HAMPSHIRE COUNTY COUNCIL

Decision Report

Decision Maker:	Hampshire Economic Board
Date:	21 September 2010
Title:	Broadband Strategy Progress Report
Reference:	2033
Report From:	Director of Economic Development

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1. Executive Summary

1.1. The purpose of this paper is to bring Members of the Hampshire Economic Board up-to-date on progress to identify the action Hampshire County Council could take to stimulate and influence broadband speeds in Hampshire, particularly in rural areas.

1.2. This paper:

- reviews action to date within Hampshire and also regionally and nationally;
- outlines the issues currently being considered in the exploration and development of a commercial proposition
- makes recommendations to the Hampshire Economic Board on the approaches to be pursued, and the next steps for consideration.

2. Background

2.1. At its meeting on 25 February 2010, the Hampshire Economic Board agreed that securing broadband access to all homes and business sites in Hampshire as envisaged by the Digital Britain Report, is a clear economic and social priority. The Board recommended exploration of the options of taking strategic action to improve broadband services across the county, building on the expertise and partnership network of eHampshire and the Hampshire Public Services Network (HPSN2) network and future plans in Hampshire.

2.2. To inform and support the consideration of any intervention, research has been undertaken to secure an accurate picture of broadband service delivery across Hampshire, identify other Local Authority strategic interventions across the UK, and explore the financial and legal implications of any Hampshire County Council project. Members of the Board gave their approval for discussions to take place with commercial operators, including internet service providers, to help identify a commercially sustainable model (or several models) between the public and private sector. Any model would have to be subject to EU State Aid Rules on Competition.

2.3. As well as discussions with commercial operators and internet service providers, research has been undertaken to assess the progress of other county, regional and national initiatives to support faster broadband speeds. When considering areas for intervention, it is important to consider how the market will deliver improved broadband services. Research undertaken by the Department for Business Innovation and Skills (BIS) and OfCom has divided the UK into three market sectors. Sectors 1 and 2 will be met by the market without state intervention; these areas are high density communities in clusters around large villages, towns, cities and urban infill. It is widely acknowledged that market sector 3, the "Final Third", will **not** receive superfast broadband without some form of support from the public sector. The Final Third in Hampshire is represented mainly by rural communities, areas of low housing density or areas of low consumer demand. See Appendix 3 – Final Third Next Generation Rollout at 60% and 75% UK Coverage.

2.4. Since the last report, the coalition Government has appointed a new Broadband Minister, Ed Vaizey. Its manifesto stated that the new Government will "ensure the rapid roll-out of superfast broadband across the country" in both urban and rural areas. David Cameron has also confirmed the appointment of Martha Lane-Fox as UK Digital Champion. The coalition Government is seeking market (or demand) led solutions to the problem of poor broadband access. The Department for BIS has announced two separate schemes to test market approaches to next generation broadband deployment. The first is a desk-based research project, which has asked the market to respond to delivering superfast broadband without the encumbrance of current Government regulation in three pre-defined geographies (areas in Wales, Cumbria and Scotland). The second scheme is detailed in paragraph 2.5. Both schemes aim to provide Government with learning about how the market can be encouraged to deliver next generation broadband services, and how existing infrastructure such as public service networks, power lines and water systems can be used to greatest public benefit.

2.5. The new Secretary of State for Culture, Media and Sport, Jeremy Hunt, has announced that the second of these schemes will be funded by a grant fund of £15 million and will support three or more schemes in deploying physical infrastructure. The fund will be administered by Broadband Procurement Group BDUK (part of BIS). Bids are being channelled via the Regional

Development Agencies, in the case of Hampshire County Council, the South East England Development Agency (SEEDA). Support for the initial expression of interest from Hampshire was shown and a submission has been made for funds from the BDUK scheme.

2.6. As any Government intervention is likely to take some time to materialise, and may not favour the south-east, there is merit in Hampshire County Council proceeding with its own plans which can be adapted as necessary to take advantage of any new regional or national opportunity.

2.7. A summary of the meetings with commercial operators and an update on other initiatives is attached as Appendix 1. Investigation and close monitoring of these initiatives is helping to inform the consideration of any intervention to be taken by Hampshire County Council.

