommendations and have begun to address them. We look forward to participating in discussions with the BSG on this exercise over the coming months.

Action: DfES to be involved with BSG in compiling report as required.

RECOMMENDATION 9

Obstacles to curriculum online should be unblocked as quickly as possible

Government Response: The Curriculum Online portal service was launched formally by Charles Clarke on 9 January 2003 at the BETT Exhibition, Olympia. The initial feedback has been very good with over 91% of respondents saying that they will use the portal again. There are in excess of 17,000 resources available through Curriculum Online, which attracts around 7,000 hits a day. Nearly £2.5 m of e-Learning credit expenditure has been identified from 40% of the 450 registered suppliers.

The total amount of e-Learning credits is now £330m - £30m was allocated to schools from November 2002 with £100m to follow in <u>each</u> of the next three financial years.

Phase 2 of the Curriculum Online programme is underway. Alongside improving the portal service for both users and suppliers, we are developing its functionality to include parents, pupils and other parts of the curriculum; finding the most appropriate business model for delivering the future service; developing an e-payment system; and marketing and communicating to a wide group of stakeholders and users.

<u>Extending broadband coverage and increasing competition</u>

RECOMMENDATION 10

Regional and local government should encourage and promote local demand registration schemes to provide a reliable indication of growing demand

Government Response: The Government agrees that demand registration schemes provide a useful means of convincing service providers that it would be commercially viable to install a service in a certain area. We will be following the success of the EEDA Demand Broadband scheme which has recently announced the first two clusters of demand (Diss and Felaw Maltings) that will be offered for commercial bidding to offer broadband services to that area. We will draw on this experience to consider whether this approach can be replicated elsewhere.

Action: DTI with EEDA to review the Broadband Brokerage project in June 2003.

RECOMMENDATION 11

Government must facilitate the deployment of wireless broadband alternatives to DSL / cable and develop a strategic plan for wireless broadband

11.1 Prioritise more spectrum for broadband in appropriate bands

Government Response: The Government has allocated numerous bands for the full range of broadband services. We recognise the need to give early access to operators in the 3.4 GHz and 5.8 GHz band and are aiming to release these bands with the minimum delay. We are also planning further access to the 3.6-4.2 GHz and 2.010-2.025 GHz bands and their use for broadband applications is one of the options. In the longer term the introduction of spectrum trading and more flexible licence terms will give wireless broadband operators the opportunity to extend into suitable bands: we are actively considering including fixed wireless access in the first wave of spectrum trading.

Action: The Radiocommunications Agency will be making additional spectrum available for broadband applications during 2003.

11.2 Spectrum assignment on the right terms

Government Response: The Government aims to have assignment processes that meet operators' need for ready access to spectrum. Where the interference potential of a radio system is low we will exempt it from licensing and make the terms of the exemption just sufficient to create an effective operational environment. Where operators wish to deliver a higher level of service that requires licensed access to the spectrum the award process - whether an auction or other method - and licence terms will match both commercial realities and the need to deliver broadband services effectively. In the longer term we are working towards a spectrum management regime that will be even more flexible, so that, within limitations needed for efficient spectrum use, operators will themselves be able to decide how spectrum should be used. This will allow the development of innovative uses of the spectrum and stimulate the timely rollout of new wireless technologies

Action: The Radiocommunications Agency will assign spectrum for broadband applications on terms designed to allow the effective delivery of services, taking account of commercial considerations.

11.3 Innovative approaches for backhaul infrastructure

Government Response: The Government agrees that the availability of low-cost backhaul is a key feature to increasing the availability of broadband services in the more poorly served areas and to increasing competition of the local access level.

There are a number of schemes underway aiming to provide backhaul to an area and/or to investigate new models for the provision of backhaul. For example:

- The South East England Development Agency is looking at developing a Coastal superhighway strategy using funding available from DTI. This will aim to facilitate high-speed network services provision over a multi-node network in the main population centres of Kent and East Sussex, thereby establishing a broadband access for some of the region's most deprived communities.
- Cambridgeshire County Council has recently let a £29m PFI contract for the provision of broadband services across Cambridgeshire, using County Council and partner funding and a PFI Grant from the Government. Implementation of the Cambridgeshire Community Network is now under way to link schools, libraries, councils and community outlets. The Network will also integrate with regional networks, the Government Gateway and local NHS trusts

We also believe that Government initiatives for civil infrastructure and demand aggregation may have a significant impact on backhaul (see response to recommendations 12.1 and 14).

11.4 Government services online in 'grey' and 'red' areas

Government Response: The Government attaches importance to the rapid rollout and adoption of broadband and is technology neutral as to how this objective is achieved. A combination of service methodologies will be deployed and the UK Broadband Task Force will provide advice and guidance on these technologies as appropriate.

Although there are examples of authorities using wireless services (e.g. Somerset County Council's Somerset Network), the technology is less well understood particularly when technologies other than point to point microwave links are used. As a priority, the Task Force will develop guidance on wireless access for public sector consumers, drawing on users' experience to date

Action: UK Broadband Task Force to develop guidance by 30 May 2003.

11.5 Planning and Rights of Way

Government Response: The Government will shortly be consulting on possible changes to the planning arrangements for satellite dishes and other antennae. We are proposing to consult on a range of options, most of them being deregulatory. The consultation is intended to gauge the strength of feeling on the issue of householders' rights regarding the installation of antennas on their property.

Action: ODPM is hoping to conclude consultation on possible changes by the end of June 2003.

11.6 A strategic plan for wireless broadband

Government Response: A co-ordinated plan for adopting the five wireless recommendations will be developed.

Action: The timeline for making spectrum available and a more flexible spectrum management regime is:

2003 Q1 - licence exemption of 5 GHz bands A and B for wireless LANs
2003 Q2 - consultation on use of 2010-2025 MHz for broadband applications
2003 Q2 - award of 3.4 GHz Public Fixed Wireless Access licences
2003 Q3 - consultation on use of 3.6-4.2 GHz band for Fixed Wireless Access
2003 Q3 - opening 5 GHz band C for Fixed Wireless Access
2003 Q3 - further stage in award of 28 GHz Broadband Fixed Wireless Access licences
2004 - Removal of unnecessary licence conditions
2004 – Possible introduction of spectrum trading

In addition, the UK Broadband Task Force will develop guidance on wireless access by public sector consumers by 30 May 2003 and ODPM is hoping to conclude consultation on possible changes by the end of June 2003.

RECOMMENDATION 12

Government should facilitate infrastructure sharing to reduce capital requirements for new service provision and develop practical steps to enable the provision of civil infrastructure by third parties

12.1 Third party provision of civil infrastructure

Government Response: The Government has brought forward measures in the Communications Bill currently before Parliament to deregulate the application of the Communications Code and facilitate the development of ducting-only networks. This will allow undertakings to enter the market at a totally new level of the supply chain. We look forward to working with the Broadband Stakeholder Group in investigating the interest in the market to take advantage of this opportunity.

RDAs are already considering funding a few pilot schemes in selected communities to test the provision of civil infrastructure models and to test out the relative merits of networks based on ducting and/or dark fibre.

Ducting projects are currently underway, for example, in Norwich, where EEDA has contributed £3.4 million to the construction of a publicly owned duct network. Here, sewers, riverbeds and spare ducting are all being used to provide the cabling required.

Action:

Communications Bill to be enacted according to the Parliamentary timetable.

Oftel to consult on draft guidance for the application of the new regime for the Communications Code by end March.

DTI to follow the progress of schemes for ducting and provide advice to local initiatives as necessary.

12.2 Sharing existing infrastructure

Government Response: The Government agrees that the sharing of existing ducts, poles and trenches by fixed network operators could improve the availability of broadband. Oftel published guidance on duct and pole sharing in June 2002. In this document Oftel re-iterated its policy of encouraging duct and pole sharing by operators wherever this is practical and consistent with competition law. However, fixed network operators have continued to show little interest in infrastructure sharing. The Government does not therefore believe that template contracts or codes of practice are warranted at this stage, although Oftel will keep the position under review.

Action: Oftel will continue to keep under review whether further guidance is required.

RECOMMENDATION 13

Government should reduce regulatory uncertainty for operators and investors by ensuring that both sector specific and non-sector specific regulation supports broadband objectives

13.1 Communications Bill

Government Response:

The Government agrees that it is important that OFCOM should aim to foster an environment that encourages investment. That is why the Communications Bill, currently before Parliament, includes the desirability of encouraging investment and innovation in relevant markets among those factors to which OFCOM should have regard in carrying out their functions.

