department for
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Broadband Delivery Programme: Superfast Pilots - Lessons Learnt Report

Broadband Delivery UK

November 2011

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1 Executive Summary

1.1 Overview

1.1.1 The UK Government's objective of stimulating private sector investment to deliver the best Superfast Broadband network in Europe together with increased coverage across the UK by 2015 is one of its top priorities. It has allocated £530m within the life time of the current parliament to achieve it. Early activity in support of this objective has focused on rural pilot projects in Cumbria, Herefordshire / Gloucestershire Borders, North Yorkshire and the Highlands and Islands in Scotland[1], and which has been used to inform this document.

1.1.2 The primary purpose of this document is to set out the lessons learned to date from the initial progress of the pilot projects, focusing on the set up of projects, preparation for procurement and its early stages, as well as parallel activities such as work to stimulate demand for superfast broadband.

1.2 Key lessons from the Pilots

1.2.1 **Local delivery**

In rolling out the broadband delivery programme the UK Government has established a locally led delivery approach. This approach has been successful in enabling local bodies[2] to develop a local vision and priorities which are tailored to meet local requirements and are incorporated into local economic growth and service transformation plans.

1.2.2 **Project resourcing and governance**

Local bodies need to establish a Project Board to oversee the delivery of the project at a strategic level as well as to ensure the objectives and milestones have been met and to provide high level support in resolving the challenges which arise.

Projects also require dedicated teams to ensure successful delivery. The scale of the challenge should not be underestimated. As a minimum projects require a dedicated Project Director, a commercial lead, a technical lead and legal support as well as wider project support (such as administration, finance, communications and dedicated resources to undertake demand stimulation activity and procurement).

1.2.3 **Project planning**

All of the Pilots took longer to commence their procurements than was originally envisaged. Projects require a minimum of 6 months mobilisation and planning activity prior to embarking on procurement. Key areas of focus should include:

- **Developing the business case, vision and project priorities supported by a funding strategy**

In order to maximise the scale of coverage and depth of superfast broadband coverage, local bodies will need to 'match' the Broadband Delivery UK (BDUK) funding contribution with funding from other public sector sources, which will need to be confirmed in Local Broadband Plans. The Pilots all developed their own funding strategies, exploring all

1 The Local Broadband Plan for an additional pilot project, Digital Rutland, was approved by BDUK in September 2011.

2 The term 'local bodies' covers any public sector body that will be developing local broadband projects for the delivery of broadband services. They may be of any constitution as long as they are representative of the communities they are intending to serve and can demonstrate the constitution, capability, governance and independence to manage a local broadband project and associated funding. However, it is anticipated local bodies will primarily be English Local Authorities, working alone or jointly, and potentially some English Local Authorities working together in Local Enterprise Partnerships.

funding opportunities that may be available in order to maximise the overall public sector contribution. The funding strategy needs to be aligned with clearly articulated local priorities and objectives. In order to reach a consensus on these issues strong senior commitment and leadership is required from the lead local body (most commonly a local authority). This needs to be supported by wide ranging stakeholder engagement, including a significant emphasis on political management ranging from parish councillors to Members of Parliament. The successful outcome sought is a strong investment case which stands out against other competing local funding bids and which articulates the wider benefits which superfast broadband infrastructure can bring. In the current climate, which has seen an overall retrenchment in local government spend, this has proved to be a challenging process involving a significant and unpredictable time commitment.

- **Undertaking demand stimulation activity and awareness raising communications**

The experience of the Pilots has demonstrated that the level of demand that a local body is able to demonstrate can help influence bidders' confidence in the projected revenues from the sale of wholesale broadband services. This, in turn, can enable suppliers to invest and contribute more to a local broadband project and reduce the public sector subsidy required. Accordingly, work to establish the likely level of demand across communities and business needs to be commenced at an early stage in the project's lifecycle and will continue until the end of the project and beyond. Linked to this is a need to effectively manage the expectations of communities and stakeholders particularly regarding the achievability and cost effectiveness of technical solutions as well as the timescales for delivery. Demand stimulation is a highly resource intensive activity and, based on current pilot projections, significant funding will need to be set aside for this purpose.

- **Developing a 'data room'**

Bidders will expect procuring authorities to provide as much information about the project area as possible. This will include details on the locations of residential premises and communities, the location and nature of businesses, the location of existing supply infrastructure and potential locations for infrastructure (public sector or community locations). This information should be prepared well in advance of commencing procurement activity, and will need to be sufficiently detailed and accurate so that bidders can meaningfully take it into account in their proposals.

- **Ensuring a co-ordinated approach to planning issues**

Local bodies should give full consideration to planning issues at an early stage. This includes working with planning authorities, including district councils, to ensure a joined up approach to planning activity across the project area and ensuring bidders will be clear about their obligations in relation to planning issues.

- **Developing a communications strategy**

The high degree of interest from individuals, local groups, businesses, other public sector bodies, political leaders and government agencies means that communication must be commenced early and managed in a systematic and consistent manner.

1.2.4 Market capacity

The evidence from procurements currently under way is that suppliers have the capacity to address a relatively small number of procurements at the same time. There is therefore a risk of market overload at a national level if too many procurements take place simultaneously. Consequently BDUK will manage the flow of projects through the procurement process to ensure that the number of procurements at any one time is manageable for interested suppliers and with the aim of maintaining competition.

1.2.5 Local bodies working in partnership

The experience of the Pilots shows that local bodies which are willing and able to work together to increase the scale of intervention can achieve a more efficient approach, without resulting in slower development and procurement times. When scoping future projects local bodies should endeavour to form cross border partnerships wherever possible to better aggregate demand and secure economies of scale. Cross-county aggregation of procurements are also being actively encouraged by BDUK because this will enable a greater number of projects to move along the national 'pipeline' more quickly (see 1.2.4 above).

1.2.6 Commercial models

The preferred commercial model for three of the Pilots is the investment gap funding model. The fourth Pilot (North Yorkshire) has asked bidders to propose solutions under this model or a public sector owned supplier model. Under the investment gap funding model a local body procures broadband coverage outcomes from a private sector supplier through a contract. BDUK will provide funding to the local body as a contribution to the payments made by the local body to the supplier under the contract. The investment gap is the public contribution required to a supplier's investment in broadband infrastructure to make a project commercially viable.

Where local bodies intend to adopt this approach they should use BDUK's Broadband Delivery Framework which provides a streamlined procurement route for local bodies to procure broadband services using a 'gap' model. This will speed up the procurement process and reduce the costs involved for local body procurement teams as well as for suppliers. Further information on the Framework is available at http://www.culture.gov.uk/what_we_do/telecommunications_and_online/8252.aspx.

All of the Pilots considered a model involving a joint venture between public and private partners although this was not as widely favoured as the gap funding model. This was largely because the public sector has to commit to a degree of on-going involvement in the network with the associated higher levels of risk. For risks that reside with the local body, full consideration of the range of possible scenarios will be required with an assessment of the impact on the finances of the local body for each scenario and whether 'worst case' scenarios can be funded adequately by the local body.

2 Introduction

2.1 Background

2.1.1 The UK Government's objective of stimulating private sector investment to deliver the best Superfast Broadband network in Europe by 2015 is one of its top priorities. It has allocated £530m within the life time of the current parliament to help support this. These funds are intended to be used for stimulating investment in broadband rollout in those areas where commercial investment alone would not otherwise happen because of the weak commercial case. This tends to be in rural and harder to reach areas, where broadband infrastructure can make a vital contribution to the growth agenda. Further detail on the Government's approach is set out in the Programme Delivery Model (http://www.culture.gov.uk/publications/8482.aspx).

2.1.2 Broadband Delivery UK (BDUK) is part of the Department for Culture, Media and Sport (DCMS) and is the delivery vehicle for the government's policies relating to stimulating private sector investment using the available funding. BDUK, together with the broadband policy team in DCMS, are responsible for the Broadband Delivery Programme.

2.2 Purpose

2.2.1 The primary purpose of this document is to set out the lessons learned to date from the initial progress of the Superfast Broadband Pilots (see section 3.1) in order to assist local bodies in managing projects.

2.2.2 The purpose of the BDUK Pilots is to test a number of different aspects, including:

- How local bodies should approach working together;
- How to develop and structure comprehensive Local Broadband Plans; and,
- How to address issues that will arise during the procurement of local broadband projects.

2.2.3 The Pilots are continuing to develop and have proved to be a useful source of information which BDUK has been able to use to help shape the approach to the development of further projects.

2.3 Scope

2.3.1 This document, the Lessons Learnt Report, provides an overview of:

- The initial set up of projects;
- Preparation for procurement;
- The early stages of procurement; and,
- Parallel activities such as work on demand stimulation.

2.4 Intended audience

2.4.1 The primary intended audience of this document are:

- Local bodies who are developing Local Broadband Plans, or who have progressed into the pre-procurement stage;

- Suppliers interested in delivering broadband solutions, particularly those bidding for the Broadband Delivery Framework (see section 3.2);
- Current and potential future supply chain members; and
- Other interested stakeholders.

2.5 Structure of this document

2.5.1 The remainder of this document is structured as follows:

- Section 3 provides an update on the Broadband Delivery Programme;
- Section 4 sets out the key learnings and critical success factors for building a vision and benefits case for broadband. It also includes examples of outputs from the Pilots. All subsequent sections follow this format focusing on the areas described below;
- Section 5 focuses on developing a funding strategy;
- Section 6 focuses on exploiting the European Regional Development Fund (ERDF);
- Section 7 focuses on demand for broadband services;
- Section 8 focuses on community based approaches;
- Section 9 focuses on project mobilisation;
- Section 10 focuses on project resourcing;
- Section 11 focuses on project governance;
- Section 12 focuses on procurement / commercial approaches;
- Section 13 focuses on the use of enterprise networks;
- Section 14 focuses on 'barrier busting' (i.e. developing a coordinated approach to breaking down planning barriers which could impede project implementation);
- Section 15 focuses on communications planning;
- Section 16 focuses on partnership working between local bodies;
- Section 17 focuses on engagement with suppliers and understanding the market; and,
- Section 18 focuses on creating a data room.