2.8. There is one pilot being developed in Little London, with a grant from Hampshire County Council (Rural Delivery Strategy Budget), and funds from SEEDA are also being pursued for two further pilots in the county. (See Appendix 1 Hampshire Initiatives – paragraphs 5.3 to 6.1.)

3. Summary of Future Action

Key Points

3.1. There are several key points that the Council needs to consider:

(i) A real need has been evidenced by previous reports to the Board for intervention by Hampshire County Council. Infrastructure of this type supports both consumers and businesses and has a critical role to play in ensuring the sustainability of rural communities and the inclusion of those who have accessibility difficulties.

(ii) Speeds of 2 Mbps (Megabits per second) will not be considered an acceptable service standard by most users in the very near future as the next generation TV on demand over the internet services comes on stream.

(iii) Test Valley, Winchester, and Basingstoke and Deane Councils have all expressed interest in creating a coherent county-wide solution to the issue of broadband provision in rural areas. Their interest includes consideration of opportunities for financial support, as well as marshalling the support of local communities in demand stimulation projects.

(iv) Business feedback indicates time and time again that this is seen as a number one infrastructure issue. Appendix 2 details numbers of businesses and residents in rural areas that do not receive the Government's proposed minimum broadband speed of 2 Mbps and are located in the area described as "the final third". The priority of Hampshire County Council should be to help improve broadband

speeds in the areas unlikely to be enabled by the commercial market (known as the Final Third) which have significant business clusters. However to encourage home working and new business start ups means that it is desirable that NGA broadband is available in the majority of homes.

(v) The Hampshire Economic Assessment also highlights broadband as a major infrastructure issue for economic growth as Hampshire's coverage is "patchy".

(vi) Any intervention must be "future-proofed", i.e. it is essential that any technology used today is scalable for future needs, and meets agreed national and international industry standards; "white elephant syndrome" must be avoided.

(vii) The County Council can help to prioritise action but community interest in a solution must also play a part. Any scheme to support rural communities must be backed by a demand registration scheme to ensure local community interest before any investment is made.

(viii) Any action needs to be part of a formal county-wide strategy which, wherever possible, integrates both HPSN2 and commercial networks.

(ix) There is clear interest from the private sector to work with Hampshire County Council to provide a solution via a joint venture or shared risk project to deliver a solution, and models around the UK have been studied which Hampshire County Council may adapt to fit the particular circumstances of the county.

(x) The telecommunications market is divided into three segments – internet service providers, companies which put their own equipment into BT exchanges (sub-loop unbundling) and network infrastructure. In rural areas there is little competition.

(xi) HPSN2 network offers, in some locations, the opportunity to reduce both the operating and capital cost of a solution.

(xii) To ensure competition laws are not breached, any intervention must introduce increased competition to the area and must be accessible on an equal (non-discriminatory) basis to all (potential) service providers; in this way an intervention will not distort competition or disadvantage commercial companies.

(xiii) The changing financial situation for public services makes it vital that any project does not expose the Council to significant financial risk at the current time.

(xiv) There will be some parts of Hampshire where the level of demand may be insufficient to service operational costs. Given the small amount of

band width required, there may be other solutions that innovative small providers can bring (eg wireless).

4. Options for Improving Next Generation Access Broadband Services

4.1. At the current time there looks to be several options open to the County Council to pursue, as follows:

(i) Do nothing and let the market address the issue (if) when it becomes commercially viable – no intervention for Hampshire County Council and therefore no financial risk and no cost. However the economic risk is that the market will fail to address the poorly served areas of the county in a timely manner. This could leave rural communities socially and economically excluded and disadvantaged at a time when we are on the cusp of a significant change in business models offering exploitation of the new technologies, and when these communities are already experiencing economic difficulties.