The Communications Bill gives OFCOM a specific duty to carry out and consult on impact assessments for any proposals that may involve a major change in its activities or have a significant impact on businesses in the communications markets or on the general public. Proposals about broadband that fit these criteria would be the subject of such an assessment, in which OFCOM would set out the likely impact of the proposal.

The Government would expect OFCOM to want to include in its Annual Report accounts of its work in relation to such areas as innovation and new services and developments. It is likely therefore that, in the current environment where broadband and related services are a key feature, OFCOM would wish to include reports of its work in these areas.

The Government agrees that in line with public expectations of Internet services there is no need for a special regulatory regime for Internet services and content. This was set out in the White Paper and the Communications Bill continues to follow that policy. Developments such as the implementation of the e-commerce Directive are further steps to ensure that the right regulatory regime is in place to make the UK the best environment to do e-business.

13.2 Reinforce e-policy principles for departments and undertake cross Government review of major inhibitors to broadband rollout

Government Response: The Government reaffirms its commitments to the e-policy principles, set out by the Office of the e-Envoy for Government policy makers working on proposals that affect or have the potential to affect the Internet and e-commerce, as follows:

- Always establish the policy consequences for e-commerce
- Avoid undue burdens on e-commerce
- Consider self and co-regulatory options
- Consult fully on e-commerce implications
- Regulation should be technology neutral in its effects
- Check that your proposals are enforceable in an electronic age
- Take account of the global market place - the EU and international angle
- Consider the implications for e-Government

We do not however feel that an additional cross-government review is necessary. Indeed we believe that the BSG has played an important role in identifying possible barriers and we will continue to work with the BSG and industry more generally to identify inhibitors to broadband roll out and remove these wherever possible.

Action: DTI will continue to be represented on the BSG Regulatory sub-group and to take forward its recommendations.

13.3 Pursue alternative solutions to issues related to street works

DTI and the Department for Transport are going to consult with industry on proposals for solutions to tackle street works disruption in the context of new proposals for a Streetworks and Traffic Management Bill.

Action: DTI/DfT to consult with industry on these proposals by Summer 2003.

13.4 Review regime for property taxes in respect of their application to cable/duct infrastructure

Government Response: The Government agrees to a review of the business rating system as it applies to communications infrastructure.

The Valuation Office is willing to expedite appeals and allocate additional resources to achieve this, but notes that the success of an accelerated appeals process will largely depend on the prompt provision of the factual information that it needs to consider appeals.

There is no provision in the Local Government Finance Act 1988 for exceptional relief to be granted to those operators on the Central Relating List. Those not on the Central Rating List can apply to their local billing authority for hardship relief.

Action:

Review to be undertaken by DTI in consultation with ODPM, the Valuation Office and Oftel with a view to completion by summer 2003.

DTI to set up an industry working group in conjunction with the Valuation Office and Oftel as a forum for sector rating concerns.

RECOMMENDATION 14

Government should actively encourage and enable pragmatic public sector demand aggregation

Government Response: The main focus of the UK Broadband Task Force will be on encouraging and facilitating schemes that aggregate public sector procurement of broadband, in order to secure a greater availability for the private sector and to achieve best value for money. Examples of best practice

in aggregating broadband procurement are being identified and will be available on the Task Force's website (www.broadband.gov.uk) from March, as will guidance on barriers to aggregation and on issues of data security. Advice on funding sources and the framework contracts being prepared by the OGC will also be available in March.

Furthermore, the Task Force will create a network linking all relevant Whitehall Departments to enhance cooperation.

Action: UK Broadband Task Force to publish guidance and examples of best practice in aggregation by March. UK Broadband Task Force has created cross-Whitehall procurement network.

RECOMMENDATION 15

The new UK Broadband Task Force should work with the RDAs, devolved administrations and local authorities to develop effective public private partnerships to extend coverage (particularly for red areas)

Government Response: New structures to aggregate and procure public sector broadband requirements will be created this year. Where PPPs are the appropriate solution this will be pursued.

Action: UK Broadband Task Force to work with the RDAs to create new regional bodies to aggregate and procure public sector broadband requirements. The aim is to have these in place by the end of the year.

THE GOVERNMENT'S BROADBAND STRATEGY

Introduction

If the UK is to succeed as a world-class place for e-business, public service delivery and online participation, it is essential that we develop a world-class communications infrastructure. Broadband - the term used to describe a wide range of technologies that allow high-speed, always-on access to the internet and other electronic services - will play a pivotal role in this, not just for business, but for people and Government as well.

At its most basic, broadband makes the internet a more satisfying experience: less waiting, more surfing. But it is more than just this. Broadband services - whether delivered over a telephone line, cable wire, satellite or terrestrial radio antenna or to a next-generation mobile phone - have the potential to increase productivity, enhance competitiveness and open new markets.

Background

The broadband market in the UK is currently one of the key foci for the ICT sector and a priority area for policy makers. Government believes that the rapid rollout and adoption of broadband across the UK, whether fixed, wireless or mobile, is important to both its social and economic objectives.

The Government has set a target for the UK to have the most extensive and competitive broadband market in the G7 by 2005, with significantly increased broadband connections to schools, libraries, further education colleges and universities.

This target is about getting the UK's broadband environment right for businesses and consumers, as well as ensuring that public sector organisations gain optimum benefit. The Government believes that it is important to develop a market that is both extensive and competitive. Extensiveness means extending broadband networks to households throughout the country - including those in rural and remote areas. Competitiveness means providing consumers with value for money, and a wide variety of product choice in the market. The indicators used to assess our progress against this target were set out in the UK online Annual Report 2001.

Since setting our target and in formulating our policy, we have worked closely with those at the industry's heart - and in particular the Broadband Stakeholder Group (BSG). The rest of this section outlines the developments we have made to put our feet on the right track and the future plans that will help us to reach our target.
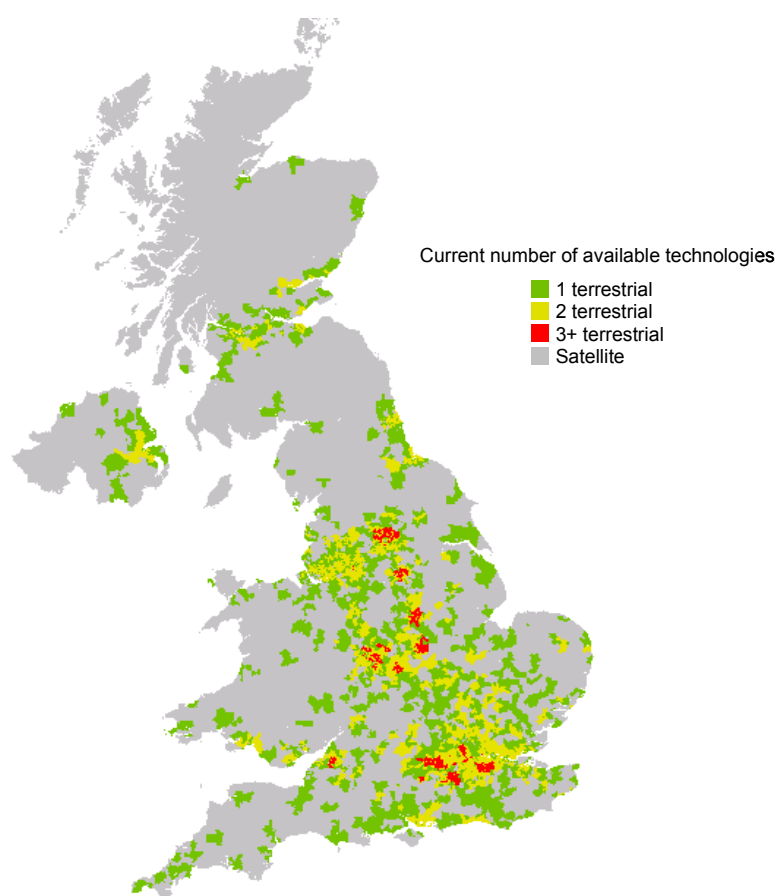
Extensiveness

Currently two thirds of the UK population is covered by a mass-market, terrestrial broadband solution, a figure which is expected to rise significantly by 2005. Cable modem services are available to 44% of households, fixed

wireless services to 13% and around 67% of the UK population is connected to an exchange that provides ADSL services.

