



*Basingstoke  
and Deane*

wired wessex

**BROADBAND STRATEGY  
FOR BASINGSTOKE AND DEANE**

December 2003

## Table of Contents

1.	INTRODUCTION.....	3
1.1	Broadband– an Overview.....	3
1.2	Broadband Delivery.....	3
2.	BACKGROUND.....	4
2.1	Project Outline.....	5
2.2	Project Outputs.....	5
2.3	Project Process.....	6
3.	FUNDING AND LOCAL INITIATIVES.....	7
4.	THE NEXT STEPS.....	7
5.	RECOMMENDATIONS.....	8
5.1	Communities with trigger levels not yet reached.....	8
5.2	Communities that are already enabled but are too far to access ADSL broadband.....	9
5.3	Partnership Working.....	9
5.4	Marketing /Community Engagement Campaign.....	9
6.	CONCLUSION.....	10
7.	GLOSSARY OF TERMS.....	11

## 1. **INTRODUCTION**

Basingstoke and Deane Borough Council appointed Wired Wessex to carry out a broadband mapping project in May 2003. The purpose of this report is to summarise the work carried out over the last 6 months and make recommendations on the Council's future strategy for dealing with broadband issues.

### 1.1 Broadband– an Overview

Broadband allows faster, always on connectivity to the internet. The service brings with it a range of benefits for staff, citizens, business, communities and partners including: -

- o Enhanced business competitiveness
- o Development of the companies providing IT and telecoms services
- o Support for the delivery of e-government objectives
- o More effective home working with high speed access to corporate networks
- o Better access to teaching and learning for students of all ages
- o Support for community led websites
- o Allows you to receive internet radio and other real time services without interruption
- o It allows you to download and send large files of information/graphics via the internet without delays
- o Splits your existing phone line so you can make and take calls as normal even when you are online
- o No need to dial up –your connection is always on

### 1.2 Broadband Delivery

- o BT (ADSL) - the service BT offers through enabled exchanges, fast download, slow upload (BT are already carrying out trials on the next generation SDSL,VDSL)
- o Wireless – available from a number of suppliers, trials running around the country, fast download, fast upload
- o Cable – minimal coverage offered by NTL and Telewest, no plans to extend current reach
- o Satellite – available in most areas, can be expensive and unreliable
- o Power line – being piloted by Scottish and Southern Electricity in Winchester

Currently BT ADSL coverage is at about 80%, although bearing in mind the limited range of ADSL this figure is not really representative of actual availability. BT's pre-registration system ensures that demand exists before they enable each additional exchange. Cable coverage is much more limited, particularly in rural areas. In order to fill the gaps local campaigns across the UK are trialling wireless services. In addition, satellite services are available but generally unreliable.

Although BT have recently announced new trigger levels which means there are no longer any exchanges in Basingstoke and Deane without a trigger level, this is not as positive as it sounds. BT ADSL is only available to a limited distance from the exchange, which leaves large areas outside the reach of the service. Also, ADSL provides the lowest level of broadband available – and generally only provides enough bandwidth for home use. For businesses, faster upload and download times are necessary to make any real difference to their systems and processes.

As technology develops more advanced options become available via wireless and DSL, and the push from the Broadband Stakeholder Group (Government's broadband policy group) is now leading to providing fibre connections to the home – this is something that will not be generally available for some time but needs to be considered in the formation of broadband strategies and future proofing local infrastructure.

## **2. BACKGROUND**

There are two key issues surrounding broadband – demand and take-up. In spite of advertising campaigns and local awareness raising many people still don't understand the benefits of broadband, and as a result demand for the service is still relatively low. Take-up is also very low, which would indicate more work is needed in proving to potential users that the benefits justify the cost. BT's trigger level scheme is working relatively well to boost demand in certain areas; however this increase is occurring in many areas as a direct result of local campaigners working hard to generate interest at a very local level.

There are still areas which are unlikely to be able to receive the BT ADSL service, due to trigger levels in some areas being unachievable based on the number of households. Also, not all households/businesses will be within reach of the BT exchanges.