A glossary of key terms used in this document is set out in Annex A.

2.6 Further information available

2.6.1 BDUK have established the 'Local Authority Resource Centre' (LARC) (also known as 'Huddle') as a virtual resource, to provide information and documentation for local bodies who wish to access additional information about the BDUK Pilots and other aspects of the Broadband Delivery Programme.

2.6.2 The LARC also provides the opportunity for collaborative working amongst local bodies and also with BDUK, with an online discussion forum to raise questions and issues for resolution.

2.6.3 The LARC site is secure and only available to invited participants; this allows sharing of commercially sensitive information. Within the LARC, BDUK have developed a suite of workspaces to provide information on a range of topics related to Superfast Broadband. If

you have not already signed up for this resource and wish to do so please email enquiries-bduk@culture.gsi.gov.uk.

2.7 Acknowledgements

2.7.1 The BDUK Pilots have all actively contributed to this document both in terms of identifying lessons learned to date and in making available project documentation, some of which has been incorporated into this document.

3 Broadband Delivery Programme update

3.1 The Pilots

3.1.1 The selection of projects within the Broadband Delivery Programme started with the four Superfast Broadband Pilot locations: Cumbria, Herefordshire / Gloucestershire Borders, North Yorkshire and the Highlands and Islands in Scotland. The Local Broadband Plan for an additional project, Digital Rutland, was approved by BDUK in September 2011. This project is part way through a procurement process and BDUK are looking at it to assess issues associated with the viability of procuring a smaller scale project.[3]

3.1.2 Currently all the Pilots are in procurement and are planning to award contracts and commence implementation in 2012.

Project	Who	Project Description
Connecting Cumbria	Lead body: Cumbria County Council	To deliver optimum geographic coverage, aiming for 100 % coverage across the Cumbria sub-region, including rural, remote and sparsely populated areas to a minimum speed of 2Mbps; To deliver a wholesale broadband which delivers the greatest access speeds (data throughput) to as many businesses and consumers as possible to Cumbria and its partners,
Highlands and Islands - Next Generation Broadband Project	Lead body: Highlands and Islands Enterprise (economic development agency) Partner local authorities: Argyll and Bute Council; Highland Council; Moray Council; Orkney Islands Council; Shetland Islands Council; Comhairle nan Eilean Siar; North Ayrshire Council (Arran and Cumbrae only)	To provide affordable Next Generation Broadband (NGB) services to all parts of the Highlands and Islands based on building out from 50 population centres. In addition to NGB provision in these key towns, Wholesale Access Points of Presence (PoPs) will also be required. Once provision is made available to the 50 key towns, this will be widened to at least a 20km radius from each town with NGB ultimately available to all.
Connecting North Yorkshire	Lead body: North Yorkshire County Council (NYCC) Partner local authorities: York City Council and 7 district councils in North Yorkshire	To bring the advantages of high-quality broadband to 100% of businesses and citizens in North Yorkshire. This involves: • Providing next generation access (NGA) to market towns in North Yorkshire, accounting for around 45% of the addressable residential/business market. • Providing, high-speed digital hubs (if possible with access layer) to around 250 communities that will act as points of interconnection to backhaul infrastructure for Community (or any other) Service Providers
Borders Broadband	Lead Body: Herefordshire County Council Partner Local Authority: Gloucestershire County Council	To bring universal minimum standard broadband to rural parts of the counties and high level of access of superfast broadband. This will in turn support the economic development ambitions of the counties and address the disadvantages of digital exclusion. The improved network will enable the delivery of latest generation public sector applications to support

[3] Lessons learnt form the Digital Rutland project have not been included in this document due to the fact that the project had only recently been approved at the time of writing.

		access to services in deeply rural parts of the counties.
Digital Rutland	Rutland County Council	To offer Next Generation Access (NGA) to 99% of the County (businesses and households) by 2013. Further aspirations for the period are a universal minimum standard broadband solution by 2015 including exploitation of wireless, satellite or community based solutions to the most remote settlements, working with neighbouring LAs and Local Enterprise Partnership (LEPs) as appropriate

3.2 The Broadband Delivery Framework

3.2.1 In parallel with the Pilots' procurement exercises, BDUK is currently undertaking a procurement exercise to appoint a panel of suppliers to the Broadband Delivery Framework. This is intended to be used for local broadband projects using an investment gap funded model (see section 12.1.5), which is the model expected to be used by the significant majority of local bodies.

3.2.2 Projects in Wiltshire, Norfolk, Devon & Somerset and Suffolk have had Local Broadband Plans approved to progress procurement through the Broadband Delivery Framework:

Project	Who	Project Description
Norfolk County Council	Lead body: Norfolk County Council	Broadband Programme to deliver above 2Mbps to all residential and business properties by 2014/15 and as much superfast broadband as possible. Significant regeneration on the back of broadband £88m annual GVA uplift, 1000+ jobs over 10 years, improved public online services
Wiltshire County Council	Lead body: Wiltshire County Council Partner Local authorities: Swindon Council	Broadband project aspiration 85% of all premises (minimum target) with an enhanced target of 95% able to access superfast broadband and 100% standard broadband to all premises by 2015 with less than 2Mbps. Broadband to drive: transformation of online public services, to support attracting business 6,000 jobs
Devon & Somerset County Councils	Lead body: Somerset CC Partner Local Authorities: Devon CC, Plymouth, Torbay, N Somerset	Programme aims to: deliver 100% broadband coverage by 2015, with a minimum of 85% being superfast broadband, to deliver 50% take-up, with businesses and the public sector making the most of this opportunity by 2015, to deliver superfast broadband for all by 2020 and increase GVA by £0.75 billion by 2020. Investment to deliver public sector transformation; job creation, tackle inequality and stimulate growth.
Suffolk County Council	Lead Body: Suffolk County Council Partner New Anglia, the Local Enterprise Partnership for Norfolk and Suffolk	The Programme vision is for the competitive provision of superfast broadband (both fixed and mobile) offering typical speeds of 100 Mbps to everyone (100% of homes and small businesses) in Suffolk by 2020. The plan is to get superfast broadband to most premises (circa 85%) by 2015, with the remaining circa 15% also getting significant improvement in broadband speeds (2 Mbps – 10 Mbps) by 2015 from interim solutions (pending the 100% vision by 2020).

3.3 Future projects

3.3.1 Local bodies which require BDUK funding for their projects are required to obtain approval from BDUK of their Local Broadband Plans[4]. As from August 2011, local bodies are also required to obtain a further approval from BDUK for commencement of a procurement process for their project (which, for most projects will be the initiation of a mini-competition under the Broadband Delivery Framework). Separate arrangements apply to the Devolved Administrations where BDUK has agreed to provide funding, although BDUK will expect to co-ordinate the overall procurement activity nationally to ensure that the flow of procurements matches supplier capacity to bid for projects, and hence to ensure value for money through competition for individual projects.

[4] The Local Broadband Plan is a document which covers the broadband strategy, delivery plans for infrastructure upgrades and the outline business case for the overall desired investment. It should also explain how improvements to broadband infrastructure will support the needs of the community and will be aligned with other local / regional plans and strategies. For full details of the content of the Local Broadband Plan and associated guidance for completing the plan see the DCMS website and Local Authority Resource Centre.

4 Identifying objectives and benefits

4.1 Key learnings

4.1.1 A locally led delivery approach enables local bodies to develop a local vision and priorities which are tailored to meet local requirements and can be incorporated into local economic growth and service transformation plans.

4.1.2 The development and adoption of a clearly articulated vision (setting out key priorities, aims and objectives, end outcomes and benefits) provides a context for building a consensus for partnership working with key stakeholders. This in turn supports demand stimulation (see section 7 below), the maximising of funding opportunities, and supplier confidence that there will be a sustainable business case for commercial investment.

4.1.3 A wide range of significant benefits for consumers, businesses and government have been articulated by the Pilots. They tend to be broadly focused around the areas of economic growth, public sector transformation and community / social inclusion benefits. It is, however, acknowledged that it can be difficult to separate out the effect and value of superfast broadband alongside other levers for economic growth and transformation.

4.1.4 These benefits are often indirect and some accrue over a long period but all of the Pilots have demonstrated that the 'benefit case' for investment can be made.

4.2 Pilot outputs

4.2.1 **Borders - Herefordshire and Gloucestershire developing a cross-county consensus**

- Herefordshire and Gloucestershire came together for their 'Borders' project because of the commonality of challenges but also commonality of ambitions.
- The key driver is to address the challenge of many small businesses being unable to compete because of their poor access to adequate broadband speeds.
- Both local authorities have established workstreams through their transformation boards to take advantage of the new opportunities presented by the improved access and speeds and have benefited from a collaborative project management approach.

4.2.2 **Highlands and Islands - Financial benefits identified**

- Research suggests that the project could deliver a Net Present Value of £504m over 15 years. This equates to a Gross Value Added (GVA) uplift of over £70m per annum being achieved within 15 years.

4.2.3 **Cumbria and North Yorkshire - Economic development benefits**

- The project is expected to lead to an increase in new business start-ups, including businesses now able to work from home, and /sell goods and services online.
- It will also create a more sustainable housing market and local communities.

4.2.4 **North Yorkshire and Borders - Community benefits**

- The project offers e-learning opportunities for smaller schools which are not able to support a wider ranging curriculum.
- It will also enable support for people with care in their own homes (e.g. tele-care and tele-health)

4.2.5 **North Yorkshire - Public sector transformation benefits**

- The project will exploit technologies which allow the sharing of information and, where possible, systems and hardware.
- Partners from across the county (Councils, Police, Fire, Health, National Parks) are involved in the "Connect Partnership". This Partnership is aimed at providing seamless service delivery (i.e. regardless of the provider) and web-based 'self service' which has the potential to improve the customer experience and to make service provision more efficient and effective.