Before consumers subscribe to broadband they will probably reach the internet through narrowband and in particular flat-rate internet access products, ISDN or interactive digital television (DTV). A growth in this available market is also needed to convince suppliers that take-up will grow to produce a return on investment. Flat-rate internet access continues to grow with 48% of internet households using these products in May 2002, up from 40% in August 2001.

Broadband Availability Map (December 2002)

Current number of available technologies
- 1 terrestrial
- 2 terrestrial
- 3+ terrestrial
- Satellite

Source: Analysys

While the UK was in August 2002 in fifth place in the G7 for market extensiveness, we expect to make progress in 2003 as new developments in the market and in policy take effect.

Over the past year, Liberty Broadband (previously Tele2) and BT announced the introduction of new demand registration systems that enable customers to register interest in receiving broadband services. In BT's case, once a set level of registrations for an exchange has been reached, this triggers the upgrading of the exchange to take ADSL. Todmorden in West Yorkshire became the first exchange to reach the trigger level set by BT after 200 consumers expressed interest with their ISPs in receiving ADSL services. A

number of other exchanges, many in rural areas, have now been upgraded or are being upgraded as a result of the scheme. In December BT announced that it was streamlining the registration scheme and in January that it was reducing the trigger levels for 388 exchanges, and introducing trigger levels for 87 exchanges that had not previously had a level set for them.

In addition, community pressure groups are springing up all over the country to convince suppliers that there is a demand for broadband. Regional Government is also involved, an example being the East of England Development Agency and their "Demand Broadband" initiative.

Developments in technology will continue to have a role to play. BT is trialing the use of new, smaller ADSL exchange equipment - 'mini-DSLAMs' - designed to deliver ADSL from small exchanges where it would not otherwise be commercially viable. New fixed wireless access services, as well as two-way and one-way satellite access, offer the potential to reach those parts of the UK outside of the reach of ADSL or cable modems. Over the past year, the Radiocommunications Agency has worked to develop a number of frequency bands to extend the possibilities for delivering broadband services by wireless. It also introduced flexible licensing arrangements for satellite earth stations that may be used for broadband services.

Leased lines offering symmetric broadband to larger SMEs and corporate customers are available throughout the country. Oftel's work to stimulate competition in partial private circuits – the wholesale products that link business premises and the networks of BT's competitors – by setting cost-based prices and strong service standards should help further stimulate competition and bring about lower prices for leased lines at the retail level.

3G mobile networks are currently being rolled out across the UK and it is expected that the service will cover an area including 50% of the population by the end of 2003.

As part of Government's ongoing strategy to extend the availability of broadband, the DTI created a £30m fund for the Regional Development Agencies (RDAs) in England and the Devolved Administrations to fund pilot projects and innovative schemes to help develop broadband networks. Initial projects were announced in March 2002 with others following throughout the year. Progress with these projects is in the process of being monitored and evaluated by the DTI, with results to be fed into the work to be carried out by the UK Broadband Taskforce.

Competitiveness

The UK has one of the most competitive broadband marketplaces in Europe, with competition at the wholesale infrastructure and retail levels. Wholesale competition is increasing following an Oftel Determination in June 2002 that requires BT to offer DSL interconnection services to other suppliers. This enables operators to connect to BT's network so providing a much wider range of wholesale and retail broadband services in competition with BT.

Retail competition is also advanced. Well over 100 ISPs offer services based on BT's wholesale ADSL products and a large number of consumers receive broadband cable modem services from the cable operators. This level of competition is superior to a number of other countries, which do not have transparent non-discriminatory wholesale offers from the incumbent, such as Germany, and less competition from cable providers, such as Germany and France. In addition, there is provision by fixed wireless and satellite, and for larger businesses there are leased lines.

In April 2002 BT made considerable cuts to the prices of its wholesale DSL services. Retail ADSL prices have fallen by up to 39% since the beginning of the year, putting the UK third in the G7 for broadband prices behind Japan and Canada. Prices are now around £20-£30 for a 512kbps service, with 1Mb services retailing slightly higher. Some companies have been offering 512kbps at lower than £20 a month.

Over the past year, Oftel has also played an active role in setting the regulatory framework for the broadband market, and has worked closely with industry to pre-empt and resolve disputes. In particular, Oftel's work has included: continuing to drive forward competitive access via Local Loop Unbundling; increasing competition in leased lines by requiring BT to provide partial private circuits at wholesale prices; and promoting competition in retail DSL by ensuring BT's wholesale DSL services are available to all ISPs, including BT's own ISP, on the same terms and conditions.

While the UK remains fourth in the G7 for market competitiveness we have closed the gap with the countries ahead of us and pulled much further away from those behind us. We expect to advance up the ranking soon.

Take-Up

In October 2002 the number of mass-market broadband users in the UK rose above one million. This was a significant milestone for the British broadband market. The same time last year there were only 180,000 users - representing year on year growth of over 500%. By February 2003 the number had exceeded 1.5m and was rising at over 30,000 a week. Recent marketing campaigns by service providers may increase the rate of growth still further.

While current levels of broadband penetration remain lower than other G7 countries, the UK has now started to catch up and currently shows the highest growth rate amongst these countries. We are therefore confident that the UK can start to close the gap in terms of broadband adoption with other leading economies.

Broadband in Education

The policy of the Department for Education and Skills (DfES) is to connect schools in England to each other and the internet with broadband at 2Mbps or faster. The target to connect 20% of schools by August 2002 was met, and the latest figures, as at end December 2002, indicate 26% of schools now having broadband connections at a minimum of 2Mbps (87% of secondary schools, 14% of primary schools).

DfES is currently working with the Regional Broadband Consortia (RBCs) to confirm targets for August 2003. Initial indications suggest that connections should reach 40% by August 2003. The provision of broadband connectivity, content and services through the RBCs and local education authorities is establishing a managed education network as the RBCs interconnect.

The Joint Academic Network (JANet) is an established network providing facilities for the Higher and Further Education sectors. National Learning Network investment has gone a long way to transforming the FE infrastructure with all colleges now having a guaranteed minimum 2Mbps connectivity through JANet. SuperJANet offers a high capacity (5Gbs - 10Gbs) national backbone in addition to which there are 18 Metropolitan Area Networks (MANs) connecting to the national backbone. The MANs are managed by regional bodies, which are established as legal entities in their own right.

Strategy

The Government's ongoing strategy for developing the broadband market will focus around the following four areas:

- maximising competition in the broadband market;

- stimulating the roll-out and take-up of broadband in the regions

- aggregating demand for broadband in the public sector

- stimulating development of broadband content and applications

Maximising competition in the broadband market

The Government continues to believe that having the right regulatory and market framework is one of the most important elements in our broadband strategy. Competition is the best means of delivering real choice and low prices to the consumer, both for broadband services and access to them. Broadband will deliver converged media and this is one reason why we have created OFCOM as a converged regulator for a converged sector. The Communications Bill will give the Office of Communications (OFCOM) the powers it needs to adapt to the continuing revolution in the services on offer over both wired and wireless devices. In the meantime both Oftel and the Radiocommunications Agency will continue to place broadband services at the heart of their regulatory effort to ensure that the broadband market grows in a long-term sustainable way, without distortions caused by market power or unfocussed regulation.

Stimulating the roll-out and take-up of broadband in the regions

Around two thirds of the UK population is covered by a mass-market, terrestrial broadband solution. This figure is expected to rise significantly over the next few years but there are still many people - in rural and remote parts of the country - who cannot access an affordable and reliable broadband

service. This situation threatens the prospects for broadband to be a boon both to our economy and to our society, and it presents a major challenge to policy makers and to industry alike. But we recognise that left to itself the market will not always deliver what some people demand.

Not only is broadband important for the national economy, we also think it is important for local and regional economies. In the English regions, the RDAs will have a total of £1.8bn next year to spend on furthering economic development and regeneration. Government Offices and Devolved Administrations also have responsibility for European Structural Funds. The UK Broadband Task Force will also advise the RDAs, Government Offices and Devolved Administrations on how to make best use of these monies where lack of broadband is identified as one of the barriers to regional development.