(ii) Develop the Council's relationship with BT, mobilise demand through resident surveys and demonstrate commercial viability of areas BT does not plan to deliver to commercially at present. Talks with BT have already highlighted opportunities to extend coverage by sharing financial risk. However this almost certainly results in local government grants and/or underwriting of income shortfalls being required. It does not present an investment opportunity which could generate funds which might then be redeployed to address harder-to-reach areas, except within an individual exchange area. However the subsidy or level of financial risk would obviously be understood in advance of commitment. Areas close to commercial viability and existing commercial exchange upgrading plans would get a service earlier than if no action was taken.

(iii) Explore the development of a commercial model where Hampshire County Council is a major shareholder. Hampshire County Council, in partnership with other public and private sector organisations, may be able to develop a commercially viable solution to next generation broadband provision across the county. This model could operate with varying levels of public sector support, which would determine the extent of coverage. This approach may have two benefits:

(a) the development of the proposition may encourage other commercial entities to enter the market and deliver services without the need for local government intervention; and

(b) developing a commercially viable solution potentially offers the County Council an investment opportunity which could generate funds which can be redeployed to address harder to reach areas if realised.

5. The Basis for a Commercial Model

5.1. Since the emergency budget announcements, officers have been exploring the development of a commercially viable intervention. This is in contrast to the strategic intervention models deployed in other areas of the country which have been reliant on significant grant subsidy and preferential loans. Officers have gathered evidence that consumer (business and residential) demand exists for services, and have identified that the market is continuing to focus on delivering next generation access to urban rather than rural communities.

5.2. Given the financial context, it is therefore recommended that any solution must encompass several elements:

(i) It must be self-financing.

(ii) It must support increased economic activity in the areas it serves.

(iii) It should improve the economic and social viability of rural communities.

(iv) It should enable improved public sector services for residents via digital channels. A report issued by Martha Lane-Fox (UK Digital Champion) has estimated that moving one Government department on-line could save the taxpayer £900 million a year. The same report also estimates that the average household saves £560 a year by accessing more competitively priced goods and services as a result of being on-line.

5.3. Following detailed examination of other local authority intervention models, a commercial model is now being investigated that is likely to be the most appropriate for Hampshire County Council to support (see Exempt Appendix 4).

6. Recommendations

6.1. That discussions with BT/Openreach and Virgin Media regarding the extension of their existing plans for Next Generation Access broadband across the county by helping with demand stimulation and demand registration schemes be continued.

6.2. That officers also continue to explore models to encourage private sector investment with local government support, including demand stimulation and registration programmes aggregation of funding streams (local parish and district councils) and stimulating private sector investors.

6.3. That, in light of the forthcoming reductions in public sector spending and the results of the first stage feasibility, officers concentrate on exploring a more detailed business model to provide next generation broadband to those rural communities where this is feasible on a substantially self financing basis, and which have been identified as being within the ‘Final Third’ (see Appendix 3).

6.4. That the next phase of the work on this model include evaluation of a number of alternative scenarios relating to deployment, product set, go-to-market strategy and funding approaches and allows sensitivity analysis to be performed in respect of the key risks identified.

CORPORATE OR LEGAL INFORMATION:

Links to the Corporate Strategy

Hampshire safer and more secure for all:	no
Corporate Improvement plan link number (if appropriate):	
Maximising well-being:	yes
Corporate Improvement plan link number (if appropriate):	
Enhancing our quality of place:	yes
Corporate Improvement plan link number (if appropriate):	

Other Significant Links

Links to previous Member decisions:		
Title Hampshire Economic Board	Reference	Date 25 February 2010
Direct links to specific legislation or Government Directives		
Title		Date

Section 100 D - Local Government Act 1972 - background documents

The following documents discuss facts or matters on which this report, or an important part of it, is based and have been relied upon to a material extent in the preparation of this report. (NB: the list excludes published works and any documents which disclose exempt or confidential information as defined in the Act.)

Document	Location
None	

IMPACT ASSESSMENTS:

1. Equalities Impact Assessment:

1.1. A full assessment will be undertaken if action is approved to address the issue of poor broadband delivery – currently this is research and information gathering.

2. Impact on Crime and Disorder:

2.1. Not applicable.

3. Climate Change:

a) How does what is being proposed impact on our carbon footprint / energy consumption?

