Bath & North East Somerset Council	
MEETING:	**Cabinet**
MEETING DATE:	**11th January 2012**

		EXECUTIVE FORWARD PLAN REFERENCE:
MEETING DATE:	**11th January 2012**	**E2369**

TITLE:	**Improving access to superfast broadband in Bath and North East Somerset: the Broadband Delivery UK Opportunity**
WARD:	All

AN OPEN PUBLIC ITEM

List of attachments to this report:

Appendix 1: "Connecting Devon and Somerset" project presentation

Appendix 2: Connectivity Maps

Appendix 3: Alternative Technologies Overview

Appendix 4: Responses on broadband from communities

1. THE ISSUE

1.1. This report is being tabled under 'Special Urgency' measures (Rule 16) due to:

(1) the DCMS announcement that they are bringing forward the BDUK deadline for submitting a Local Broadband Plan from December 2012 to end of February 2012;

(2) the timetable of the 'Connecting Devon and Somerset' project (Appendix 1), this being the only Cabinet meeting available prior to a decision being required about joining the project.

1.2. A Local Broadband Plan is required by Broadband Delivery UK to access funding from Government for bringing superfast broadband infrastructure to 90% of all premises in Bath and North East Somerset.

1.3. In order to access the BDUK funding a final plan needs to be agreed with the Government by the end of April.

1.4. Somerset County Council, Devon County Council, North Somerset District Council and Plymouth and Torbay Councils have a joint project called 'Connecting Devon and Somerset' which could meet these timescales and which is open to B&NES to join.

2. RECOMMENDATION

The Cabinet decides whether to:

2.1. To enter into an agreement with Somerset County Council, Devon County Council, North Somerset District Council and Plymouth and Torbay Councils to undertake a joint bid for Broadband Delivery UK funding to provide at least 2 Mbps to 100% of premises and superfast broadband of at least 20 Mbps to 85% by 2015. In this event, Cabinet will need to:

   2.1.1. Make a commitment to BDUK to undertake the works

   2.1.2. Agree to underwrite the BDUK allocation of £690,000

   2.1.3. Agree to meet the terms and conditions of the 'Connecting Devon and Somerset' programme

   2.1.4. Authorise Council Capital expenditure of £475,000 and a potential call on capital contingency funds of a further £215,000 in accordance with para 2.1.2 and

   2.1.5. Additionally, use £179,000 of available ERDF funding to contribute to business support activities as part of the overall BDUK programme (see 5.5.3)

   2.1.6. Delegate authority to sign the programme agreement to the Strategic Director of Development and Major Projects in consultation with the Executive Member for Sustainable Development

   2.1.7. Commit appropriate support from existing resources to meet the 'Connecting Devon and Somerset' project timetable

   This option will be subject to the normal Council capital expenditure decision making process.

OR

2.2. Not to undertake a joint bid and instead to proceed with an alternative project to identify how internet access can be brought to as many of our residents as possible. This would include investigating the development of community opportunities in our villages and rural areas.

3. FINANCIAL IMPLICATIONS

3.1. £475,000 of funding from the capital programme over three years to cover the Council contribution to the joint costs of project management, procurement and capital works, in partnership with Somerset County Council, Devon County Council, North Somerset District Council, Plymouth and Torbay Councils. The anticipated profile of this capital expenditure is £175,000 (2012-13), £150,000 (2013-14) and £150,000 (2014-15).

3.2. If Cabinet decides to take this option, there would be a revenue cost of up to £75K per year by 2014-15 for borrowing and capital repayment assuming an asset life

around 10 years. This will be factored in against the revenue budget headroom available as part of the 2012/2013 Budget process. The Revenue Budget, Capital Programme proposal and related Borrowing Approvals are subject to the approval of the Full Council in February and so any decision is subject to this confirmation.

3.3. Recognising the need to underwrite up to a total BDUK allocation of £690k, there is a risk that the Council will be required to find an additional £215k of funding for this project. In the absence of other identified funding this would represent a potential call on the Council's capital contingency provisions.

3.4. Or £50,000 of initial revenue funding will be required to develop an alternative project to identify how internet access can be brought to as many of our residents as possible. The longer term costs to deliver improved broadband access to 85% premises under this option are unknown, but are estimated to be in the region of £3m.