The public sector as a user of broadband will be a major driver for the introduction of broadband services up and down the country. Modern, high quality public services to which the Government is committed will require the use of modern communications networks. Over the six years 1998-2004, the Government has made available £1.8bn to increase access to ICT for pupils in schools. Of this, between 2002 and 2004, £710m has been made available through the Standards Fund for schools' ICT Infrastructure, including broadband connectivity. At the end of last year a substantial increase in Government's broadband expenditure was announced.

We will make sure that the potential benefit of this spending is maximised and takes full account of the benefits of broadband. In November 2001 the Prime Minister commissioned OGC to consider whether there is more that can be done to help Government departments and others buy broadband more effectively.

The OGC completed this work in Spring 2002 and found there was no systematic process for developing the capability of purchasing authorities and sharing best practice. Public sector organisations need information, advice, guidance and expertise to undertake their broadband procurements efficiently.

As a result, framework Agreements will be let and managed by OGC's trading arm, OGC.bs. They will enable public sector customers to obtain best value when buying broadband services without requiring a separate procurement for each purchase.

Any UK public sector contracting organisation or any service provider acting on its behalf will be able to utilise the broadband Frameworks provided they sign a Code of Practice. The Code of Practice provides clarity for all parties by ensuring customer eligibility and defines the scope and legitimate use of the Framework by the customer in broadband procurements. The Frameworks will provide customers with a 'one-stop-shop' for the procurement of commodity broadband services and associated services, relieving them of contract management costs.

<u>Aggregating Demand for Broadband in the Public Sector</u>

OGC's work on public sector broadband procurement is now being carried out as part of the UK Broadband Task Force, which was launched in November 2002. The Task Force's major focus is on the aggregation of public sector demand to help stimulate effective broadband rollout.

One of the main tasks currently underway is to bring as many government departments as possible into the aggregation process. For example, negotiations are taking place to include the broadband connectivity requirements of the NHS so that they could potentially engage in aggregating broadband demand with other public sector users. The broadband requirements of other departments are likely to be incorporated in the aggregation process over the next few months. The aim in all this is to achieve a more rational and focused investment in infrastructure in order to improve the availability of broadband for the country as a whole.

The Task Force will soon be developing proposals for structures at regional level to carry out the task of aggregation and procurement. These will act as the bridge between public sector bodies requiring broadband connectivity (whether local authorities, RBCs, SHAs, trusts and so on), who will define their individual needs, and the procurement process (OGC's framework contracts). DTI will be in touch with the RDAs to discuss their role in such bodies.

The increased scale of aggregation in the English regions, including the design of new aggregation and procurement structures, should also be of interest to the devolved administrations as they take forward their own plans. The Task Force will be happy to share its experiences with them in developing this work.

<u>Stimulating development of Broadband content and applications</u>

Content and applications will play an increasingly prominent role as a driver of mass adoption of broadband services. The Government has a role to play, working with industry, to examine how the business model works for broadband content. The availability of broadband-on-the-move will further increase the market for digital content, bringing benefits for business consumers and the delivery of Government services.

Over the last year, the DTI began work with the Digital Content Forum (DCF) to investigate what the position was in the UK and elsewhere with regard to content. The DTI and the DCF jointly commissioned a study which showed that, after a number of false starts, the market was beginning to address many of the barriers it faced, but left to itself it was likely that the market would not develop evenly. There was also a real danger that the UK could be left behind as broadband was developed for the global market elsewhere. It suggested a number of possible pilot projects that could be undertaken, and some of these are now being investigated further.

The Government is also committed to providing learners with access to high-quality digital learning resources. One of the key initiatives underway is

Curriculum Online. The vision for Curriculum Online is to give teachers easy access to a wide range of digital learning materials, which they can use to support their teaching across the curriculum. These materials will form a consistent, coherent and comprehensive educational service for teachers and pupils. These materials will help free teachers to do what they do best - teach - by making lesson planning and administration easier and faster, and will help teachers make individualised learning for all pupils a reality.

Government also recognises the need for high quality e-learning materials for FE Colleges, for learners in Adult and Community Learning and across the whole spectrum of post 16 learning. The Post 16 e-learning Task Force, led by Steve Morrison, recommended the establishment of a post 16 Curriculum Online. In June 2002 the Secretary for State for Education announced funding to look at the feasibility of a College Online with a supporting development budget of £0.5m for 2002-03.

GOVERNMENT ACTION PLAN IN RESPONSE TO BSG RECOMMENDATIONS

Recommendation	Action Points
1 *DTI to appoint a dedicated programme manager with overall responsibility for coordinating the implementation of the broadband strategy across Government*	DTI will appoint an individual to take overall responsibility for co-ordinating the implementation of Government broadband strategy.
2 *The BSG should continue to focus on researching and articulating the wider benefits of broadband*	DTI will monitor progress against Broadband Fund projects on a quarterly basis and post results on the DTI website. The Countryside Agency survey will be completed by end April 2003. DTI will continue to collate case studies.
3 *Industry stakeholders must continue the aggressive promotion of broadband services to accelerate take-up*	The Government will assist in promoting broadband services – see response to recommendation 4.
4 *Government must continue to assist in the promotion of broadband services*	An ICT taster session will be piloted by DfES in May-August 2003. DTI has made a web based guide to broadband availability available through the UK online for business website. The 'event in a box' (presentation resource of material that local advisers can use for giving presentations) will be available by end May 2003; a range of in-depth case studies available by June 2003 via the website; the mobile satellite demonstrator available by May 2003; and the first best broadband implementation award will be given in October 2003. The Inland Revenue will continue to provide information about all the tax incentives available for the take up of broadband and ICT generally.
5 *BSG in conjunction with the DTI to continue its work to identify practical international solutions to rights management issues*	DTI will publish the DRM report by 31 May 2003. The Patent Office will implement the copyright directive in Spring 2003.

6 *Oftel together with the BSG to address issues related to broadband interconnect and interoperability*	
6.1	Oftel will continue to work with the BSG on issues relating to broadband interconnection and interoperability.
7 *Oftel together with the BSG to keep broadband Quality of Service issues under review*	Oftel will monitor Quality of Service issues on a regular basis.
8 *The BSG will publish a report on the opportunities and barriers to the use of broadband in education (in conjunction with the DfES) by February 2003*	DfES are happy to be involved with the BSG in compiling the report as required.
9 *Obstacles to curriculum online should be unblocked as quickly as possible*	Curriculum Online launched.
10 *Regional and local government should encourage and promote local demand registration schemes to provide a reliable indication of growing demand*	DTI with EEDA will review the Broadband Brokerage project in June 2003.
11 *Government must facilitate the deployment of wireless broadband alternatives to DSL / cable and develop a strategic plan for wireless broadband*	
11.1	The Radiocommunications Agency will be making additional spectrum available for broadband applications during 2003.
11.2	The Radiocommunications Agency will assign spectrum for broadband applications on terms designed to allow the effective delivery of services, taking account of commercial considerations.
11.4	The UK Broadband Task Force will develop guidance on wireless access for public sector consumers by 30 May 2003.
11.5	ODPM is hoping to conclude the consultation on possible changes to the planning arrangements for satellite dishes and other antennae by the end of

	June 2003.
11.6	The timeline for making spectrum available and a more flexible spectrum management regime is: 2003 Q1 - licence exemption of 5 GHz bands A and B for wireless LANs 2003 Q2 - consultation on use of 2010-2025 MHz for broadband applications 2003 Q4 - consultation on use of 3.6-4.2 GHz band for Fixed Wireless Access 2003 Q2 - award of 3.4 GHz Public Fixed Wireless Access licences 2003 Q3 - opening 5 GHz band C for Fixed Wireless Access 2003 Q3 - further stage in award of 28 GHz Broadband Fixed Wireless Access licences 2004 - Removal of unnecessary licence conditions 2004 – Possible introduction of spectrum trading
12 *Government should facilitate infrastructure sharing to reduce capital requirements for new service provision and develop practical steps to enable the provision of civil infrastructure by third parties*	
12.1	The Communications Bill will be enacted according to the Parliamentary timetable. Oftel will consult on draft guidance for the application of the new regime for the Communications Code by end March. DTI will follow the progress of schemes for ducting and provide advice to local initiatives as necessary.
12.2	Oftel will continue to keep under review whether further guidance on duct and pole sharing is required.
13 *Government should reduce regulatory uncertainty for operators and investors by ensuring that both sector specific and non-sector specific regulation supports broadband objectives*	
13.2	DTI will continue to be represented on the BSG Regulatory sub-group and to take forward its recommendations.
13.3	DTI and Department for Transport will consult with industry on proposals for solutions to tackle street works disruption by Summer 2003.
13.4	A review of the business rating system as it applies to communications infrastructure will be undertaken by DTI in consultation with ODPM, the Valuation Office and Oftel, with a view to completion by summer 2003. DTI will set up an Industry working group in conjunction with the Valuation Office and Oftel as a forum for sector rating concerns.
14 *Government should actively encourage and enable pragmatic public*	The UK Broadband Task Force will publish guidance and examples of best practice in aggregation by March 2003.

sector demand aggregation	
15 *The new UK Broadband Task Force should work with the RDAs, devolved administrations and local authorities to develop effective public private partnerships to extend coverage (particularly for red areas)*	The UK Broadband Task Force will work with the RDAs to create new regional bodies to aggregate and procure public sector broadband requirements. The aim is to have these in place by the end of the year.