Strategic Intervention by Hampshire County Council has the potential to save CO_2 by reducing the need to travel and enabling economic activity with minimal CO_2 emissions.

b) How does what is being proposed consider the need to adapt to climate change, and be resilient to its longer term impacts?

Not applicable.

Summary of Action to Date

1. Discussions with Commercial Operators – Virgin, BT Openreach, Alcatel

1.1 Discussions have been held with a number of commercial operators which, for commercial confidentiality reasons, have mainly been under non-disclosure agreements. Meetings with commercial suppliers have been extremely positive.

1.2 The fact that Hampshire County Council politicians are so committed to resolving the poor broadband issue in the county has aroused much interest with commercial suppliers and meetings have been very positive. More discussions need to be held with the operators to identify the technical options available but in principle the operators are keen to work more closely with Hampshire County Council and develop a partnership approach to the issue of poor broadband. Operators felt that the County Council can help with planning and delivering solutions in Hampshire and can overcome some of the barriers, eg around planning, pole location, mobilising demand and the use of Hampshire County Council existing infrastructure where possible to minimise cost – which in itself presents a more commercial and interesting proposition for the operators. This dialogue is ongoing and due care needs to be taken in relation to the competitive nature of these discussions.

Virgin

1.3 Discussions with Virgin are ongoing in particular to explore opportunities for using HPSN2 as backhaul. Direct extension of the Virgin Cable network is a long term strategic issue for Virgin Media and is it is unlikely that any network extension will have a dramatic impact on the rural area being considered by this report.

Alcatel

1.4 Alcatel-Lucent have been helping to provide analytical support to the rural broadband project. The County Council is undertaking a modelling exercise with Alcatel-Lucent and Bell Labs to understand revenue streams and deployment costs. Alcatel Lucent are also providing detailed network analysis and looking for synergies with HPSN2 deployments to maximise the benefits of public sector investment in HPSN2 for rural communities. Alcatel-Lucent have also been key partners in the Gateshead GTI project and have extensive experience across Europe and the UK of creating innovative public private partnership agreements.

BT Openreach

1.5 To date meetings have been positive. BT will be announcing their future rollout plans for high speed broadband in October They have indicated that if match funding were available, they would be interested in supporting additional new infrastructure.

2. Discussions with South East England Development Agency (SEEDA)

2.1 Meetings have been held with the South East England Development Agency. SEEDA has drafted an action plan to support roll-out of high speed broadband in the South East but because of the imminent closure of Regional Development Agencies, SEEDA's support is likely to focus on supporting bids from the South East into the government's BDUK fund. Early indications showed support for the Hampshire financial model, and our bid for funds from the BDUK pot has been submitted.

3. Update on other UK initiatives

Rutland Telecom

3.1 Following the official launch of the next generation broadband services in Lyddington, where, following fund-raising of £37,000, 200 homes will be able to access high speed broadband, Rutland Telecom has announced similar plans to enable the village of Erbistock close to the Welsh-English border, bringing 'up to 40 mgb' speeds to a rural area where many people currently receive no broadband services at all. This model is based on a joint venture between Rutland Telecom and a local group of investors. Rutland Telecom has been inundated from communities wanting to emulate the Rutland village model. It is having trouble coping with the demand (it quotes 40 other communities getting going) but so attractive is its business model that private investors are trying to start backing Rutland Telecom.

3.2 In respect of Hampshire communities, there have been recent discussions with Rutland to examine how it could operate in Hampshire. As a potential supplier to address the issue across the whole county, the Rutland model could be used, but a feasibility study would need to be commissioned and this is an option being considered.

Cambridgeshire

3.3 Cambridgeshire County Council has awarded a £29 million, eight year contract to NTL Business to develop a county-wide broadband network linking council offices, schools, libraries and public access points such as community centres. This is the same principle as Hampshire's HPSN2 contract.

Kent

3.4 As with Hampshire County Council, Kent has harmonised service provision for Schools, Partners and corporate services under Kent Public Service Network (KPSN).

3.5 Kent County Council has grant funded several community broadband projects to deliver broadband on a village-by-village basis in 'not spot' areas. Each of these villages creates its own local ISP and infrastructure provider and each has the opportunity to use KPSN if necessary as backhaul.