The key element required to underpin a broadband strategy is the mapping of ADSL service reach, and the analysis of the potential for installing wireless services in areas with access issues. With this information, and bearing in mind funding initiatives available from the South East England Development Agency (SEEDA), it may be possible to achieve Borough-wide coverage.

Broadband is also a key issue for public sector services – significant improvements can be made with broadband facilities whether in schools, libraries, or community centres. The Government's target for nationwide broadband availability by 2005, and the implications of IEG requirements all rely on a steady increase in demand, take-up, and availability. In addition, broadband enables home-working which helps to support green initiatives, and enables those who would otherwise be inhibited by health or mobility restrictions to work and communicate with others.

## 2.1 Project Outline

The project scope included the following activities: -

- Identify gaps in service provision (ADSL)
- Map potential reach of BT exchanges
- Estimate the number of premises within reach of BT exchanges (premises=households, schools, businesses, community centres, libraries)
- Map potential wireless projects by community
- Estimate the number of premises within reach of wireless project areas
- Map the County Council's HPSN network points
- Promote the benefits of broadband (marketing, events)
- Identification of local campaigns and 'champions'
- Establish Broadband Forum
- Identify pilot projects
- Make recommendations as to the way forward on a community by community basis

## 2.2 Project Outputs

- Mapping and analysis work complete
- Marketing carried out via Council website
- Helpdesk facility established, dealing directly with queries from residents
- Report presented to Parish Liaison Group
- Pilot project identified in Kingsclere – support given to the local champion in securing funding from SEEDA
- Local Champions identified
- Lobbying of BT to reconsider exchanges with no trigger levels resulted in setting of trigger levels for last 2 exchanges in BDBC
- Support for BDBC in its bid to be the city used for the Broadband Stakeholder Group's Civil Utility Infrastructure project
- Project at Greenham Common identified and supported in its bid to provide wireless services to communities in the north of the Borough

## 2.3 Project Process

In order to ensure full coverage of Basingstoke's geographical area 57 individual 'communities' were identified. Against each of these the following data was plotted:-

- BT exchange status, trigger level, number of registrations
- Local champion details
- Number of contacts from local residents
- Location of HPSN network points
- Number/type of premises within reach of BT exchange/wireless potential project

The results of this analysis can be summarised as follows:-

Total number of Communities	57	
Total number BT enabled	44	77.2%
Total number BT trigger not reached	13	22.8%

It is important to note however, that the average take-up rate for BT ADSL services in Hampshire is about 9% - which means that although it would seem the ADSL service is fairly widely available, awareness of the benefits of broadband is still very low.

In order to address the issues in Basingstoke the following steps can be taken:-

### Communities with enabled exchanges

- Promote the benefits of broadband via a marketing/events programme
- Engage local organisations, i.e. Parish Councils, Community Groups
- Engage support from local Chambers and business support groups
- Identify problem areas outside reach of the BT exchange
- Provide guidance on the implementation of broadband into existing community and business systems
- Ensure equal access to internet/broadband services for those in deprived areas or with health restrictions

### Communities with exchanges that have yet to meet the trigger level

- Identify and support local champions
- Assess need and boost demand via local events and marketing
- Lobby BT to lower the trigger level, or, map the feasibility for a wireless project
- Set up and support wireless campaign and prepare bid for funding from SEEDA
- Support implementation of broadband when it comes on line

A certain level of general support and guidance will be needed by broadband users as the service becomes more integrated into networks and infrastructures – there are implications not only for business support networks (training and development) but also for community groups and individuals who would benefit from having access to the service.

### **3. FUNDING AND LOCAL INITIATIVES**

SEEDA has recently launched its Community Grants Scheme for implementation of wireless broadband projects, which includes: -

- o Help information for Community Broadband Organizations available on [www.seeonline.net](http://www.seeonline.net)
- o Community Broadband Fund, accessible through seeonline, through Community Broadband Advisors and through direct interface into the SEEDA broadband team

This is the best route for local campaigns to apply for funding; however any application must include full business and network infrastructure plans.