SYNOPSIS OF ACTIVITY IN THE ENGLISH REGIONS AND DEVOLVED ADMINISTRATIONS

A lot of activity is taking place at a regional/devolved level contributing to the development of broadband in the UK, spearheaded at a Governmental level by the English RDAs and the devolved administrations. This annex is intended to act as a brief run-down of some of this activity, which includes projects funded under the DTI's £30 million UK Broadband Fund among others.

The Remote Area Broadband Inclusion Trial (RABBIT)

An example of joint working on broadband among RDAs and devolved administrations

The RABBIT project has been set up to promote the use of broadband to small businesses and organisations in remote areas and to evaluate the effectiveness of the available solutions. Several Regional Development Agencies and Devolved Administrations are working together to share RABBIT as a joint project, while a central team implements the trial.

The overall aim is to stimulate the market and increase competition as well as to provide a publicly available information source of the available suppliers and technologies, including price and performance. The project is aimed at small businesses in areas that cannot receive ADSL or cable modem solutions, but who are prepared to try out the alternatives now available. The project team have gathered information on a range of "ADSL equivalent" solutions from different suppliers that meet the needs of differing sizes and types of business. The project is progressing well with 708 applications approved nationwide so far.

The RABBIT project is supported by:

- South West of England Development Agency
- East Midlands Development Agency
- Advantage West Midlands
- South East England Development Agency
- East of England Development Agency
- Department of Enterprise, Trade and Investment (Northern Ireland)

The project is financed through funding from the DTI UK Broadband Fund.

South West

Broadband Fund Projects

The **Buckfastleigh Community Network** –will bring broadband to key facilities in Buckfastleigh and to the community as a whole through a wireless network. Backhaul is through the South West Grid for Learning at the local primary school and connected to the community broadband centre WAVE.

The **Broadband Interactive Content Demonstrator** - the broadbandshow is a series of road shows demonstrating the benefits of broadband to SMEs in the tourism and aerospace sectors. It gives them hands-on access to broadband applications, practical help and mentoring to assess the potential for their businesses.

The **Outreach** project seeks to establish broadband communication hubs in Wiltshire for remote and other workers. The research phases of the project have been completed and contact made with complementary broadband initiatives in the county. Where possible, joint working is being established.

The **Informative Action** project's aim is to capture and display in a clear and coherent format as much information on broadband and ICT related projects in the South West as possible. The use of ConnectingSW.net will raise awareness leading to better project co-ordination, and more productive planning for the broadband development in the South West. As a 'living resource' the site will be subject to regular updates.

Other Broadband Initiatives

E-Mapping and Strategic Review on Infrastructure – BT and 9 other telcos are making their broadband/telecommunication information available for the construction of maps portraying networks in the South West region. Other RDAs and DAs will be able to take up this opportunity on the back of this initiative and the negotiations with BT.

Market Town Broadband Audits - broadband surveys were carried out in Devizes and Oakhampton to establish the demand for and access to broadband communication services for both businesses and households. This will provide a snapshot of the current and future requirements for broadband connections in small market towns throughout the UK.

Pathfinder & Digital Divide - work undertaken on behalf of the SWRDA indicates that an economically viable and sustainable broadband delivery solution can be developed and deployed in the currently un-served market and coastal towns of South Devon. The key issue for any such solution is to bypass the high margin elements of the broadband supply chain - many of these elements are greater for rural locations than for urban areas.

Mobile Skills Centres – four high technology mobile classrooms providing an education and training service from North Devon College. The Mobile Skills Centres form an important addition to the accommodation and resources of the college and are used for a range of situations.

ACT NOW

An example of EU funding in an Objective One area

The £12.5m Cornwall ActNow project was launched in April 2002 with the help of £5.25m Objective One funding. Under this scheme, 13 BT exchanges in Cornwall have been upgraded to deliver ADSL technology. To date, the total number of broadband connections has risen to over 2500 of which 538 are SMEs.

ActNow is an acronym for Access for Cornwall through Telecommunications to New Opportunities Worldwide and is a partnership involving the South West Regional Development Agency, Cornwall County Council, Cornwall Enterprise, Business Links, Cornwall College and BT who were appointed through an open tender to be part of the public sector led partnership offering the ADSL packages. Its ultimate aim is to provide a full package of broadband start-up services for 3,300 small and medium sized enterprises backed by a commitment from BT to a roll out scheme for the enabling of exchanges.

The actnow package for SMEs includes pre and post sign-up advice, a range of computer equipment and broadband connection options to suit the needs of individual businesses, financial support and privileged members' access to the actnow website, www.actnowcornwall.co.uk.

South East

Coastal Superhighway

A commercial demand analysis was undertaken in early 2003 to investigate the potential demand for broadband connectivity using fibre-optic networks linking the coastal towns of Kent and East Sussex with London and Brighton. The aims of the study included an investigation of the demand for high-capacity connectivity in the Region. A key priority was to investigate broadband usage that would not otherwise take place. The identification of public sector bodies that were likely to participate in piloting innovative uses of broadband and significant opportunities for collaboration by new network operators were explored.

SEEDA is tendering for a contractor to build the Coastal Superhighway in Spring 2003, of which the first phase is to be operational by October 2003.

The expected outcomes are to:

- encourage regional investment by large corporates
- attract operators to offer mass-market broadband solutions in the region
- ensure the provision of more Points of Presence (POPs) in the network to encourage more companies to invest if traffic to the POPs is quicker and more convenient

Satellite Programmes

SEEDA developed a Satellite Broadband Pilot in Hastings and Rother aimed at SMEs where current transport infrastructure and lack of broadband access undermined future prosperity in the area. The pilot studied the role of satellite broadband in regenerating remote communities and provided low cost access to broadband services in rural parts of the region where ADSL or cable modem services were not available. As a result of the success of this pilot, SEEDA extended it region-wide at the end of 2002.

Non-Broadband Fund Projects

SEEDA is creating a duct network in 2003, which will be owned by the public sector and available for use by private sector carriers to support fibre development in Hastings by the second half of 2003. The objective of this project is to reduce the cost of leased lines and promote access to competition by encouraging local loop unbundling (LLU) operators to enter the town.

SEEDA allocated grants to every county and Unitary Authority in the Region to support rural broadband wireless pilots. SEEDA also offered them a consultancy to initiate demand aggregation programmes. SEEDA ran a number of programmes (breakfast roadshows) with Institute of Directors and Business Links to encourage take-up by enterprises.

London

Broadband applications and IT infrastructure are a key factor in supporting London's and the rest of the UK's economic drive. Initiatives underway to support this include:

e-Start for Business - this initiative, a £1.5 million project commissioned by the LDA, seeks to assist small and medium-sized businesses, especially black and minority ethnic businesses and other minority businesses to harness the potential of broadband. The project will involve promotion, research, training and implementation support. e-Start began in January 2002 to run for three years, initially focusing on parts of London considered to be priority areas.

VET Broadband - this £287,000 initiative, supported by £190,000 of LDA investment, seeks to demonstrate the benefits of broadband to SMEs in the media and creative sectors in London's City Fringe and will run until 2005.

London Innovation - the LDA has launched the www.london-innovation.org.uk website to promote the benefits of innovation and knowledge transfer to London businesses, encouraging collaboration with the region's higher education and research institutions. Future development of the website will provide direct online services to businesses, facilitating the provision of business intelligence and providing mechanisms for collaboration and knowledge transfer. Internet technologies play a key role in supporting the LDA's innovation agenda. The website was launched in Sept 2002, and the second phase is expected to be launched in Summer 2003.