4. CORPORATE PRIORITIES

4.1. Improving broadband infrastructure supports the following Corporate Priorities, set out in more detail in section 5.2:

- Promoting the independence of older people
- Improving life chances of disadvantaged teenagers and young people
- Sustainable growth
- Addressing the causes and effects of Climate Change
- Improving transport and the public realm

It in turn support policies and aims set out in the following documents:

- Infrastructure Delivery Plan 2010
- Draft Core Strategy 2011
- The Local Strategic Partnership's Sustainable Community Strategy 2009-2026
- The Economic Strategy for Bath and North East Somerset 2010 – 2026
- Future Council and Service Transformation report 2010
- Vision for Bath and North East Somerset 2006.

5. THE REPORT

5.1 Technical Information

5.1.1. Technologies are in development which offer real alternative solutions to fibre optic cable for rural broadband. These are outlined in appendix 3. There are acceptable download speeds (10 Mbps) but upload speeds are restricted (4 Mbps) and to achieve these through satellite the cost is prohibitive for many individuals at £85 per month.

5.1.2   With the latest technology for satellite broadband having only just gone live, improvements to the restriction on upload speeds are likely to be incremental due to the nature of satellite technology. Similarly, costs decreases are likely to be

incremental also, due to the massive investment of £0.5b for the latest KA technology satellite needing to be recouped over its lifetime of 15 years[1].

5.1.3   Fibre optic cabling is seen as the preferred solution by specialists consulted in broadband technologies, even the technical specialists in satellite broadband and the other alternative technologies currently on trial.

5.1.4   Shared solutions such as wireless or white space can have their capacity completely compromised by one user gaming or streaming video and are seen to be suitable only as a last resort or for extremely isolated rural communities on a small scale.

5.1.5   Certainly, alternative technologies have their applications. BDUK see satellite technology as appropriate to the final 1-2% of premises across the country in remote rural areas or those with particular topographical challenges and a Rural Community Broadband Fund is designed to facilitate delivery of these kinds of projects, but in order to access this funding and any future rounds a Local Broadband Plan is required.

5.2   Impacts on Individuals and Communities

5.2.1   Broadband has the potential to promote the independence and well-being of older people by: helping to provide better and more equal access to public services, reducing the sense of isolation through the use of social media, and enabling older people to remain economically and socially active by providing better infrastructure for home-working.

5.2.2   Encouraging greater use of broadband holds great potential for older people who find it harder to access healthcare services, by allowing better access to online diagnostic information, and in future by potentially allowing communication and support from healthcare and social service professionals via video-linking.

5.2.3   Online learning tools are now commonplace and distance learning is increasing in popularity. Learndirect, Open University and BBC Learning are ever increasing their online offering. As more learning resources become available online, it is likely that those households with adequate broadband connections, and which can afford broadband packages, will benefit more than those with slow or inadequate connections.

5.2.4   There is some evidence that ownership of a computer at home is linked with better GCSE results[2]. It is therefore important that teenagers and young people living in more rural areas have as much opportunity to access broadband services as their urban counterparts.

5.2.5   The Draft Core Strategy, the Economic Strategy, and the Sustainable Community Strategy all highlight the importance of sustainable growth across the District. That is, encouraging private sector investment and jobs growth in appropriate areas to replace recent private and public sector job losses, and enabling more rural local centres to play their part in this process. Broadband infrastructure would help to facilitate this process.

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[1]   The KA band covers the frequencies of 26.5–40 GHz.
[2] Schmitt and Wadsworth (2004), as quoted in "Mind the Gap: Digital England, a Rural Perspective", Commission for Rural Communities (2010)

5.2.6   The increased ability to work and set up businesses from home would reduce the need to use the road network, thereby contributing to a reduction in congestion and pollution around our main urban areas (including Bath).

5.3   Impacts on Business

5.3.1 Entrepreneurs are very likely to at least start their businesses at home, largely due to the risk of taking on overhead costs in the early stages of business development.

5.3.2 Fast, reliable internet connectivity is critical in allowing home-based businesses to develop markets and communicate with customers, suppliers, and to connect with other remotely located staff.

5.3.3 Roughly one third of the population in B&NES is based in more rural areas We estimate that around 40,000 people live in areas which are more susceptible to low internet speeds. Improving broadband connectivity to these areas would provide better conditions for start-ups in these rural areas, especially in higher value-adding sectors (see paragraph below)

5.3.4 Supporting our smaller rural centres: should more people be able to take up flexible work practices (home working) and start businesses in their home, it is likely that this could contribute to increased spend in, and use of, local high street shops and amenities

5.3.5 Improving business productivity: enhanced broadband accessibility has a significant role to play in improving productivity, thereby improving chances of business survival. It allows businesses to take advantage of new technologies which produce cost savings and increase revenue, for example through the use of online customer and supplier management systems, and allowing overseas markets to be more effectively tapped.