4.2.6 **Borders - Benefits evaluation**

- The project intends to evaluate the benefits of broadband investments by tracking a range of indicators including: premises with enhanced connectivity, new business formations, employment and wage levels, use of services and levels of homeworking.

4.3 Key success factors

4.3.1 A well-managed local authority project is dependent upon:

- Strong senior commitment and leadership enabling clear and timely decision making;
- Good stakeholder engagement; and
- Good communication of vision and articulation of the need for and benefits of improved broadband.

4.3.2 Early discussion of the project vision with a wide group of stakeholders and partners can help to develop clarity about the wider benefits which the project will deliver.

4.3.3 Local bodies should ensure that at the outset their project develops a clear view of the outcomes and benefits it intends to deliver by implementing the project, acknowledging that flexibility is necessary in understanding where outcomes may adapt over time.

4.3.4 The project scope needs to reflect a wide range of benefits and these benefits should be aligned with delivery of the local vision.

4.3.5 A benefits monitoring and evaluation work stream will need to be established in order to track benefits over the lifetime of the projects.

4.3.6 While there tends to be strong emphasis on procurement activity, maintaining a focus on wider project outcomes and progressing wider activities necessary to achieve these should also be a priority.

5 Developing a funding strategy

5.1 Key learnings

5.1.1 BDUK expects that local bodies will 'match' the BDUK funding contribution with funding from other public sector sources, although this was not a requirement at the time when the Pilots were first identified. The Pilots have all since developed their own funding strategies, which involves exploring all funding opportunities that may be available in order to maximise the overall public sector contribution. In the current climate, which has seen an overall retrenchment in local government spend, this has proved to be a challenging process involving a significant time commitment.

5.1.2 Considerable work needs to be undertaken with elected members and partners, including development of a communications plan, to build a strong investment case which stands out against other competing local funding bids and which articulates the wider benefits which improved broadband infrastructure can bring.

5.1.3 A funding strategy will only gain support within a local body where it is underpinned by a coherent vision which envisages significant benefits around public sector transformation and economic development and growth.

5.1.4 A credible funding strategy can be a key mechanism for driving demand – for example contributions from Primary Care Trusts, Local Authorities and the Police in the development of digitised services can help drive demand.

5.1.5 Local bodies should provide bidders with clarity regarding the total amount of funding available for the project and any conditions associated with public sector funding streams. This gives certainty to bidders and helps to ensure that procurements are not delayed by either bidder reluctance to spend money during bid development, if the affordability position is unclear, or by a need to consider trade-offs of scope/coverage to fit within funding.

5.2 Pilot outputs

5.2.1 Three of the Pilots (North Yorkshire, Cumbria and Highlands & Islands) plan to use European Regional Development Fund (ERDF) as a major funding stream for their project (see section 6 below).

5.2.2 Both Cumbria and North Yorkshire have used Performance Reward Grant (see glossary) to support their superfast broadband projects.

5.2.3 The Borders project considered a wide range of funding sources including:

- ERDF to supporting business connectivity and demand stimulation;
- A possible bid to the Kings Fund (telemedicine);
- Growth and Innovation Fund – Revenue contribution to business demand stimulation through the UK IT Association;
- Possible revenue in kind (through work undertaken) from a range of voluntary and community groups, including Parish Liaison Officers and Community Development Officers, Rural Community Councils, Federation of Small Businesses, Chambers of Commerce, National Farmers Union;
- Community Infrastructure Levy - This is made up from contributions from developers but focused on strategic projects and delivered through a central pot. Though there are likely to be competing demands for this funding, it could provide a valuable source of matched funding for broadband infrastructure;

- New Homes Bonus - a payment from central government which amounts to borrowing against future potential growth; and,
- Growing Places Fund – available to help boost economic growth by getting the required infrastructure built to enable the creation of new jobs and homes by getting stalled projects moving again.

5.3 Key success factors

5.3.1 Local bodies should build in sufficient planning time to develop a funding strategy and investment case which has widespread leadership and stakeholder support – including, for local authorities, political leadership (cabinet and portfolio holder) and senior management team (including the Section 151 officer).

5.3.2 All funding opportunities (including EU Structural Funds – see below) which may be available should be investigated and exploited where possible, including funding from local businesses.

5.3.3 Local bodies should provide bidders with clarity regarding the total amount of public sector funding available for the project.

5.3.4 When developing a funding strategy which includes an element of local authority funding, a business case can be developed to support the investment case which identifies opportunities for growth or efficiencies which over a period of time would deliver potentially significant cashable savings (for example in the area of shared services or channel shift).

6 Accessing the European Regional Development Fund (ERDF)

6.1 Key learnings

6.1.1 ERDF is aimed at economic regeneration projects which offer substantial benefits that meet the needs of the region and its local areas and which would not be sustainable without a grant. The rest of the funding, known as 'match funding', comes from other sources such as: local authorities, government schemes, other public bodies and the private sector.

6.1.2 European regulations do not permit ERDF to be used to fund major broadband infrastructure in 'Regional Employment and Competitiveness' programme areas. However, ERDF can be used to fund "last mile" infrastructure to allow connectivity to broadband networks for SMEs. Cumbria and North Yorkshire have both been seeking clarity from the Department for Communities and Local Government (DCLG) on the definition of eligible expenditure, and are seeking to have the ability to include all expenditure on infrastructure between SMEs and the core network.

6.1.3 Each region's Local Management Committee (LMC), made up of a range of stakeholders including the local authorities, make the actual decision about which projects should get funding. In order to secure ERDF funding some of the Pilots have needed to lobby for it intensively including advocating changes to regional operational programmes (which can require European Commission approval).

6.1.4 Across the regions the LMC's have taken a variety of positions (for example, in the West Midlands the LMC was not supportive of Herefordshire's request for ERDF, whereas the North West LMC has recently invited calls for bids for connectivity to broadband networks for SMEs, which Cumbria are hoping to successfully bid for).

6.1.5 The Pilots (Cumbria and North Yorkshire) have stressed when lobbying for ERDF that in practice investments to connect SMEs will also be used for other customers. There has been ongoing dialogue with DCLG to allow as much flexibility as possible on this issue while ensuring that the ERDF programme is implemented in a way that is consistent with the Regulations governing the Structural Funds. DCLG will be taking a more flexible approach to the "last mile" to support SMEs who would benefit from fast access.

6.2 Pilot outputs

6.2.1 Both Cumbria and North Yorkshire put together multi-million pound bids for ERDF funding to support connectivity and use by small businesses to the superfast broadband network. These bids have received initial approval at the time of writing.

6.3 Key success factors

6.3.1 Local bodies should aim to access ERDF funding wherever possible. This will involve working with LMC's to determine priority areas for funding and may in certain instances involve consideration of a cross regional approach.

6.3.2 Local bodies should work with their LMCs to ensure that their ERDF Operational Programmes allow expenditure on broadband, and to get any changes agreed with the European Commission if necessary. They should then work with the LMCs to encourage prioritisation of spending on broadband and to seek support for specific broadband projects.

7 Demand for broadband services

7.1 Key learnings

7.1.1 All the Pilots recognise that 'build it and they will come' approach will not work and that the degree of demand and the transition from demand to actual take-up will determine both the commercial sustainability of the eventual solution and the realisation of public sector benefits.

7.1.2 The experience of the Pilots has demonstrated that the level of demand that a local body is able to demonstrate can help influence private sector bidders' confidence in the projected revenues from the sale of wholesale broadband services. This, in turn, can enable suppliers to invest and contribute more to a local broadband project and reduce the public sector subsidy required in an investment gap funding model.

7.1.3 There are two distinct aspects of demand stimulation. First is the need to raise the awareness of residents to the likely offer in order to increase take-up and access to services through the internet. The second, and critical to realising the economic benefits, is the need to build the capacity and understanding of the benefits of broadband among local business. The Pilots acknowledge that they did not initially realise how time consuming both of these areas of work would be.

7.1.4 In light of the evidence gained from the Pilots, there is a huge appetite for superfast broadband but a mismatch between the level of demand and the knowledge about how it can be exploited. In particular, there is a knowledge gap among business around the potential benefits of superfast broadband and the risk that investment in infrastructure, if not complemented by a programme of support will not lead to the competitiveness gains and could ultimately lead to low exploitation and marginal sustainability of the provision.

7.1.5 Demonstrating potential demand can include aggregating spend on public sector network connections to provide greater certainty of revenue flows for suppliers.

7.1.6 A major factor which will contribute to stimulating demand is the existence of a vibrant and competitive retail service provider (i.e. internet service providers) market. The key learning in ensuring take up is making sure any platform has equivalence of access (in terms of operational support systems and business support systems) to the rest of the UK.

7.2 Pilot outputs

7.2.1 **North Yorkshire's approach to demand stimulation** involved a concerted 'County-wide' project managed by NYCC to set up a network of broadband champions who would focus requests and commitment from residents into NYCC. This gave the county council an understanding of the residential demand profile for the county. NYCC will be able to access significant business support funding through ERDF investment. Some of the options developed to stimulate demand will include; on-site training for businesses on online applications, vouchers to cover the cost of installation and an awareness 'roadshow' visiting businesses to sign them up for the new service.

7.2.2 **The Borders project** has developed a comprehensive programme of demand stimulation focused on both community and business focused activity.

Community initiatives

- The project hosted a range of local events across both counties in order to inform Parish Council representatives of the project and its potential benefits. A key element of these events was the recruitment of Community Champions to assist the project in raising awareness within their community, educating residents about the benefits of

NGA and encouraging take up. At the time of writing, across the counties over 100 Champions had been recruited as community representatives.