London Fashion Network - The London Fashion Network is a £370,000 initiative supported by £142,000 of LDA investment which will foster supply chain links between businesses in the London fashion industry. The project will run until 2003.

Fashion Capital - A complementary initiative is the Fashion Capital project, a £276,000 initiative supported by £189,000 of LDA investment, which will develop a portal for the London Fashion industry, providing a one-stop-shop to information sources relevant to the sector. The project began in March 2002 and the portal will be launched in 2003.

In addition to these existing initiatives, the LDA is working with its partners to:

- Promote the rollout of broadband infrastructure across London and to engage in pilot projects that demonstrate the potential of new technologies;
- Encourage the adoption of Broadband and other new technologies by SMEs;
- Promote the assimilation of ICT skills amongst London's workforce;
- Take a leading role in the electronic provision of London government services

West Midlands

There are a range of projects underway in the West Midlands to develop the usage of broadband for citizens, business and the public sector.

Backbone - a backbone network is being built in the West Midlands region to connect initially the education community, followed by more elements of the public sector. Developed using the purchasing power of the public sector it will then be opened up to provide broadband access in rural areas. The network will be delivering live service to its first customers on 1 August 2003

Marketing – Broadband Value Initiative – a project is being developed with Imagination and BT to investigate the impact of marketing broadband within various sectors of the community. It is expected that this campaign will go live in March.

Rural Pilots - there are 5 pilot projects being planned in rural areas to demonstrate the impact of marketing and initial funding in establishing broadband in a particular type of community. Bridgnorth in Shropshire was chosen to test this approach in a market town. Advantage West Midlands agreed to underwrite some 300 ADSL subscriptions, if the local community supplied the balance needed to trigger the enabling of the exchange. Following a marketing campaign, the total was quickly achieved, BT reduced the exchange's trigger level - and Bridgnorth now has broadband.

The market town pilot has been moved to Leominster in Herefordshire to test the original model. Other pilots will be undertaken based around a large industrial estate in Staffordshire, a small remote industrial estate in Shropshire and a village in Worcestershire. Another target is still under consideration.

Satellite & RABBIT – the West Midlands is working with the RABBIT Programme to develop satellite and wireless coverage in rural areas. Take-up was initially slow, but is now 84 with over a third from the rural areas of Warwickshire.

Aston Broadband Business Pilot Project - the Broadband Business Project is an EU and DTI funded pilot project working with a number of local organisations to target SMEs within the Aston area, an urban area being substantially redeveloped at the moment.

E- portal for the West Midlands - an E-portal has been developed to showcase the SMEs of the West Midlands and to give them the tools to contact customers and finance. This will receive further investment next year to extend the facilities it provides.

ICT Clusters and Techno-centres - there are a number of ICT Cluster and Techno-centres in the Region to incubate and nurture new and small businesses specialising in high technology applications. AWM will continue to support these facilities and develop new ones as appropriate.

East Midlands

EMDA want to establish broadband as the fourth utility and a key pre-requisite to all economic development and regeneration activity that is carried out in the East Midlands. The ultimate goal is to become an exemplar eRegion by 2010 and underpin the achievement of being a top 20 European region by 2010.

DTI Broadband Fund

Remote Area Broadband Inclusion Trial (RABBIT) looks to provide subsidy to SMEs to gain broadband access in areas that are "remote" from conventional broadband infrastructure. There are 112 trialists to date in the region, all of whom are involved in ongoing evaluation of the alternative technology provided.

The Broadband Innovation Project is a regional broadband awareness programme developed with UK online for business, East Midlands Network and Metafocus. To date 63 out of 100 SMEs targeted have received in-depth guidance and support, with 37 programmed in. 300 SMEs have attended the workshops with an additional 150 going to attend by the end of March 2003. CD-Rom toolkits are being distributed via various business support organisations across the region and have received great acclaim by UK online for Business nationally with a view to national distribution.

Wireless/DSL Broadband Connection Pilot Study is designed to test the reach and take-up of wireless broadband technology, in the market town of Sleaford. Progress has been delayed due to planning regulations, unforeseen project difficulties and the emergence of DSL provision on Sleaford Exchange.

e-Lessons: Broadband Content for Education is an application combining streaming video with interactive content to provide an engaging learning environment for school children, delivered over broadband technology. Teachers can create lessons with interactive elements and homework can also be requested and submitted via broadband. The developed applications are currently being tested in primary and secondary schools across the region, with a view to rollout across the EMBC network in the future.

Other Projects

Lincolnshire Broadband Initiative has been developed by Lincolnshire Development, a department of Lincolnshire County Council. This £12.3m ERDF Objective 2 bid is divided into two distinct parts. The first is an infrastructure project seeking to deliver broadband to key employment sites and the second part is the ICT Action Plan which promotes and facilitates use of the infrastructure to achieve clear economic development benefits. Combined the projects aim to drive economic growth and diversification. Public funds stimulate commercial services and increased ICT usage in businesses, whilst also building a critical mass of demand across public and private sectors. The project seeks to achieve 3,000 additional SMEs trading online via Broadband by the end of 2005.

East of England

The Broadband Brokerage was established in June 2002. A website (www.demandbroadband.com) allows companies, public sector organisations, communities and individuals to register their interest in using broadband. Where a pattern of demand for a particular area has reached critical mass a Local Partnership is formed, fronted by the Local Authority, which would own their community network. Each of the Telcos is then approached to identify the most cost effective solution

There have been 8,800 registrations to date. The first two clusters (Diss in Norfolk and Felaw Maltings in Ipswich) were announced for commercial bidding to 40+ suppliers in February 2003.

Connecting Communities Competition is a complimentary initiative to the national Wired Up Communities scheme. Winning communities will obtain a substantial contribution to the provision of broadband services. There are three categories for participants (dependent on population), with at least one winner in each. The competition is running until June 2003.

Over 200 entries were received by the initial closing date, which is more than expected. Consultancy is being offered to the most promising entries in order to build their business cases.

The Business Centre/ Incubator Programme aims to assess the costs and benefits of connecting the existing Business Centres and Incubator units in which EEDA has a financial stake. As many of these as is commercially viable will be connected, using as many combinations of technologies as practicable.

3 business centres have been wired up so far, with two more in progress at the moment. Reports on the rest are due by the end of April 2003. The Norwich municipal ring project will connect the business parks in the central Norwich area with high speed broadband.

Support for Research and Development to encourage projects investigating or promoting the use of new technologies or the innovative use of existing technologies. Examples are:

- Tendring Wireless trial established to test new wireless technologies over rural Essex & Suffolk plus the Haven Gateway ports.
- Participation in the Rabbit project - around 200 grants to SMEs issued or in progress.
- Rural ADSL trial with BT in Burnham Market and Shottisham. These trials use mini DSLAMs in rural exchanges to provide an ADSL type service to areas which could not have previously being connected to such services.
- The Norwich ring project will be the first major scheme of its kind in the UK - the establishment of a dark fibre ducting network funded by the public sector then offered to commercial operators willing to provide a service.

In Cambridgeshire, a series of community led broadband networks are being built around Cambridge (such as Cambridge Ring West); the aim is for these to be ultimately joined together into one network.

North West

Broadband Fund Pilot Projects (only those underway in February 2003)

Alston CyberMoor Project (Voluntary Action Cumbria) -seeks to provide fast wireless internet access to Alston Moor. 570 households have received a PC and, along with others, will have the chance to receive broadband access. There are in excess of 120 broadband connections to date.

Hawkshead Community Network (Hawkshead Traders) - seeks to provide affordable broadband access to the area through a self-financing broadband system that can be expanded to include the whole community and provide an infrastructure for e-commerce.

Broadband LAND Project (Cumbria Tourist Board) – a plan to develop a mobile location-based information and navigation service aimed at the tourism industry and Cumbrian residents. A wireless broadband network will allow access to geographical, tourism and transport information.

Pirelli Lifelong Learning Project (Pirelli) – the NW Broadband Fund is supporting the delivery of broadband connection, operating system and anti-virus software to Pirelli's onsite learning centre.

Eastserve Network (East Manchester Ltd) - funding for the Eastserve Network, the cornerstone of the Eastserve project, to provide connectivity and access to Internet facilities as well as training for residents.