3.6 Proactive supplier engagement is still a high priority, to minimise telecommunications suppliers focussing major investment on larger population clusters (which invariably already enjoy the best provision) and investing minimally unless Kent has intervened.

3.7 Joint Discussions are held on a regular basis with East Sussex and Hampshire County Council to share best practice and collectively lobby both industry and Central Government.

Yorkshire Forward/North Yorkshire Net

3.8 NYNet is a private trading company, with its shares owned by North Yorkshire County Council and Yorkshire Forward, the Regional Development Agency. NYNet provides wholesale broadband products to the local authority and Internet Service Providers (ISPs). It is unable to provide services directly to business or residential consumers. North Yorkshire County Council provided £12 million capital investment, supplemented with £4 million from Yorkshire Forward and £1.1 million from the European Regional Development Fund (ERDF).

3.9 NYNet is live and has attracted various public sector clients, including the County Council, local Primary Care Trust, district and borough councils, local Fire and Rescue Service and other bodies. The network is available to around 330,000 households and 50,000 small and medium enterprises. Despite this success with the public sector, NYNet has experienced difficulty attracting ISPs to provide business and consumer services. This may in part be due to the nature of their managed service agreement with BT. North Yorkshire local authorities are currently challenging the State Aid Rules classification of the funding received by NYNet.

South Yorkshire/Digital Region

3.10 South Yorkshire's Digital Region project has been backed by four local authorities, the local Regional Development Agency and with European funding – total funding for the project is £100 million. The area of South Yorkshire suffers from poor internet take-up and broadband service, lack of demand and lack of investment from various telecommunication

companies means that there is a significant gap between broadband availability in Yorkshire and the rest of the country.

3.11 The project has identified that the delivery of better public services and faster economic growth has to be underpinned by broadband infrastructure which encourages businesses into the area to improve the life chances of local residents.

3.12 The four councils created a Joint Venture (Special Purpose Vehicle) called Digital Region with Thales as the commercial partner. The project will use Sub Loop Unbundling (SLU) technology to deliver minimum speeds of 25Mb/s to 90% of the region by 2011 – 94,000 homes. This is a £100 million project.

3.13 The advice from the South Yorkshire team has been to engage with business and residents at the beginning of the project to identify demand and not wait until the project is up and running.

Cornwall

3.14 Cornwall Council has agreed to allocate £1 million over the next five years to ensure a project is delivered to ensure superfast broadband coverage to businesses in Cornwall and the Isles of Scilly. The costs of developing and managing the project are approximately £4.5 million, with the balance being provided through EU Convergence funding. If successful, the project will result in around 10,000 businesses using the new infrastructure and a further 6,000 businesses benefiting from improved performance. It will also create 4,000 new jobs and safeguard a further 2,000 existing jobs.

3.15 The ERDF supported project requires significant European match-funding, and needs to secure the necessary approvals from Brussels before signing any contract with a private sector partner. These approvals take time, and the project will not be in a position to announce the preferred bidder until early summer 2010.

Devon

3.16 Devon County Council is looking to invest in improving broadband services for the rural community to help boost the local economy and improve services to business. The Council is looking at which areas would benefit most from targeted investment using strict economic criteria. It is based on a balance between demand and turnover and aimed at those areas suffering from very slow connectivity. The work, which is still ongoing, has identified key clusters, which are now the subject of a detailed analysis and investment planning.

4. EU Opportunities

4.1 The South East Local Partners office in Brussels has been asked to explore any current or future EU programmes that may be able to support the Hampshire project. Currently, the only plans are for the publication of an EU Broadband Strategy in September and the organisation of a Broadband Conference in January 2011.

5. Update on Hampshire initiatives

Basingstoke

5.1 In 2006 eHampshire identified Basingstoke Town as an area which is poorly served for broadband. Since then eHampshire has been working with Basingstoke and Deane Borough Council and Hampshire County Council to bring commercial partners, including Openreach, to discuss potential solutions, including developing a programme with Alcatel Lucent for a stand-alone broadband infrastructure.