- Residents' questionnaires – a residential survey (both on-line and paper based) was designed with the support of Fast Broadband for Herefordshire and Gloucestershire Rural Community Council. A key purpose of this initiative was to highlight the degree of latent demand across the area to bidders.
- Development of communications materials, such as newsletters.
- Appointment of a lead elected member as broadband champion to evangelise about the programme to communities.
- Business focused initiatives
- Communication via the Herefordshire Business Board and the Gloucestershire LEP was essential to feel 'ownership and involvement' of the project in order to promote to the network of businesses.
- The business demand stimulation activities are looking to provide a degree of 1-1 intensive business support to 'middle adopters' who require advice and guidance in order to implement business change through the exploitation of superfast broadband.
- Herefordshire Council has been running a series of workshops for rural businesses to promote the benefits of the internet and is intending to continue with those workshops and "drop-in" clinics. This is seen to be crucial in assisting local business to exploit the internet as a resource and improve competitiveness ultimately to increase GVA in the area.
- A similar early catalyst project 'connect.glos' in Gloucestershire, funded through the South West Regional Development Agency, engaged over 1,000 SMEs in promoting the wider use and benefit of broadband and ICT in their operations.
- Gloucestershire will soon have access to provision from a regionally procured business support service.
- Alongside the residential survey, a business survey has been developed with the support of the Herefordshire Business Board. This is primarily an online resource which feeds into an automated spreadsheet. The spreadsheet will be used to capture the paper based business and residential surveys from both counties to provide one holistic data source of the likely demand.

7.2.3 **Demand aggregation – North Yorkshire and Cumbria** have both focused heavily on demand aggregation in order to strengthen their overall investment case and to increase supplier confidence regarding revenue flows. Prior to commencing the current pilot project North Yorkshire already had successfully aggregated a significant amount of public sector demand across the county. Cumbria has adopted a plan for aggregation as part of its overall project strategy and is currently progressing this initiative in parallel with its other project activity. The case study below describes Cumbria's approach.

Case study - Cumbria's approach to demand aggregation:

- Cumbria County Council positioned its broadband procurement process alongside the creation of a Public Sector Network (PSN) for the county. They are working with partners to aggregate potential public sector capital and revenue streams over a 2/3 year time horizon, as part of developing the strongest possible business case that will encourage the appointed supplier to match BDUK investment in delivering rural superfast broadband across the county.
- Cumbria's approach involves utilising CLEO network (Cumbria and Lancashire Education Online) which connects primary and secondary schools in the county to high

speed broadband and will allow other public sector organisations such as NHS, the Police and District Council's the opportunity to align their IT networks at the appropriate point in their procurement cycle. The CLEO network which provides 10Mb connectivity to primary schools and 100Mb connectivity to secondary schools in Cumbria is currently operating at only 15% capacity. It is envisaged that the successful supplier appointed through the procurement process will be able to exploit a publicly owned asset that is currently operating at only 15% capacity.

- **District councils** - Cumbria are working with the district councils in its area to explore the financial and other benefits that may be realised locally by positioning the local network as part of a wider PSN. An improved countywide superfast broadband infrastructure provides increased potential to develop provision of shared services and in time this could lead to a single portal for all public sector services in Cumbria helping residents and businesses alike to easily access the services they need wherever they live and work in the county.
- **Parish councils** - The experience of the Pilots shows that Parish Councils can play an important role in building the bridge between the demand aggregation work of grassroots champions and the more strategic elements of activity typically overseen by County Councils.
- **Police -** The police in Cumbria see the PSN as a potential opportunity to achieve efficiency savings (through areas such as joint working and co-location of services). Exploiting secure mobile connectivity is also a priority and the intention is to increase the use of mobile handheld as a way of improving productivity of police operating in patrol vehicles, greatly reducing the need for them to return to base and make use of traditional paper based reporting procedures. Levels of mobile connectivity across the county are variable though and this would be greatly improved through the creation of a countywide superfast broadband infrastructure.
- **Health –** Cumbria NHS currently has its own network but there is a commitment going forward to align this to a common PSN)infrastructure across the county. Cumbria NHS are already leaders the field in making use of tele-care (use of remote sensing, fall alarms, alarms for movement in the home) and telemedicine (using mobile connectivity to help health workers to connect remotely in real time with patients records and provide an instant diagnosis). Initiatives such as these can help achieve significant savings in terms of bureaucracy, reducing the need to travel back to base to update records and importantly providing immediate diagnosis and support for patients to receive immediate care. Patchy mobile connectivity across the county however constrains the wider roll out of these services. As well as the direct impact and benefit to patients living in rural areas who are usually obliged to travel to access quality health care, the health service anticipates a 20% saving in administration costs.
- There are also interoperability benefits with other public sector partners who have responsibility e.g. for adult care services. A 'shared services' approach would open up possibilities to align separate information systems which would have a direct impact on efficiencies in terms of back office savings, reducing the need for expensive paper trails, increasing the productivity of frontline health and care workers and delivering direct benefit to patients in the home

7.3 Key success factors

7.3.1 The greater potential demand that can be demonstrated, the more attractive the project will stand as a potential investment opportunity for suppliers.

7.3.2 Local bodies should plan demand registration and stimulation activity at an early stage in the project development. This may include:

- Development of communications material including newsletters and questionnaires;
- Development of a dedicated portal to provide information to communities and to register demand (although it is acknowledged that this approach can have limited benefit in areas with limited or no access to broadband);
- Mobilising community and business champions to support demand stimulation activity as early as possible. Their roles can vary significantly ranging from holding community /business workshops to ensuring questionnaires are completed;
- Promotion of new digital technologies that can be used more innovatively to support sustainable economic development (such as tele-working);
- Where possible the above activities should be aligned with national initiatives such as Race Online.

7.3.3 Local Authorities and other public sector partners should investigate opportunities to aggregate demand by working together to identify quick wins, optimise shared benefits from joint working, and make the case for ongoing investment of public sector partner funding which may deliver significant cost benefits.

8 Community based approaches

8.1 Key learnings

8.1.1 A variety of different community-led approaches are being developed and tested in Cumbria (also a Big Society vanguard area) to support the rollout of broadband into villages and homes. Work here is being used to inform the development of a series of community involvement models which will be promoted to other communities and local authorities, via a community toolkit and Action for Communities in Rural England (ACRE) community representatives, as potential ways for them also to get involved in delivering broadband to their area.

8.1.2 The Rural Community Broadband Fund has been set up to support this work – both the development of the community involvement models and to provide funding to rural communities who want to take this approach. This is jointly funded by BDUK and Defra. It will make £20 million available to allow rural communities to apply for help with small scale broadband projects, and is specifically targeted at the 'final 10%' of the population.

8.1.3 The experience of the Cumbria community based Pilots and other work in North Yorkshire shows that local communities are willing and able to usefully channel their interest and enthusiasm into activities which add to and enhance the outputs of county / region wide broadband procurements and help achieve improved broadband coverage.

8.1.4 The success of community based projects is dependent on community organisation and mobilisation, technical support and assistance in preparing business cases and sourcing funding.

8.1.5 Experience of the Pilots to date has shown that the development of community based projects can have a long lead in time as communities organise themselves, then complete their requirements and liaise with suppliers. These requirements can shift significantly during the process based on what communities learn about the feasibility and cost of potential solutions. This has demonstrated that there is a need for independent technical advice about which routes are most appropriate for communities (such as fibre, wireless or to lobby to be part of county wide rollout).

8.1.6 Individual, small communities in Cumbria have sometimes encountered challenges in engaging with the supplier market. This has demonstrated the importance of communities clustering and aggregating their requirements together in order to gain a critical mass which gives them leverage to effectively engage with the market.

8.1.7 BDUK's consultation with community broadband groups in Cumbria has demonstrated a number of issues regarding community preferences, including:

- A commonly held view that having to manage a community access network is a 'chore not a vocation'. It is often a last resort not a preferred choice. As such it can present significant commercial sustainability issues;
- There is a need for lower cost backhaul solutions, and this need could be met by the availability of business grade Ethernet services, which would emerge as part of a broadband infrastructure upgrade if specified; and,
- Some of the communities in Cumbria who were initially enthusiastic about building or owning do it yourself networks moved towards a model which involved contributing extra to extend what could be incorporated into a county-wide infrastructure. Their approach moved from "how do we do it ourselves", to "how do we work with suppliers to go further", promoting choice and affordability.

8.1.8 Drawing on the work in Cumbria and North Yorkshire to date, five models of involvement have been developed by BDUK which will allow communities to improve on the

broadband solution that they might otherwise receive through the Local Broadband Plan. The models require increasing levels of community commitment. At the simplest level they involve demand aggregation work, allowing customers to register their interest for improved broadband. This increases to approaches where communities can improve on standard solutions and instead design – and even build and run – solutions tailored to their own requirements. The five models are:

- **Demand Registration** which includes rules to allow communities to opt for a better solution as part of the main County-level project, e.g. to go from fibre to the cabinet to fibre to the home. This will involve talking to each member of the community to 'sell' them superfast broadband, logging their interest on a demand registration template and possibly negotiating wayleave charges with local landowners – with the aim of influencing the county-wide Local Broadband Plan.
- **Build and Benefit** in which the community formally offers to help deliver a superfast solution by, for example, digging trenches, arranging way-leaves or paying higher installation charges to lower the costs for the Local Authority's broadband network providers.
- **Community Enterprise Partnership** approach in which the community raises some of the finance but works with a partner to bring the rest of the investment and to design, build and operate the network on behalf of the community.
- **Community Enterprise Concession** in which the community is prepared to raise all of the finance but offer a concession to a company to design, build and operate the network on its behalf.
- **Do It Yourself** in which the community is prepared to raise the finance as well as design, build and operate the network.

8.1.9 BDUK are in the process of developing a community broadband toolkit as a resource to promote best practice and a wider understanding of smaller scale broadband programmes. Its aim is not to be prescriptive but to draw upon the learning and experience of the Pilots and other resources.