Bolton and Bury Broadband for micro-businesses (Bury Metropolitan Borough) - seeks to identify the characteristics of Internet content of particular value to micro businesses (less than 10 employees), focusing on content that performs best with a broadband connection.

Driving up Skills in Bury through Community E-learning (Bury Learning Partnership (Bury MBC) - aims to use broadband technology to respond to the needs of low skills in the East Bury and Radcliffe areas while stimulating demand for and use of broadband and promoting online learning.

Speke & Garston Broadband Pilot Project (South Liverpool Housing) - seeks to provide broadband connections and multimedia content to a target of 150 homes and SMEs, employing a portal and set-top box approach.

Increasing business competitiveness by the effective use of broadband (Netshopper UK Ltd) – aims to assist 75 SMEs in Greater Merseyside to use online website products and services through the provision of broadband access and will act as a demonstrator of broadband benefits to SMEs.

Project 'ACCESS'
Seeks to address the imbalance in Cumbria caused by the lack of affordable access to advanced communication networks. The project will facilitate the delivery of access to broadband services to over 90% of the resident citizen and business communities, and public sector sites, throughout Cumbria. Delivery of the service is expected to commence around December 2003.

Yorkshire and Humberside

Business Insight - this programme funded through the UK Broadband Fund consists of two related projects: ***Proof of Concept*** and ***Satellite Broadband***. The Proof of Concept project has facilitated the central Business Insight hub where local participants can log-on and learn about the benefits broadband can bring. Business Insight members can access ECDL content, participate in forum debates, search White Papers and other information and research, read case studies, and contact other Business Insight members.

The Satellite Broadband project provisions 450 SMEs (200 of which are rural) with a satellite broadband connection, free for one year, with the option for the participant to commercially renew after the free period. This project is still in delivery until the end of the year. 450 SMEs have been successfully connected to the Satellite Broadband service.

An SME Evaluation sub-project has been established, whereby SMEs can feedback what their business might require from broadband business services. The information received will be fed back into the programme and be available for use on other projects created for e-business services, giving them tangible and legitimate direction.

York Broadband Project -as at August 2001 BT had ADSL-enabled 2 exchanges in the City of York; York and Melrosegate. However, despite assurances from local partners that there was demand in the city take-up was very low. It was agreed that Yorkshire Forward in partnership with Science City York would identify the problems and look at how local businesses and residents could be encouraged to take up the service. With the offer of a 75% subsidy, 50 businesses were connected to broadband. The programme commenced in April 2002 and will be completed in mid 2003.

A pilot programme was undertaken to address the issues identified. This was branded Broadband York and incorporated PR, advertising, Direct Mail, online activity, workshops and events. The launch event in May 2002 was followed by a mail campaign resulting in a Broadband York week in September 2002.

As a result of the activity the penetration of broadband in York has significantly out-performed the other major cities in the Yorkshire and Humber region and the UK as a whole. In addition, BT have enabled the remaining four exchanges in the city.

Broadband Supply and Demand Mapping – a map of supply and demand has been charted in the region, giving a clear picture of where broadband connections are and what the potential market for it could be in any area. This is to be used as a guide in future broadband projects so new initiatives can be carefully targeted.

North East

Broadband-related projects underway in the North East region include:

Regional Portal - an electronic place where every individual, business, organisation and institution can trade, develop and interact. It is a broadband demand generator and has introduced over 7000 businesses to broadband.

Market Towns ICT Initiative - this has introduced over 4,700 rural businesses to broadband, over 100 of which are now operating e-commerce solutions via broadband. An example is Sweets for Treats, a Rural post office now selling old English sweets to the United States, Israel and the Far East.

CORUS Task Force - £500,000 given to the Task Force has so far delivered additional broadband infrastructure to the Wilson Centre and the broadband strategy for Tees Valley

Broadband Awareness campaign - UK Broadband Fund money has been used in this campaign, which has seen reduced trigger levels on 22 BT exchanges, the enabling of 3 exchanges, and the creation of 21 virtual business clusters.

Consett Neighbourhood Renewal Scheme - this scheme has introduced broadband to over 120 homes in a unique partnership between Education, Social Services and the Local Council to introduce learning via broadband to deprived inner urban areas.

www.n-e-ability is a sub portal for the disabled community, aimed at providing broadband enabled content to a range of disabled community members. In the NE there are over 800 organisations associated with this sub portal and it is a model that is likely to be rolled out elsewhere.

Grow Your Business – a £5 million project to deliver broadband and e-commerce to rural and urban SMEs. Over 100 businesses have signed up to participate in this programme in its first week of operation

Satellite Broadband - This broadband awareness campaign has delivered two way Broadband over satellite to over 186 businesses on 37 sites. It has been an extremely cost effective and successful campaign demonstrating the appropriateness of two way satellite communication to rural areas.

Vibes – an RDA supported SME initiative in Tyne and Wear bringing broadband to a variety of small business clusters.

DurhamNet –an RDA supported initiative bringing broadband to most of South West Durham and Weardale, specifically to over 250 rural businesses.

South East Northumberland – a project designed to bring blanket broadband coverage to SE Northumberland using wireless technology and facilitated by RDA funds.

Wales

Broadband Wales Action Plan
(**www.cymruarlein.wales.gov.uk/broadband.htm**)

The Broadband Wales Action Plan was launched in July 2002 and aims to drive forward broadband in Wales through significant investment of £135 million. The plan is split into five areas comprising demand stimulation, supply stimulation, encouragement of local initiatives, specific procurements, and the aggregation of public sector demand.

Examples of projects currently underway under these headings are:

Demand Stimulation

The Satellite Broadband Subsidy Scheme is providing up to £1500 for SMEs unable to get terrestrial broadband.

Broadband has been installed in all of Wales' main Business ICT Support Centres to demonstrate what it is and what it can do.

The Assembly Government is encouraging broadband content under the National Grid for Learning Cymru, a project that uses digital technology to provide curriculum materials for use in schools across Wales.

Increasing Supply

Funding has been allocated to provide broadband connectivity in key business sites and locations.

Encouragement of local projects

The Assembly Government is supporting a range of local projects including the eFro project (see below) and the Arwain project which is supplying cheap wireless broadband to the Cardiff area.

Aggregation of Demand

Broadband Wales will drive forward the aggregation programme in the public sector and where appropriate in the private sector. In the public sector, it will build on the work already undertaken in Life Long Learning (see below) and health to offer facilities and the benefits of aggregation to all public sector organisations operating within Wales.

In addition, several other projects are underway, about to commence or are being considered – see the Cymru Arlein website for more information.

DTI Broadband Fund

The £2.67 million allocated to Wales from the UK Broadband Fund has been used in the support of two specific projects:

eFro Broadband Wireless Project (http://www.e-fro.cd/)

£100,000 has been allocated as part funding to support the development of the eFro Broadband Wireless Project. This uses 802.11b broadband wireless spectrum to provide broadband access to a community in rural North West Wales. As a result, people have been able to get broadband in Dyffryn Ogwen who could have not otherwise have done so. The project is concerned with demonstrating the value of broadband using 802.11 b technology, stimulating demand for broadband, creating online communities and trialing innovative technologies in Wales.

Lifelong Learning Network

The remaining £2.57 million funding was allocated to support the lifelong learning network. This is a multi million pound project initiated by the Welsh Assembly Government in October 2001 to provide broadband connectivity and multi media equipment to schools, learning centres and libraries in Wales. In March 2002 the Assembly Government signed a contract with Logical UK Ltd for the provision of a country-wide broadband network linking all 22 Local Education Authorities in Wales and eight University sites. This core network was in place in August 2002 and connected to the Internet via the Joint Academic Network (JANET). The network provides 100 Mbps connectivity into each unitary authority.

The Broadband Fund money is being used specifically to extend general public access to libraries, ICT Learning Centres and schools that open to the public after hours. Local Authorities are currently in the process of connecting to the core network with all authorities expected to be connected by the end of March 2003.

Local authorities are responsible for local connectivity in each of their areas and the Assembly Government is aware that authorities are currently procuring that local connectivity. Furthermore, the Assembly Government is in the process of procuring specialist advice on how other parts of the public sector can join this network and ultimately, providing legal and regulatory barriers allow, it is hoped that SMEs can take advantage of it too.