5.3.6 According to available data, roughly 23% of the District's businesses are based in more rural areas with a likelihood of poorer digital infrastructure. We estimate that roughly 650 businesses are located in postcodes with connectivity of 2 MBPS or below. Map 1 at Appendix 2 shows that these are mostly smaller firms of 1 – 10 people which could potentially compete more effectively with better access to ICT.

 5.3.7 A report on the business benefits of ICT estimated that productivity uplift in the South West could be as much as £3bn over five years if more small businesses in particular were able to effectively adopt new technologies. The report cited improved broadband infrastructure as a critical requirement, along with improving ICT skills and providing advice on effective adoption.

 5.3.8 The report also cited particular types of firms which could make the most gains from more effective use of ICT, including creative, professional, advanced engineering and construction firms. 34% of all construction firms in the District are based in our rural areas.

5.3.9 Supporting the growth of innovative and creative firms: Demand for better connectivity is driving the development of information and communication technologies, for example social media applications, but also the development of content for these applications.

5.3.10 Bath and North East Somerset has a thriving creative and digital community, which could benefit from increased local online projects and use. Content-creating

firms are notoriously "speed-hungry", requiring fast upload as well as download speeds, which can be delivered via superfast broadband.

5.4 Community feedback

5.4.1 There is considerable support for improved broadband access in these communities, many of which have identified improved internet connectivity as a priority in their Parish Plans (see Appendix 4).

5.4.2 Responses from the Draft Core Strategy consultation highlighted broadband as an issue in rural communities.

5.4.3 The recent Voicebox 19 report found that people living in rural communities were significantly more likely to be dissatisfied with their internet connections, and also that people living in rural communities are more likely to work from home.

5.4.4 A total of 14 public statements were made from individuals, businesses and Parish Councils at the Scrutiny meeting on 5th December 2011 in favour of the BDUK option.

5.4.5 The Council has been receiving individual enquiries from community and Parish Council representatives looking to investigate individual cases and solutions for particular areas. While we are able to facilitate these to some extent, the information required is largely that which would be provided by the research and technical knowledge that would be delivered through undertaking a Local Broadband Plan or similar study.

5.5 Cost Benefit Analysis

OPTION 1

5.5.1 There is an opportunity to join the 'Connecting Devon and Somerset' project and to develop a joint bid to access funding from BDUK. This would provide 2 Mbps to 100% of premises and superfast broadband of at least 20 Mbps to 85% by 2015. This would access £690,000 BDUK funding for infrastructure and £1,380,000 private investment from an infrastructure provider.

5.5.2 Broadband Delivery UK (BDUK – see below) estimates that roughly 18,000 premises in Bath and North East Somerset would be eligible to receive government support for improving infrastructure.

5.5.3 Under this approach £179,000 European Regional Development Fund (ERDF) funding is also available to support and assist small and medium sized businesses to exploit the opportunities presented by the rollout of superfast broadband. The funding is available only if the BDUK offer is taken up and can be used for:

- Awareness raising and demand stimulation
- Specialist advice
- Embedding superfast broadband business support
- Connecting business to superfast broadband ie. Delivering the 'last mile' or FTTP (fibre to the premise).

5.5.4   Under this option the total cost to the Council is £475,000 due to the increased economies of scale. The cost of improving broadband access to 18,000 premises in Bath and North East Somerset equates to £26 per premise.

5.5.5   The benefits of this approach are fixed costs, fixed outputs, a running project and large economies of scale.   Further benefits are that funding of £2,249,000 is brought in to deliver broadband infrastructure to the B&NES area. This equates to a leverage of council funding to overall investment of 1:4.7. The disadvantages are that a quick decision has to be made, without the time to undertake the initial study Cabinet had proposed to research other options.

5.5.6   Under this option B&NES will be able to take advantage of joining the 'Connecting Devon and Somerset' demand stimulation programme, which includes consultation and has so far signed up 4,000 supporters.