8.2 Pilot outputs

8.2.1 **Cumbria community based approaches**

- A number of Community based projects have been developed in Cumbria with a focus on optimising connectivity for local communities. Cumbria County Council has been involved in this work from the start and is supportive of its aims. It is running alongside their own county-wide procurement process.
- Suppliers have been involved through informal discussions as the Cumbria groups developed their options and through a formal Industry Day. They are key partners in ensuring the success of this work, both in terms of acknowledging that they will need to utilise communities to stretch their coverage in extremely rural areas and in contributing to the development of some of the tools.
- The scoping and delivery of these projects required community organisation, and community support through parish councils. Community co-coordinators and existing broadband champions played a key role in developing a consensus on project priorities. Work was undertaken to gather requirements from a range of groups in Northern Fells, Eden and Garsdale Dent, who formed East Cumbria Broadband Forum (ECBF). The primary focus of these groups has been to test different aspects of the community 'Build and Benefit' approach, including the impact of variable terrain; population density; community skills and levels of funding. The results will be

used to inform the development of an industry-agreed 'Build and Benefit' model of involvement, which other communities can consider whether to pursue.

- Work in Cumbria to date has shown that a wide range of technical solutions to deliver edge of network coverage above a standard 2Mbps needs to be considered, evaluated and promoted, to enable communities to develop the most appropriate, cost effective and sensible solution for them. This will include wireless and satellite solutions as well as fibre.
- Due to challenges in a number of areas (for example, lead in times as communities organise themselves, engagement with the supplier market, sourcing of funding, achieving State Aid compliance and developing a business case), the progress of these projects has been slow, despite considerable effort from the communities themselves and the County Council, supported by BDUK. At the time of writing the outcome of the projects is uncertain, although more detail will be provided by BDUK as they progress.

Case Study - North Yorkshire community based project development methodology

North Yorkshire set aside an internal NYCC funding programme (around £750k – Performance Reward Grant) to roll out connectivity to community hubs. The approach is currently being refined but initial focus has involved developing a 4 stage process for developing community based projects:

Stage 1 involves stimulating demand by:

- Using mapping information to identify potential communities
- Encouraging and facilitating communities to gauge interest
- Developing a community register of who will sign-up
- Developing and agreeing criteria for funding allocations

The outcome at end of this stage involves a number of communities expressing a wish to pursue community-led broadband projects

Stage 2 is a planning phase involving

- A technical assessment of deliverability
- The exploration of the potential of joining up with other communities
- The exploration of alternative funding options (e.g. commercial cases)

The outcome at end Stage 2 is a desk-top assessment of technical feasibility and optimal solutions

Stage 3 is the proposal phase involving

- Communities developing a "business plan" including community sustainability
- Communities agreeing on areas covered by the project
- Developing a technical blueprint

The outcome at end of Stage 3 is worked up community proposal that can be considered for allocation of funding.

Stage 4 includes a technical and business case refinement followed by the community preparing the way for delivery

The outcome at end of Stage 4 is that the community projects are approved for funding and delivery can begin

This approach is underpinned by the production of a North Yorkshire community toolkit.

8.3 Key success factors

8.3.1 Local Authorities should aim to promote the involvement of local communities by:

- Providing support and guidance to their communities;
- Supporting community organisation and mobilisation; and,
- Facilitating access to funding and technical support.

8.3.2 Community based projects are easier to develop and implement for all parties if the local authority is supportive. As a minimum, they will need to share information with communities about whether they are in an area which will not receive superfast broadband. At the other end of the spectrum, they can support by being an 'accountable body' for the financing (i.e. by underwriting community based projects through the provision of advancing payments which are then repaid by community groups as other sources of funding become available). It is also critically important that local authorities set a very clear framework/approach for communities to work within and to be agreed by all agencies involved from the outset.

8.3.3 Where there are existing community based projects, the Local Broadband Plan will need to be developed to take them into account. Local bodies are also responsible for working with communities that wish to develop their own local projects to fit them within a Local Broadband Plan.

8.3.4 All parties should have flexibility to cope with community requirements changing as they work through the process.

8.3.5 The time communities will need to complete their requirements and liaise with suppliers should not be underestimated.

8.3.6 All projects receiving funding will need to be compliant with State Aid regulations. In practice, this means the communities will need to:

- Map and target their proposed project area, and consult publicly to minimise the extent of the intervention;
- Run a fair, open and technology neutral competitive process to select a supplier minimising the public subsidy required; and,
- Ensure open access to the network, benchmarking and other provisions are used to protect abuse of the monopoly position of the wholesale provider and maximise competition on the new network.

Local authorities may wish to support communities with these activities as they are likely to need access to external expertise and capacity.

8.3.7 Community based projects should undertake early planning in order to identify potential funding sources. This could come from multiple sources, including the private sector (such as telecoms suppliers or bank loans) and the community itself (such as a one-off connection charge or a share of future revenues). Public sector funding can also be applied for via the Rural Community Broadband Fund, which has funding from BDUK and the Rural Development Programme for England (RDPE).

8.3.8 All community projects should produce an appropriate fully costed, detailed business plan which, amongst other things, will describe: the business case, what the project will do, details of the proposed technical solution, how it will be delivered and operate, who will be involved and benefit, where and when it will be delivered and what the funds will be spent on. Funders will also want to know who is accountable for making sure that the funding is

properly spent and they will want to have confidence that the project will be well managed, that risks to delivery have been identified and that plans are in place to ensure that these will be mitigated.

8.3.9 Individual communities should investigate opportunities for clustering together and aggregating their requirements in order to gain a critical mass which gives them leverage to effectively engage with the supplier market.

9 Project mobilisation

9.1 Key learnings

9.1.1 Project mobilisation takes time – all the Pilots took significantly longer to commence their procurements than was originally envisaged prior to detailed planning.

9.1.2 There were a number of reasons why this occurred:

- Availability of resources - some of the Pilots were operating within financial constraints and therefore the project teams were created by adjusting current workloads, seconding staff and creating the resource capability to make appointments; and,
- There was also some lack of awareness at the time of developing the original applications for Pilots of the scale of the challenge or the resources required to undertake the task. This issue has now since been addressed in the Local Broadband Plan guidance for local bodies.
- Internal governance mechanism also took time to establish, including formal adoption of, for example, accountable body status (see section 8.3.2).

9.2 Pilot outputs

9.2.1 Preparing for procurement involved a wide range of time activities for all the Pilots including:

- Development of funding strategies and sourcing of funding (e.g. ERDF);
- Agreement on local priorities and areas of development;
- Creation and agreement of a Project Initiation Document;
- Communications planning;
- Planning, structuring and managing the procurement process;
- Development of draft procurement documentation including a draft specification of requirements, an evaluation framework and draft contract;
- Development and refinement of the Local / Regional Broadband Plan;
- Establishment of the project board and governance arrangements;
- Recruitment, induction and mobilisation of the project team, including engaging external advisors;
- Stakeholder and community engagement activity;
- Development of a ‘data room’;
- Demand stimulation activity and planning;
- Setting up and hosting an industry day;
- State Aid approval planning and public consultation;
- Developing a risk register; and
- Identification of known planning activities or restrictions.

9.3 Key success factors

9.3.1 Projects require a minimum of 6 months mobilisation and planning activity prior to embarking on procurement. Key areas of focus should include:

- Recruiting the project team and establishing governance arrangements;
- Forming partnership agreements with other local bodies as required;
- Developing the business case, vision and project priorities / objectives;
- Undertaking demand stimulation activity and awareness raising communications;
- Developing a funding strategy;
- Selecting and procuring which approach (and which people) will support the chosen procurement route
- Planning and consultation to ensure state aid compliance; and,
- Developing a ‘data room’ containing key information about the project area including demographics, current existence of broadband and demand for superfast Broadband.

10 Project resourcing

10.1 Key learnings

10.1.1 Projects require dedicated teams to ensure successful delivery. The scale of the challenge should not be underestimated. For example, the Borders Project started by slowly supplementing its resources as the scale of the challenge became more apparent. The project had to increase its resource levels every time it peeled back another layer of complexity, though with an understanding that different skills would be needed to address the different complexities. This required flexibility and transferable skills form project team members and also buying in external expertise, when needed.

10.2 Pilot outputs

10.2.1 The configuration of roles differed for each individual pilot project but a range of typical roles will include:

- **Senior Responsible Owner -** who has ultimate responsibility for the project including:
  - Making decisions on no- material changes;
  - Resolving problems and conflicts that arise;
  - Controlling any risks, issues and changes that may arise during the project;
  - Ensuring that benefits identified in the business case are realised;
  - Ensuring adequate funding is available;
  - Approving costs at key milestones; and,
  - Ensuring that appropriate mechanisms are in place to ensure that the project is audited (whether internally or externally).
- **Project Director**
  - Project co-ordination and management;
  - Development of the Local Broadband Plan and business case;
  - Overseeing the procurement process and bidder negotiations;
  - Organising and directing the project team;
  - Monitoring and control of progress - ensuring that any actions required by the project board are taken;
  - Managing the project budget and ensure that additional funding required is sought in good time;
  - Monitoring, controlling and reporting progress to the Project Board meetings and liaising with BDUK;
  - Project organisational structure;
  - Ensuring that the resources required to deliver the project are adequate;
  - Producing agreed documentation for review by the project board;
  - Ensuring the suppliers deliver the agreed solution;
  - Building in quality checks so that the final solution is fit for purpose;
  - Controlling any risks, issues and changes that may arise during the project;

- Resolving problems and conflicts that arise;
- High level communications; and,
- Ensuring that lessons learned are captured.

- **Commercial & Procurement Lead** responsible for:
  - Procurement process management;
  - Direct legal requirements;
  - Funding strategy; and,
  - State Aid process and approval.
- **Technical Lead** responsible for:
  - Development of the requirements specification;
  - Deployment assurance;
  - Supplier management; and
  - Development of technical assurance of solutions and implementation plans, and authorisation of any changes during the life of the contract.
- **Stakeholder and community engagement Lead** including demand stimulation and registration. This role involves developing strategies to promote the take up of superfast broadband and mobilising community and business champions to support demand stimulation activity.