5.2 Openreach has since made the town one of the first in the South East to receive the new fibre to the cabinet broadband solution and services are now available for the public. This service, however, is not yet available to all of the town and eHampshire is working in conjunction with the public (a local community activist group) and Basingstoke and Deane Borough Council to lobby Openreach and BT Group to extend the coverage area. This campaign includes local MP Maria Miller.

Little London

5.3 The villages of Little London and Smannell near Andover have been identified as test sites to explore the feasibility of exploiting HPSN2 to help rural communities get faster broadband.

5.4 Hampshire County Council has allocated £30,000 of funding for the community to be used as a contribution towards the capital cost of the project. The project is a joint initiative with Test Valley Borough Council Economic Development.

5.5 The pilot will explore the practical, commercial and legal validity and viability of exploiting HPSN2 which may then be used in other rural communities. The tender process is underway and contractors are likely to be appointed shortly.

Andover

5.6 Andover has recently been announced as one of the next three exchanges in Hampshire to receive fibre to the cabinet during summer 2010; Fareham and Portsmouth (Central) being the other two. Hampshire County Council is exploring with Openreach models to extend the coverage area beyond the area that Openreach consider financially viable. This could take the form of:

(i) Underwriting the risk with a clawback over three years

(ii) Helping communities to prove demand

(iii) Acting as a funding coordinator for communities to contract with Openreach.

6. Rural Development Programme for England Bid

6.1 A bid has been submitted by the Economic Development Office under the SEEDA Rural Development Programme for England to try to secure funds of £136,000 to help three village communities in Hampshire - Mapledurwell, Bradley and Smannell - link to the HPSN2 network to achieve high speed broadband. The fund total is £375,000 for the whole of the South East.

7. South Hampshire

7.1 South Hampshire has a strong broadband and ICT infrastructure. eHampshire is working with commercial suppliers and Partnership for Urban South Hampshire Economic Development Panel to ensure that the area continues to have leading edge broadband infrastructure. In order to help with this, eHampshire has produced a website, developed in conjunction with Hampshire County Council Environment Department, mapping the location of planning development sites across the county so that Telecom's planners can assess where to deliver their networks.

8. HPSN2 Roll-Out update

8.1 Since the novation of existing HPSN services was completed in November 2009 the new core Wide area network was installed and linked into the HPSN network and Hampshire County Council data centre on schedule at the end of February 2010. Since then over 50 sites have been migrated to the new service, including the first "silver" site at Hampshire Highways West (using a 100Mb circuit with back-up DSL).

8.2 Core Telephony and ISP services are entering the final planning stages.

8.3 As with Kent, options are being investigated to encourage further penetration of HPSN2 deployment to increase opportunities for backhaul reuse

Rural broadband speeds in Hampshire

Hampshire is served by 119 exchanges, all of which are enabled for xDSL Broadband. Cable coverage is extensive across Hampshire and most urban centres in Hampshire have very good broadband coverage.

However, investigating this picture further reveals that 112,000 people and 3,400 business premises are unable get broadband at the Government's proposed minimum of 2Mb/s.

(Data supplied by Point Topic Limited)

	Rural areas with No Cable, and <2Mb/s							
	Businesses						Residential	
	Bus sites - retail	Bus sites - offices	Bus sites - factories	Bus sites - warehouse	Bus sites - other	Bus sites - total	Households	Population
Basingstok	61	114	126	46	56	403	6,241	15,172
East Hamp	61	87	241	60	44	492	5,647	13,928
Eastleigh	25	28	42	16	8	119	440	1,069
Fareham	3	9	10	11	2	36	474	1,156
Gosport	0	0	0	0	0	0	0	0
Hart	54	57	72	28	18	229	2,723	6,880
Havant	10	6	8	5	2	32	753	1,795
New Fores	185	121	165	95	58	626	9,786	22,743
Portsmout	0	0	0	0	0	0	0	0
Rushmoor	0	0	0	0	0	0	0	0
Southamp	0	0	0	0	0	0	0	0
Test Valley	94	150	287	139	64	734	7,874	19,301
Wincheste	117	222	253	105	58	755	12,452	30,556
	610	793	1,205	508	310	3,427	46,390	112,600