In addition, the South East Media Network (6 'Wireds' covering the South East) will be delivering SEEDA's Broadband Content Programme, aimed to encourage and assist businesses in getting the most out of broadband.

Wired Wessex has built and will be managing the Hampshire Broadband website on behalf of the County Council, which will provide a community based source of broadband information. This includes specific 'community' pages available for every village and town, to support local champions and campaigns.

Finally, the Hampshire Broadband Forum has been established by the County Council (supported by Wired Wessex), to ensure a coherent approach to broadband issues across the County. This will include local authority representation, and may therefore replace the need for a Basingstoke and Deane Broadband Forum as originally proposed.

### **4. THE NEXT STEPS**

There are two key issues surrounding Broadband – demand and take-up. In spite of advertising campaigns and local awareness raising many people still don't understand the benefits of Broadband, and as a result demand for the service is still relatively low.

Take-up is also still very low; which would indicate more work is needed in proving to potential users that the benefits justify the cost.

BT's trigger level scheme is working relatively well to boost demand in certain areas; however this increase is occurring in many areas as a direct result of local campaigners working hard to generate interest at a very local level.

There are still areas which are unlikely to be able to receive the BT ADSL, due to trigger levels in some areas being unachievable based on the number of households. Also, not all households/businesses will be within reach of the BT exchanges. In these instances the best solution would be wireless, and there are projects under way across the country trialling this service.

From the data gathered during the project, including the mapping and exchange information, and in response from information gathered through the Wired Wessex helpdesk, it is clear that there is a two tier approach which should be considered based on the following circumstances:

- Communities with trigger levels not yet reached to enable BT exchanges and unlikely to reach targets due to locations (mainly rural), and,
- Communities that are already enabled but are too far (in terms of distance) from the enabled exchanges to gain access to an ADSL service (mainly urban)

During the project and through Wired Wessex, Basingstoke and Deane have become aware of the 'Newbury Wireless Project' a business consortium working with West Berkshire Council towards the implementation of a wireless solution in the West Berkshire area. This project could benefit areas such as Bishops Green and could provide future broadband capabilities to other areas within the Borough of Basingstoke and Deane were access is an issue.

The access issue has been recognised by SEEDA and as a result have launched a 'Community Grant Scheme' which allows communities to bid for funding to support wireless broadband projects. SEEDA is also running a Satellite Grant Scheme which makes a contribution to set up and first year costs, and has committed funding to Unitary and County Councils for funding of other broadband projects.

## 5. **RECOMMENDATIONS**

### 5.1 Communities with trigger levels not yet reached

It is recommended that in these areas to following actions be undertaken in conjunction with Wired Wessex, to support the communities in meeting their trigger levels. This would include:

- Identification and contact with the local champion
- Consultation with Parish Councils and community groups
- Distribution of direct mail flyer encouraging registration with BT
- Local events aimed at raising awareness of broadband

<b>Exchange</b>	<b>Communities</b>	<b>Trigger</b>	<b>Registrations</b>
Burghclere	Burghclere	150	93
Headley	Headley	150	95
Herriard	Herriard Ellisfield	150	95
Preston Candover	Bradley Brown Candover Chilton Candover Mapledurwell Preston Candover	100	45
St Marybourne	Stoke St Marybourne	150	80

## 5.2 Communities that are already enabled but are too far to access ADSL broadband

Although a large number of properties in the following urban areas have been identified as being out of reach of BT Exchanges; it is recommended that further research be carried out to confirm the numbers in order to consider the need for a wireless solution being pursued through local champions, Wired Wessex, and the SEEDA Community Grant Scheme:

- Identify and contact local champion
- Carry out PR via local magazines
- Two 'drop-in' days to be held at the local superstores to gauge interest/take up
- Analysis of interest generated and if required support for each area in the preparation of a bid for funding of wireless services in conjunction with potential suppliers, as detailed in the supplier database.