- **Legal support** responsible for:
  - Supporting the procurement process and preparation of the procurement documentation
  - Supporting the preparation of the State Aid notification
- **Other key project roles include:**
  - Finance management;
  - Communications;
  - External funding business cases and applications;
  - Mapping and data room preparation;
  - Output and outcome monitoring (benefits evaluation);
  - Planning – 'barrier busting' and ensuring that the project is aligned with other infrastructural activities;
  - Audit; and,
  - Project support.

10.3 Key success factors

10.3.1 As a minimum projects require a dedicated Project Director, a commercial lead, a community engagement lead, a technical lead and legal support as well as wider project support (such administration, communications, finance and dedicated resources to undertake demand stimulation activity). Where future projects procure their supplier through the Broadband Delivery Framework, BDUK anticipates that fewer resources overall would be needed.

10.3.2 Local Bodies should:

- Ensure all key roles are recruited to before pre-procurement activity commences;
- Include sufficient time within the project plan to accommodate the time required to produce procurement documentation including approvals;
- Ensure that decisions about requirements require all strategic and legal ramifications to be understood;
- Be clear about the role of external advisors and be clear with them regarding project objectives, the timeline and the processes in use, ensuring control of key documentation and processes is retained within the internal team; and,
- Give early consideration to the future management of the contract and consider putting in place strong capability at any early stage to ensure continuity for the operational phase.

11 Governance

11.1 Key learnings

11.1.1 All the pilot projects were directed by a Project Board which met on a regular basis throughout the project. For Borders this meant cross county representation (including from the NHS) which has aided shared knowledge, experience, learning and flexible resource identification.

11.1.2 All the projects established Project Boards which played a key role in the control process and received regular reports on the progress of the project from the project teams. Key project documentation and decisions, including key procurement decisions, were signed off by the boards. They also agreed any change controls which represented material changes to the agreed direction as identified in the Local Broadband Plans.

11.1.3 Project Boards undertook pre-planning work to develop a process for managing 'trade-offs' (for example, between speed and coverage and reprioritising investment) in order to ensure that the procurement would not be delayed.

11.2 Pilot outputs

11.2.1 **Highlands and Islands** provides a good practice example of a Project Board (using PRINCE2 principles) which was established to approve all outputs and to authorise any major deviation from agreed objectives. The Board has the authority to sign off the completion for each of the deliverables/ outputs before authorising the start of subsequent project phases. The Board ensures that the required resources are committed and will arbitrate on any conflicts within the project or negotiate a solution to any issues between the project and any external bodies. It also approves key appointments and is responsible for assurance that the project remains on course to deliver the desired outcomes in accordance with the authorised Project Initiation Document and all quality procedures.

11.3 Key success factors

11.3.1 Local bodies should establish a Project Board to oversee the delivery of the project at a strategic level as well as to ensure the objectives and milestones have been met and to provide high level support in resolving the challenges which arise.

11.3.2 Clear roles and responsibilities should be defined from the outset, for both the Project Board and the Project team.

11.3.3 Given that it is likely there will be different phases to the project there will be a need to review the project management roles and membership (particularly that of the board) throughout the project lifecycle.

11.3.4 The monitoring and daily guidance for the pilot projects should be the responsibility of the Project Team. The Project Delivery team advise on technical issues and implement the outcomes of the Project Process team after approval by the Project Board.

12 Procurement / commercial approaches

12.1 Key learnings

12.1.1 **Competitive dialogue** - All Pilots have pursued a Competitive Dialogue procurement process. They adopted this approach because, while they could define what they want, they were not able to assess either the technological viability to deliver that or the likely "gap" in funding to address market failure without dialogue with the service suppliers. Competitive Dialogue was seen as essential to leverage the most economically advantageous solution across a range of options rather than one specified route, both commercially and technically.

12.1.2 **Area based lotting** – All Pilots opted for one single broadband contract as it is easy to manage and retains the critical mass required. They had little information to intelligently define lot areas which could create issues like cherry picking profitable lots and reduce the potential for cross subsidy. Area based lots may also reduce the economy of scale and therefore the affordability and value for money of the solution/s and would create difficulties in managing and integrating between providers.

12.1.3 Cumbria took forward a procurement which divided the Council's requirements into two service based procurement lots. Broadband services was combined with a procurement for public sector enterprise network services within the same lot. ICT Services (excluding networks) was a separate lot. Cumbria invited bidders to bid for one, two or both lots with the Authority reserving the right to merge the lots for the most economically advantageous offer.

12.1.4 **Staging / slicing of the procurement** (separating the procurement into separate contracts, for example a. design stage, actual implementation stage and the wholesale services delivery stage) was considered by a number of Pilots but rejected on the basis that there are likely to be major problems in integrating between the phases (making risk transfer difficult), competition following the design stage would be severely curtailed and the designs might have to be largely reworked during the implementation phase anyway.

12.1.5 **Investment gap funding model** – three of the Pilots (Cumbria, Borders and Highlands & Islands) favoured a gap funding model as it is well understood and accepted by industry and considered it to be an effective mechanism for using public investment to leverage private sector investment. The risk largely lies with the private sector in determining ongoing demand for services. This business model reduces the risk of low demand leading to long-term subsidies from the public sector, and can be simpler for the public sector to deliver than the more infrastructure-based models. Under the investment gap funding approach a local body procures broadband coverage and speed outcomes from a private sector supplier. BDUK will provide funding, through a grant, to the local body as a contribution to the payments made by the local body to the supplier under the contract.

12.1.6 **Joint ventures** - the Pilots who eventually adopted the gap funding model considered alternative commercial models and in particular the joint venture option. This model involves the public sector funding the deployment of assets, but then partners with a private-sector firm (or firms) to build, operate and maintain the network for the public sector. The public sector typically retains at least some ownership of the assets. A Special Purpose Vehicle (SPV) may be set up between the public and private partners to manage the expenditure and any surplus income generated. This option was considered because of its potential to spread the risk with a private sector company, offering the local body a return on investment and enabling the local body to retain a degree of control over the work programming. The model also allows the public sector to take a long-term view on the financing and benefits of the infrastructure, whilst harnessing the skills, experience

and operational efficiency that the private sector can offer. However it was rejected by the Cumbria and Borders projects for a number of reasons described below:

- The public sector has to commit to a degree of ongoing involvement in the network with the associated higher levels of risk;
- To make this option attractive to the private sector, the public sector may have to put in a relatively high percentage of the overall cost but this would not be known until the procurement was complete. As such it would be hard to quantify the potential financial exposure to which the council would be committing itself; and,
- All Pilots looked to contract with a single "prime" supplier who would take on all of the responsibility for the delivery of the broadband coverage and speed objectives set out in the contract.

12.1.7 There were a number of **key procurement characteristics and principles** which were common across all the pilot procurements:

- All geographies within the defined area must be addressed (although some differing roll out approaches applied);
- The service must provide a platform for future growth to extend broadband speeds in the future;
- Customers should have a choice of more than one retail service provider;
- Wholesale and retail solutions must be provided;
- Wholesale offering must be available to all service providers enabling them to offer equivalent and additional services;
- Stimulation of demand across individuals, communities, business and associated take up will be required;
- Open access to underlying technology and passive infrastructure will be required for a minimum of seven years;
- Peak hour throughputs and congestion management of services will be required;
- Capital funding is available but solutions must be commercially sustainable and investment from industry will be expected. No revenue funding will be provided;
- Investment based on outcomes, for example agreed service level and characteristics for business and residential consumers;
- Technology neutral procurement process; and
- A procurement process which complies with European regulations.

12.2 Pilot outputs

Case Study – North Yorkshire: Consideration of Commercial options

North Yorkshire County Council (NYCC) took forward two options – gap funding and the Public sector owned supplier model. Under the latter model NYnet (a company wholly owned by NYCC and the delivery arm of the Project) would provide broadband infrastructure services.

NYCC decided that they wanted to procure an open access, wholesale high quality broadband infrastructure which offers Multiple Service Provider interconnection points and allows Community Hub interconnection points.

In order to deliver this outcome they took two commercial models into the procurement process for suppliers to bid against.

- Option 1 – a traditional 'gap funding' model which involves the supplier investing their own money at their risk to supplement public funds in order to provide the NGA network. The successful bidder would own and operate and receive 100% of any revenue generated.
- Option 2 – involves the bidder designing, building, managing and operating a broadband Infrastructure which will be purchased by NYnet, and used for the provision of wholesale services to service providers with all revenues flowing to NYnet.

Variant bids were also allowed. For example, both options allowed the participant providing a platform or solution that will meet the needs of existing and future requirements for public sector services that will enable NYnet to retail to end user public sector customers. Option 2 allowed bidders to inject capital in return for revenue margin share.

Under Option 2, NYnet would make available access to existing core infrastructure located in 10 BT exchanges around North Yorkshire, thereby allowing the market to consider how it can further exploit the potential of public sector aggregation. NYnet currently is the principal platform for public sector aggregation in North Yorkshire.

NYCC and NYnet believe that existing public sector sites (e.g. schools) can act as cost effective locations for community hubs. By entering into an arrangement where backhaul to the sites is aggregated with public sector demand, NYCC and NYnet believe that an economically more sustainable proposition can be created in terms of backhaul pricing for Community Service Providers. NYCC and NYnet see this as having a potential pivotal role in the 350 parishes of less than 200 citizens, where rental charges for backhaul may render investment by a community based provider to be commercially untenable.

North Yorkshire recognised that there are commercial advantages and disadvantages in both options relating to risk transfer, margin retention, control and coverage. It was critical that both options were appraised on an equal footing and so a methodology has been developed for evaluating on this basis. The final outcome has yet to be determined at the time of writing this document.

12.3 Key success factors

12.3.1 The experience of the Pilots demonstrates a preference for the adoption of a simple subsidy of the private sector's investment gap. Where local bodies intend to adopt this approach they should use BDUK's Broadband Delivery Framework which provides a simplified commercial route for local bodies to procure broadband services using a 'gap' model.

12.3.2 When considering commercial models local bodies should seek optimal risk allocation between the public and private sector, while ensuring that it is acceptable and deliverable.