OPTION 2

5.6   An initial investment by the Council of £25,000 would be required to undertake a piece of research to identify how internet access can be brought to as many of our residents as possible, including investigating the development of community opportunities in our villages and rural areas.

5.7   The Council would have time to consider further all alternative options, some of which may not require extensive Council funding. A further £25,000 could deliver the community and business consultation requested by the Scrutiny panel.

5.8   However, it is likely that these pieces of work will demonstrate demand and initial research indicates that fibre optic cabling is required to deliver the scale and capacity needed for broadband infrastructure in B&NES.

5.9   This approach therefore runs the risk of confirming the need for extensive capital investment, while losing the opportunity to partner with adjacent authorities, to achieve economies of scale, to access the BDUK, ERDF and private funding and therefore to utilise the £2,249,000 funding in the 'Connecting Devon and Somerset' offer.

5.10   This approach has increased project costs as a result of not partnering with adjacent authorities.

5.11   The cost estimates from BDUK are based on achieving 85-90% coverage with superfast broadband. A further project would be required to reach the final 10-15% but an opportunity to access Rural Communities Broadband Fund (see section 5.16) to deliver this will have been lost. Whereas the 'Connecting Devon and Somerset' offer is for 100% coverage.

5.12   Furthermore, there is a finite capacity in the UK telecoms industry to deliver large infrastructure works. There is an additional risk under this option that telecoms infrastructure contractors will be committed to large scale BDUK projects and not have the capacity to engage with a relatively small area like B&NES.

5.13   Under this option a full consultation exercise with white premises (the 18,000 premises in B&NES with poor broadband which are eligible for BDUK funding) including planning, procurement and analysis would take up to 16 weeks.

COSTINGS TABLE

Cost	Option 1: join with Devon and Somerset – delivering 2 Mbps to 100% premises and 20 Mbps to 85-90% premises		Option 2: initial research and likely second stage delivery, achieving 20 Mbps to 85-90% premises
Cost	Cost to B&NES	Other income generated	Cost to B&NES
Initial mapping			
Initial research into bringing broadband to rural B&NES	X		✓ £25,000
Consultation	X		✓ £25,000
Delivery costs			
Mapping, procurement, legal and project management costs	✓ £175,000		✓ £300,000
Demand Stimulation and Skills Uplift	X	£179,000 from ERDF	✓ £100,000
Broadband Infrastructure 25% BDUK allocation	X	£690,000 BDUK allocation	✓ £690,000
Broadband Infrastructure funding from B&NES	✓ £300,000		✓ £690,000
Broadband Infrastructure 50% private investment	X	£1,380,000 Private infrastructure provider	✓ £1,380,000
Additional Officer time (2 years @ £50,000 pa. including on costs)	X		✓ 2 fte to deliver for 3 years £300,000
Sub total	**£475,000**	**£2,249,000**	**£3,510,000**
TOTAL	**£2,724,000**		

Accessing the BDUK fund – the Local Broadband Plan

5.14   In order to access the B&NES allocation of BDUK funding and private investment capital, the authority must produce a **Local Broadband Plan**.

5.15   The Local Broadband Plan would:

- Set out the area's ambitions for improving broadband infrastructure
- Develop a business case for better broadband provision, with reference to economic growth, digital inclusion and improved public services access
- Map the current and forecast connectivity picture (including slow speeds and areas with a lack of investment) and identify how appropriate private sector solutions are
- Identify priority areas for intervention
- Review the modelling undertaken by BDUK, identify where BDUK data / assumptions need to be challenged and challenge where appropriate
- Provide an overview of likely capital cost in order to deliver the overall objective of reaching the fastest speeds possible for the greatest number of premises
- Produce a funding strategy which provides maximum value for money, to include what the private sector might be expected to contribute
- Plan and lead on a community and business engagement programme to gain support and register demand
- Plan how the project will be rolled out.

A Local Broadband Plan for Somerset and Devon has been undertaken, which could be extended to cover B&NES.

Rural Community Broadband Funding

5.16   On 29th November 2011 the Rural Development Programme for England (RDPE) announced a £20m joint fund with BDUK for rural communities in the 10% hard to reach areas covered by a Local Authority Local Broadband Plan, or if the LBP is not in place, if they are able to demonstrate that they will be in the 10% hard to reach areas in a LBP when finalised.

5.17   Funding of 50% is available, expressions of interest for the first round are due by 31st January 2012 and funding needs to be contracted by 31st December 2013.