Hatch Warren	Chineham
Beggarwood	Old Basing
Kempshott and Gabriel Park	Lytchpit

## 5.3 Partnership Working

It is also considered appropriate for the Council to continue in its partnership working with other organisations such as:

- The County Council in key projects, such as the development of the Hampshire Public Services Network (HPSN) and to explore any opportunities to facilitate broadband access.
- The Newbury Wireless project. This project could benefit areas such as Bishops Green and could provide future broadband capabilities to other areas within the Borough of Basingstoke and Deane were ADSL access is an issue

## 5.4 Marketing /Community Engagement Campaign

Finally, a marketing/community engagement campaign has been prepared which the Council can use to promote the benefits of broadband, as a when appropriate, by the Council and Wired Wessex sharing opportunities and providing the most cost effective solutions to supporting the Council Broadband Strategy. In addition the following bodies would all be useful associations and partners to work with: -

- Community Action Group
- Southern Strategic Partnership
- Hampshire Association of Parish and Town Councils
- Hampshire County Council
- Hampshire Broadband Forum
- Hampshire and Isle of Wight E-government Partnership
- [www.hampshirebroadband.org](http://www.hampshirebroadband.org)

- South East of England Development Group (SEEDA) and [www.seeonline.net/broadband](http://www.seeonline.net/broadband)
- South East Forum e-government Group (SEFEG)
- Chamber of Commerce
- Business Link
- Country Landowners' Association
- Local Strategic Partnership (LSP)

## **6. CONCLUSION**

Basingstoke and Deane Borough Council has demonstrated its interest in being at the forefront of broadband developments in Hampshire. Much progress has been made over the last few months in raising awareness within the Council's area, and this will increase significantly with the marketing of the Hampshire Broadband website.

In order to meet the needs of residents as they discover the benefits/problems tied to broadband it is important now to continue to provide a 'helpdesk' offering general advice and assistance. In addition, local champions and campaigns should be encouraged to continue their efforts, be supported in their marketing/events, and provided with assistance in sourcing funding. Increasing awareness of the benefits of broadband will enable businesses to benefit and in turn support the growth of the local economy.

All of these factors together demonstrate the need for Basingstoke and Deane to continue its considerable efforts to ensure its communities can benefit from broadband.

## 7. GLOSSARY OF TERMS

ADSL	Asynchronous digital subscriber line (basic broadband service)
Bandwidth	A measure of the amount of electronic data that can be transmitted, either down a telephone line or through an individual radio channel.
Broadband	A network connection which allows large amounts of data to be transferred at high speed. Broadband is delivered in a variety of ways, most common being by leased lines, cable modem access or ADSL. Other solutions are becoming more widely used in rural areas using wireless communications and satellite.
Cable Modem	Device used for delivering Broadband over a television cable network.
DSL	Digital Subscriber Loop. A technology that enables higher bandwidth communications to be passed through conventional telephone lines.
DSL	Digital Subscriber Line
DSLAM	Digital Subscriber Line Access Multiplexer
HPSN	Hampshire Public Services Network – Broadband for public services, e.g. local authority to local authority and County
ICT	Information & Communication Technologies (same as 'IT')
IP	Internet Protocol
ISDN	Integrated Services Digital Network. An international communications standard for sending voice, video and data over digital telephone lines or normal telephone wires.
ISP	Internet Service Provider
Leased Line	A point to point connection which can deliver guaranteed bandwidth.
PoP	Point of Presence – a physical location in a telecommunications network from where services to end users or to a subsidiary network can be provided.
PSTN	Public Switched Telephone Network
RAB	Regional Aggregation Body – A body set up by the dti to look at ways of co-ordinating public sector broadband demand.
SDSL	Synchronous digital subscriber line ('full scale' broadband service)
SEEDA	South East England Development Agency
VoIP	Voice-over Internet Protocol
VPN	Virtual Private Network, (e.g. HPSN).
WLANS	Wireless Local Area Networks