12.3.3 Where local bodies adopt non-gap funding models in the future, such as a joint venture approach, they will need to give full consideration to any take-up risk, considering whether the take-up risk is transferred. If the risk of ensuring adequate take–up of broadband resides with the local body, full consideration of the range of take up scenarios will be required with an assessment of the impact on the finances of the local body for each scenario and whether 'worst case' scenarios can be funded adequately by the local body.

12.3.4 Local bodies should endeavour to form cross border partnerships to better aggregate demand.

13 Use of enterprise networks

13.1 Key learnings

13.1.1 There are opportunities for suppliers of broadband solutions to make use of existing and planned investments in enterprise networks used by public sector organisations. Moreover, local bodies have a role in identifying public sector demand for services on the new network (for example opportunities for additional public sector site connectivity or home workers)

13.1.2 Use of the public sector's own enterprise networks is not always feasible. For example, they may require extensive technical alteration to make them fit for purpose, which might render them impractical or too expensive for re-use, or may be subject to commercial contracts or procurement constraints that do not permit their reuse for the household consumer market. The Borders Broadband project ruled this option out because:

- Existing contracts did not allow for use for the delivery of broadband services;
- There were anticipated technical issues relating to ensuring adequate separation of community and public sector traffic; and
- There was a general lack of infrastructure and what existed was often in an unsuitable physical location.

13.2 Pilot outputs

Case study – Highlands and Islands - Aligning projects to procure superfast broadband with procurement of public sector networks

Pathfinder is the contract which provides high bandwidth connectivity to over 800 public sector sites across the Highlands and Islands Enterprise (HIE) area through aggregation of the wide area network demands of five Local Councils: The Highland Council, Orkney Islands Council, Shetland Islands Council, Argyll & Bute Council and Moray Council.

The contract was awarded to Thus (now Cable & Wireless) in March 2007 and expires in March 2014. The service provides bandwidths in the range from 4Mbps to 1Gbps to all schools, libraries and the majority of Council offices throughout the area.

The contract is managed by The Highland Council as lead authority on behalf of the other Councils and a project team is currently looking at the options for re-procurement. As the 800 public sector sites within this contract represent a significant demand within the area, there is the question as to how Pathfinder and the Next Generation Broadband project might benefit each other.

HIE, as the body responsible for the superfast broadband project in the Highlands and Islands, did consider joining up the Next Generation Broadband project with the Pathfinder re-procurement. Under this option, the two projects would come together into a single procurement with a combined set of requirements covering broadband for HIE and Wide Area Network services for the Councils. The combined demand would be presented to the market and a joint procurement team set up to manage the process. There were advantages in this approach with greater demand and so a more attractive proposition to bidders with the public sector acting as an anchor tenant to the broadband network.

However, this option was rejected because the entire project becomes much more complex with multiple stakeholders and differing requirements. Timescales would also be hit hard as a result. Lessons from the initial Pathfinder project indicated that trying to manage across

sector on such a project, without senior cross-sector ownership would be extremely difficult. There was no evidence of a desire to enter into such a joint approach, likely due to this very reason.

It was agreed, though, that although the two projects would proceed separately, they would build on each other to provide an overall enhanced outcome. For example, public sector sites could be used as locations for HIE Points of Presence (PoPs) which may reduce costs to the HIE project and in turn would benefit Pathfinder through lower service costs. The delivery of increased backhaul and PoP infrastructure as a result of the HIE project should in turn provide more attractive services and costs to Pathfinder. The advantages of this approach is that benefits can be realised between the two projects without the complexity and increased overhead including increased timescales of a combined project.

13.3 Key success factors

13.3.1 Local bodies should consider opportunities for utilising existing public sector networks. This could be in the form of providing access to public sector enterprise network infrastructure and/or services to leverage those assets, services and expenditure to get the best Superfast Broadband upgrades possible. Or it may involve re-using broadband infrastructure to lower the investment required in future public sector enterprise networks.

13.3.2 Local bodies should be fully aware of any contractual or technical constraints which may prevent this use of existing public sector enterprise networks.

14 Planning

14.1 Key learnings

14.1.1 Planning issues are often perceived as barriers to broadband development. In addressing these constraints the Pilots have endeavoured to align their projects with other infrastructural activities being undertaken by other local bodies in the area.

14.1.2 The Borders team set up a 'planning and barrier busting task and finish group' reporting to Herefordshire & Gloucestershire Planning Committees.

14.1.3 A range of initiatives have been pursued by the Pilots working with partner organisations to promote synergy with broadband projects including:

- Review of planning and highways policies to ensure integration of fibre becomes the norm in all new build and ongoing maintenance programmes; and,
- Working with the national grid, sewage and utility companies to investigate opportunities for laying fibre through use of pylons or earthworks.

14.2 Pilot outputs

Case study – Cumbria approach to addressing barrier busting

Cumbria has been developing a Planning Performance Agreement (PPA) which aims to promote improved co-ordination across the different planning agencies. It requires the agreement of all parties from the Cumbria Joint Planning Officers Group, including representatives from the County Council, districts councils and the National Park Authority.

This agreement will consider the types of planning applications which will need to be submitted and will describe the information which suppliers will be expected to provide as part of that agreement.

In addition Cumbria County Council is developing a number of other key strands in developing its planning approach, including:

- Ensuring that key principles of good planning practice are enshrined in its contract with its preferred supplier(s);
- Capturing forward planning activity captured in Local Development Frameworks;
- Developing a Geographical Information Systems database showing development plan allocations/designations and constraints;
- Making representations to Local Planning Authorities regarding positive broadband statements;
- Developing land acquisition plans; and,
- Pursuing options regarding the possibility of compulsory powers to avoid Way Leaves Negotiation and putting in place a specialist team to manage negotiation agreements with land-owners.

14.3 Key success factors

14.3.1 Local bodies should ensure that full consideration is given to planning issues at an early stage in the project mobilisation phase. Key issues to consider include:

- Work with planning authorities including district councils to ensure a joined up approach to planning activity across the project area; and,

- Ensure that contracts with suppliers are clear about their obligations in relation to planning issues.

15 Communications planning

15.1 Key learnings

15.1.1 The pilot projects are all highly visible and politically important with a strong drive coming from central and local government and a very high degree of political and local scrutiny.

15.1.2 There is a need to ensure effective communication routes to the wide range of stakeholders and these routes will also differ between each audience.

15.1.3 Demand stimulation activity for residents and businesses are almost exclusively focussed on communication in their first phases.

15.2 Pilot outputs

15.2.1 **The Borders Broadband Project** developed a comprehensive communications plan, which mirrored the approach taken by the other Pilots. It addressed and identified the different audiences, stages, key messages, activities and methods of delivery throughout the cycle of the project. A wide range of audiences was identified as needing to be reached by the project. These include;

- Local Politicians and MPs / MEPs;
- BDUK;
- Community and representative groups;
- Potential business customers;
- Potential bidders and subcontractors / ISPs who have a commercial stake in the solution;
- The Local Authorities and their staff;
- The Local Enterprise Partnerships covering Herefordshire and Gloucestershire;
- Service providers;
- Gatekeepers such as the Federation of Small Businesses, National Farmers Union, Chambers, Associations of Local Councils, Market Town Partnerships, Voluntary Service Groups, Community Councils, IT Support Companies; and,
- Other infrastructure providers e.g. power, road, rail.

A range of messages were identified as being pertinent to distinct audiences and relevant at different stages of the project. These include;

- Notification of the tender process and period;
- Notification of the contracted supplier;
- Managing expectations over the timescales of the physical deployment
- Managing expectations of the extent and topology of the physical infrastructure
- Managing expectations around the retail cost of the service
- Launching the infrastructure deployment
- Launching the services
- Raising awareness of the potential provision

- Building capacity around the exploitation of that provision; and,
- Sharing the lessons learnt

15.2.2 **Cumbria** identified a number of groups of people who will play key roles in facilitating engagement with stakeholders such as:

- Elected members in representing the views of local communities, identifying opportunities where broadband will make a difference, and feeding information from the community back in order to shape the delivery of the project accordingly;
- Community based representatives and Hub co-coordinators in generating local involvement in the project to bring together community interests; help shape delivery and reality test proposals; and awareness raising of the project;
- County Council area based teams to ensure maximum community engagement;
- Connecting Cumbria Partnership Board in providing opportunities for feedback and ensuring stakeholders understand what has happened as a result of their input, with representatives on this group facilitating two way dialogue;
- County Council Leader and Chief Executive in facilitating engagement with public sector partners in Cumbria and Members of Parliament; and,
- Cumbria County Council and Chamber of Commerce in managing the relationship with the business sector so that they are fully engaged.

To support the ongoing communication channels described above Cumbria also undertook a package of core communication activity aimed at all stakeholders including: a newsletter (produced every 6 weeks), establishing a dedicated 'Connecting Cumbria' website as well as content delivered via Twitter, production of regular briefing packs and media management (targeted articles and press releases).

15.3 Key success factors

15.3.1 Ensure that all stakeholders are fully informed about the overall objectives of the project and the key phases of activity, establishing key messages, as there is a high risk of people misinterpreting the purpose of the project. Understand that there will be a high level of interest in the project, but also a high level of disinterest from people who do not understand the value or future relevance.

15.3.2 Allocate sufficient time to communicate with stakeholders and communities at the start of the project in developing the project vision by getting the right people round the table early.

15.3.3 Communications should be proactive. The high degree of interest from individuals, local groups, businesses, other public sector bodies, political leaders and government agencies means that communication must be managed in a systematic and consistent manner to avoid the burden of 'ad hoc' or bespoke responses becoming too great on the project's limited resources.

15.3.4 Projects should adopt key 'good practice' communications principles:

- Messages should be consistent across the project area;
- Key stakeholders, suppliers, customers and the project team should have up to date information without having to request it;
- Key messages should be tailored to the right audience so that information looks relevant; and,

- Communications activities should be scheduled in implementation plans so that messages, materials and delivery mechanisms are prepared well in advance.