Scotland

The main aim of the Scottish Executive's broadband strategy is to promote affordable pervasive access to broadband connections across Scotland. Around half of Scotland's population currently has access to broadband via ADSL and/or cable modem (which is 15-20% behind the figure for the UK overall) and the take-up of these services is still very low.

In the light of these circumstances, and the depressed telecoms market, the latest update to the www.scotland.gov.uk/connectingscotland/makingithappen strategy, published last December, includes a major new £24 million initiative to accelerate and widen access to ADSL-equivalent broadband to 70% of the Scottish population by the end of 2003-04. Detailed plans for the implementation of the initiative are due to be completed shortly. In conjunction with this, a technology neutral business support package will be available across Scotland to generate demand, with associated marketing.

Pathfinders
The Scottish Executive is also running two pilot projects (the Pathfinder Projects) in the Highlands and Islands and the South of Scotland to aggregate public sector demand for broadband infrastructure. Contracts for the projects will be awarded late summer.

ATLAS
Scottish Enterprise's project ATLAS aims to improve the competitiveness of the telecoms wholesale market for the benefit of high-end users in urban areas and, more widely, in selected business parks. To date, a virtual telecoms trading exchange (TTE) has been set up in Scotland. The ATLAS Business Park Network is currently being developed and will link up a series of business parks around the country, improving access, choice and price of broadband services.

Community wireless
Highlands and Islands Enterprise are developing proposals for a project under the Highlands and Islands Partnership Programme. The aim of this is to take broadband coverage in the Highlands & Islands beyond 70 per cent.

Regulatory issues
The regulatory side is largely reserved but the Executive liases closely on issues such as Scottish representation on OFCOM with the UK Government.

Scottish Programme under UK Broadband Fund

   1. *Awareness-Raising/Demand Stimulation projects*

Neutral Broadband Website - providing online independent advice and information on broadband for businesses. This went live in November 2002.

Network of E-Business Demonstration Centres (EDCs) - providing accessible hands-on experience of simple broadband applications together with independent expert advice for SMEs to make educated decisions on using broadband. 2 EDCs have been operational since November 2002 and nine in total will be operational by March 2003.

Corporate Demonstration Centres – designed to bridge the awareness, education and skills gap related to the use of broadband for key business applications by SMEs e.g. e-procurement, distributed design, video conferencing. Large corporates will host and demonstrate the relevant applications.

2. Supply-related projects

Wireless pilot - this project will provide a pilot demonstrator broadband network capable of supporting a community spread across a number of populated islands in the Western Isles using a range of technologies, primarily wireless.

Powerline Carrier Technology (PLT) Pilot Projects - These aim to illustrate the potential for PLT technology to deliver broadband via the electricity socket to rural communities in Crieff (over 60 users to date) and Campbeltown.

Network Trial Using VPN - will develop/demonstrate the application of a broadband model for electronic community networking using a Virtual Private Network in a part of Ayrshire unlikely to benefit in the short to medium term from the commercial deployment of broadband.

Sectoral Application - in Agriculture - this project will use wireless technology to deliver rural content and applications over broadband to rural/farm businesses in Ayrshire and test the case for broadband, in terms of applications benefits.

Scottish Borders Rural Area Network - will provide a small number of community broadband networks in a rural region not included in the ATLAS network. The community networks will be run on a commercial basis. It is currently being procured and will address rural disadvantages of lack of competition, high distance-related tariffs for certain services and lack of access to broadband services. It would ultimately be integrated with the ATLAS network to exploit broader benefits.

3. Content/Applications-related

Wireless Area Network - will bring together Scotland's expertise in wireless technologies from industry, academic research, infrastructure and applications development in order to enhance and demonstrate our innovation in the wireless arena. It will facilitate trials of new wireless content and applications.

Other initiatives

Satellite-based broadband - Highlands and Islands Enterprise and three Scottish Enterprise Local Enterprise Companies have piloted schemes that offer assistance with the installation costs of satellite-broadband technology. Business benefits have been monitored as have several issues associated with satellite broadband, such as signal loss in bad weather and its position relative to tariffs for other fast Internet technologies.

ADSL broadband - HIE is currently collaborating with BT on the inclusion of 2 exchanges near Inverness in BT's "ADSL Exchange Activate" commercial trial of "mini D-SLAM". This may help to provide a more cost effective method of upgrading exchanges with a small number of ADSL customers in rural areas.

Northern Ireland

UK Broadband Fund

Northern Ireland secured £1.46m as its share of the £30m UK Broadband Fund to develop innovative schemes extending broadband networks to a wider range of customers than those who appear commercially viable. Fifty-four applications were received in response to DETI's first call for pilot actions and feasibility studies which closed on 14 June 2002. A second call was launched by the DETI Minister Ian Pearson on 3 December 2002. To date, 21 projects have been awarded a total of £582k to fund a range of projects located across Northern Ireland. Examples of projects being supported are as follows:

- Westernconnect Ltd, an ICT company based in the North West of the province, has received funding to trial a state of the art broadband access network using the latest wireless technology. This "first of its kind" network is being piloted for a period of 12 months in Londonderry and will be offered to 40 businesses in the area. The pilot will examine how users in regional locations can avail of broadband offerings which otherwise may not be possible through their existing service provider.

- Belfast-based StreamOn.net Ltd has been awarded funding to develop a Virtual Trade Fair and Business Broadcasting Channel tailored for broadband which will allow small businesses to showcase their products and services 24 hours a day, seven days a week. It is anticipated that this pilot will stimulate both the creation of broadband content and the take-up of broadband access by small businesses and, ultimately, demonstrate the potential for improved profitability for the small business sector in Northern Ireland.

- EPEC, a consultancy firm based in Belfast, has been awarded funding to carry out a pilot study to explore, develop and exploit the benefits of broadband for the social economy sector in Northern Ireland. The project involves a needs assessment and external best practice review, promotional and awareness raising activity and a demonstrator pilot action for up to 20 social economy organisations.

- BTNI has been awarded support from the Broadband Fund towards the development of a Northern Ireland ASP (Applications Service Provider) Portal. The Portal will provide new and existing businesses with access to innovative and relevant low-cost ASP applications, which will drive up the adoption of broadband technologies in Northern Ireland. It will partner with indigenous software companies to provide them with a route to market through adding their products to the Portal's portfolio of ASP services.

Flagship Broadband Applications, Content and Services Call

This call, with up to £2 million available, sought innovative broadband projects addressing applications, content or services that will directly impact on the effectiveness of the Northern Ireland economy. The call, which closed on 27 September 2002, resulted in 19 submissions being received by

Telecommunications Policy Unit. Three submissions have now been selected to go to the Request for Proposals stage.

Local Access Initiative

DETI is currently developing an initiative, likely to be valued in the region of £16m, to stimulate local access investment that aims to provide businesses and consumers with affordable broadband services.

Broadband Aggregation

A feasibility study into the aggregation of public sector demand for broadband communications commenced in October 2002. DETI is in the lead role and has obtained cross-departmental and wider public service agreement to the study's Terms of Reference and the formation of a Project Board in line with the Prince II methodology. A Project Initiation Document (PID), detailing the project plans and planned outcomes for the feasibility study forward has been agreed, and consultants are currently being appointed to assist DETI with the study and the production of a supporting GIS database. It is expected that the outcomes from this study will be available in April 2003.

Interreg III

Launched on 20 November by Ian Pearson, this EU Fund has allocated €7 million to stimulate investment in and accelerate development of efficient communications and e-commerce infrastructure in Northern Ireland and border counties of ROI. DETI's Telecommunications Policy Unit is liasing with the Department of Communications, Marine and Natural Resources (DCMNR) in Dublin to develop a Call in line with the aims of Interreg III. It is proposed to hold an Information Day to allow both public and private service organisations to influence the shape of this Call. Agreement has been given by SEUPB to the appointment of consultants to assist with the work associated with this proposal.

Digital Island

This is a policy-level framework, put forward by InterTradeIreland, DETE and DETI, aimed at seeking the fullest exploitation of the digital technologies by businesses across the island. Telecommunications Policy Unit, together with DCMNR and DETE have agreed to take forward a strand within the Digital Island model on ICT Infrastructure and Services. Issues currently being addressed include alignment of radio spectrum allocations by the Regulators in the UK and Ireland; mobile roaming along the border area; all-island short code dialling; and costs for cross border data traffic.