5.18   A decision to join the Devon, Somerset, North Somerset, Plymouth and Torbay project would ensure that all premises receive a minimum of 2 Mbps. It is therefore unlikely that B&NES would need to consider applying for Rural Community Broadband Funding in addition to joining the Devon and Somerset project. If the Council does not undertake a Local Broadband Plan it would not be able to apply for the RCBF.

Project Governance

5.19   Should the Council decide to go ahead with developing a bid in partnership with Somerset, Devon, North Somerset, Plymouth and Torbay, it is proposed that a project board involving all three authorities be set up to manage the development of the Plan and to oversee specialist consultant work.

Timings and Delivery

5.20   Draft Local Broadband Plan work for B&NES will be completed by the end of February 2012 should the Cabinet decide to join the 'Connecting Devon and Somerset' project.

5.21   The table below sets out potential timings for the whole project.

Table 1: Estimated project timings:

Item	Estimated timing
Undertake data and mapping and prepare Local Broadband Plan	Immediate start
Submission of draft LBP to Government (BDUK)	End of February 2012
Submission of final LBP to Government	April 2012
Procurement process begins	October 2012
Demand stimulation activities begin	Spring 2012
Rollout of infrastructure begins	October 2013
Rollout of infrastructure is complete	End 2014 / early 2015

6   RISK MANAGEMENT

6.1   The report author and Lead Cabinet member have fully reviewed the risk assessment related to the issue and recommendations, in compliance with the Council's decision making risk management guidance.

7   EQUALITIES

7.1   A formal Equality Impact Assessment will be carried out.

7.2   If the Council should decide to submit a Local Broadband Plan to the Government, which is the first step in delivering improved broadband infrastructure in the District, there are some real opportunities to:

- Reduce the inequality of service generally experienced by those living in more rural areas than those living in more urban areas;

- Improve communities' ability to use the internet to access public service information, work from home if travel is difficult, develop their businesses, use distance learning materials, and so on;

- Ensure more vulnerable communities and groups, such as older people, can receive help to access better internet services which might for example help to support them in dealing with health issues.

8   RATIONALE

8.1   This report shows that, in general, people living in our more rural areas are at a disadvantage due to the lack of planned broadband infrastructure upgrades.

8.2   Improved broadband connectivity supports a diverse range of Council priorities, from supporting private sector jobs growth, to improving the independence of older people.

8.3   Initiating work on a Local Broadband Plan with neighbouring authorities will allow the Council to better understand connectivity issues, and identify any potential costs associated with delivering superfast broadband to premises not already receiving upgrades from BT.

9   OTHER OPTIONS CONSIDERED

9.1   **Do nothing:** should the Council decide not to move forward with Local Broadband Plan work.

9.2   In this case, an opportunity will be lost to potentially access Government funding to deliver improved broadband services in our more rural areas.

9.3   This option assumes that the private sector will deliver superfast infrastructure to more premises in B&NES not currently covered by current rollout announcements or that alternative technologies have the capacity to deliver.

10   CONSULTATION

10.1   Cabinet members; Parish Councils; Other B&NES Services; Local Residents; Community Interest Groups; Stakeholders/Partners; Other Public Sector Bodies; Section 151 Finance Officer; Chief Executive; Monitoring Officer; Business representative bodies.

10.2   The Chair of the ECD PDS Panel has been consulted over the urgent decision and agreed that the matter is urgent and cannot reasonably be delayed.

11   ISSUES TO CONSIDER IN REACHING THE DECISION

11.1   Social Inclusion; Customer Focus; Sustainability; Human Resources; Young People; Corporate; Impact on Staff.

12   ADVICE SOUGHT

12.1   The Council's Monitoring Officer (Divisional Director – Legal and Democratic Services) and Section 151 Officer (Divisional Director - Finance) have had the opportunity to input to this report and have cleared it for publication.

Contact person	John Wilkinson x 6593
Sponsoring Cabinet Member	Councillor Cherry Beath
Background papers	- Cabinet Paper E2328, 9th November 2011: 'Improving Access to Superfast Broadband in B&NES – the Broadband Delivery UK Option', appendices and Cabinet Resolution - Economic and Community Development Policy Development and Scrutiny Panel, 5th December 2011, call-in of decision E2328 - Draft Core Strategy - Economic Strategy for Bath and North East Somerset - Sustainable Community Strategy for Bath and North East Somerset - Vision for Bath and North East Somerset
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