15.3.5 Ensure stakeholder views inform development of project as it develops its specification.

15.3.6 Build stakeholder understanding of their potential role in delivering the project aims while effectively managing expectations about what is achievable in the short term.

15.3.7 Engage bidders setting up industry days which give bidders a chance to understand the projected vision, objectives and approach.

15.3.8 Develop targeted community events across the area in order to mobilise and engage communities, giving them the opportunity to inform, shape and be involved in the delivery of the project.

16 Partnership working between local bodies

16.1 Key learnings

16.1.1 Three of the Pilots involve joint working between a number of authorities (Highlands and Islands (covering six local authority areas), the Borders Broadband Project covering Herefordshire and Gloucestershire and the North Yorkshire project involving North Yorkshire County Council and York City Council[5]. In scoping their projects the Pilots determined the optimum size of a project based upon a number of factors such as potential economies of scale achievable, procurement costs likely to be incurred and incentivising suppliers to bid based on a scalable procurement.

16.1.2 The experience of these Pilots shows that local bodies are willing and able to work together to increase the scale of intervention where this is more efficient, without resulting in slower development and procurement times.

16.2 Pilot outputs

16.2.1 **Herefordshire and Gloucestershire joint working -** Herefordshire agreed to act as the lead for the public sector. Gloucestershire put in place an agreement with Herefordshire to agree funding and other resources into the joint effort. It was deemed that this is more efficient than having either two mirror contracts or separate arrangements and maintains a clear line for contracting.

16.2.2 The whole project was overseen by a joint Herefordshire and Gloucestershire project board, which also included PCT representation, and the CEOs of both local authorities were briefed on a regular basis.

16.2.3 In delivering the project the two counties have remained aligned in terms of strategy, approach, and respective contributions to resourcing and funding. Moreover, the dual authority approach has helped to ensure access to a range of skills and greater capacity to deliver than would be the case for a single county procurement.

16.3 Key success factors

16.3.1 Local bodies should endeavour to form cross border partnerships to better aggregate demand. In considering the optimum size of a project local bodies should consider the following factors:

- The extent of local collaboration achievable, where local bodies will need to work to an agreed timetable, and be capable of agreeing an effective project governance structure;
- Potential economies of scale in the delivery of broadband solutions;
- The likely 'transaction' costs for both the public sector and bidders in progressing procurements, relative to the value of investment required. Smaller and more numerous procurements are likely to cost more overall, and disincentivise suppliers from bidding;
- Geographical distribution of the targeted business and residential consumers, including authority boundaries;
- Local body funding and the level and skills of available resources; and,

[5] The Connecting North Yorkshire project also involves all 7 District Councils and others in a collaborative project approach.

- The ability to create a well competed procurement for a commercially sustainable solution.

16.3.2 Cross-county aggregation of procurements will also be actively encouraged by BDUK because this will enable a greater number of projects to move along the national ‘pipeline’ more quickly.

16.3.3 When developing relationships with partners local authorities need to consider how they will work with neighbouring councils where supplier solutions will overlap council boundaries (for example, where an exchange area in the solution sits astride two local authorities).

17 Engagement with suppliers and understanding the market

17.1 Key learnings

17.1.1 Suppliers and service providers are willing to participate in local projects and the marketplace has the capacity to address a number of procurements. However, this capacity is limited and there is a risk of market overload at a national level with multiple broadband procurements taking place simultaneously.

17.1.2 There was a preference from both Pilots and their bidders for making the pilot procurements as large in scale as possible. Suppliers were concerned about the impact of delivering to sparsely populated areas on financial viability but in general were happy with aggregation where it reached between 100,000-300,000 target properties.

17.2 Pilot outputs

17.2.1 **The Highlands and Islands and Borders Broadband** projects considered options to undertake procurement based solely on geographically restricted pilot areas as opposed to county / region wide procurements. These were rejected on the assumption that the initial demand would be limited and so the bidder's business case would be reduced which, in turn, would affect their investment position. There is a further disadvantage in that any subsequent procurement to tackle a later phase would be less competitive as the demand would be lower and in addition, the supplier to the initial project would also be in a stronger position to win any further procurement.

17.3 Key success factors

17.3.1 Local bodies should seek to minimise transaction and delivery costs for the public and private sectors by working together.

17.3.2 Local bodies should seek to develop high level requirements which are technology agnostic such that the market should decide the best solution.

17.3.3 BDUK will need to organise a coordinated approach of projects at a national level to ensure a steady pipeline of procurements staggered over a period of time in order to avoid the risk of market overload, but maintaining pace to ensure completion of the Broadband Delivery Programme on time. BDUK intends to work with local bodies to manage and co-ordinate the timing of these procurements. If such a pipeline cannot be maintained the supplier market may be unwilling or unable to participate in a significant number of competitive procurements, particularly if too many projects overlap in terms of timing.

17.3.4 Local bodies should seek to keep bidders interested in the process in order to maintain competitive tension until contract award. A key way of maintaining supplier interest is by stressing the project strengths, such as local authority funding commitments, deliverable timescales, effective governance (quick decision making) and credible demand stimulation plans.

18 Creating a data room

18.1 Key learnings

18.1.1 It is important to provide bidders with key information about the project area covering demographics, current existence and demand for Superfast Broadband.

18.2 Pilot outputs

18.2.1 The data made available by The Borders Broadband project is described below which is typical of the data which the Pilots has made available for bidders.

- **Location & Demographics including:**
  - A description of key population areas within the proposed project area which are in scope (i.e. where there is market failure) and out of scope;
  - Description of the proposed area in terms of size, population, residential and commercial;
  - Premises, post codes in the area and population density information; and,
  - Population data for key towns and settlements (e.g. with populations over 1,000).
- **Communications and Topography including**
  - Communications – description of the road and rail infrastructure; and,
  - Topographical maps – for example showing hills, valleys, open spaces and wooded areas.
- **Existing Provision**
  - Private hard infrastructure - including BT exchange mapping information;
  - Details of existing broadband speeds available across the area;
  - Wireless provision – description of the range of wireless providers delivering services to the area;
  - Local loop unbundling which has taken place in the area and the companies involved;
  - Public sector networks – including details of leasing agreements, private fibre owned by commercial private suppliers, third party networks such as regional education networks and relevant information about the capacity of such networks; and,
  - Public sites including public buildings.
- **Demand and Opportunity**
  - Business information including:
    - A description of the local economy and the spatial distribution of businesses including the employment location of different industry sectors;
    - Available data on self-employed / home based workers;
    - Details of expressed demand as articulated by businesses within the area;
    - Organisations with access to broadband were asked about the adequacy of the current service and their need for a faster service in the future;
    - Relevance and demand for trading over the internet within the area;

        - Evidence of the willingness of respondents to pay extra per month on the basis that it would ensure a better broadband service/next generation access;
        - Details of active business groups in the area; and,
        - Details of Planned demand stimulation activities among local businesses.
    - Community information including evidence from market testing activity including the results of community surveys
- **Medium – Long Term Growth**
    - Maps and Plans to illustrate where the growth in residential and economic development provision is anticipated.
    - Information on potential changes to local policies or practices which may impact on implementation – i.e. property rationalisation by public sector organisations.

18.3 Key success factors

18.3.1 Bidders will expect procuring authorities to provide as much information about the area as possible, including the location of residential premises and communities, the location and nature of businesses, the location and placement of public sector spend, the location of actual supply infrastructure and potential locations for infrastructure (public sector or community locations).

18.3.2 This information should be prepared well in advance of commencing procurement activity.

18.3.3 All local bodies should ensure that they are legally entitled to use specific data sources and will need to sign a Non–Disclosure Agreement with BDUK for key data sets provided by BDUK, and agree with any other data owners (including suppliers to the local body) permission to make data available. In addition, information on existing and forecast public sector spend on relevant services that bidders may factor into their proposals should also be provided.

Annex A: Glossary

Broadband – The term used to describe a wide range of technologies that allow high-speed, always-on access to the Internet. This is most often delivered via a connection through a telephone line or cable service, but can also be delivered using wireless and satellite connections. A potential access speed of less than 512 Kbps is deemed not to be broadband.

DCLG – Department for Communities and Local Government.

ERDF – European Regional Development Fund.

Fibre based solutions – see FTTC, FTTH and FTTB.

FTTC (Fibre-to-the-cabinet) – Access network consisting of optical fibre extending from the access node to the street cabinet. The street cabinet is usually located only a few hundred metres from subscriber premises. The remaining segment of the access network from the cabinet to the customer is usually a copper pair but could use another technology, such as wireless.

FTTH (Fibre-to-the-home) – A form of fibre optic communication delivered in which the optical signal reaches the end user's living or office space.

FTTB (Fibre-to-the-building) (or FTTP - Fibre-to-the-premise) – A form of fibre-optic communications delivery in which an optical fibre is run directly onto the customers' premises.

Gbps – Gigabits per second

GVA (Gross Value Added) - A measure of the value of goods and services produced in an area.

Internet Service Provider (ISP) – a company that offers retail access packages to the internet. They combine the basic connectivity and services like email, voip, a home hub and internet security.

Local Authority Resource Centre' (LARC) (also known as 'Huddle') - a virtual resource, to provide information and documentation for local bodies who wish to access additional information about the BDUK Pilots and wider programme.

Local Bodies - any public sector body that will be developing local broadband projects for the delivery of broadband services. It is anticipated local bodies will primarily be English Local Authorities, working alone or jointly, and potentially some English Local Authorities working together in Local Enterprise Partnerships.

Local Broadband Plan - a document which covers the broadband strategy, delivery plans for infrastructure upgrades and the outline business case for the overall desired investment. It should also explain how improvements to broadband infrastructure will support the needs of the community and will be aligned with other local / regional plans and strategies.

Mbps – Megabits per second.

Mobile broadband – Various types of wireless high-speed internet access through a portable modem, telephone or other device.

NGA - Next Generation Access.

Not spot – A geographic postcode area where Customers do not have access to fixed line or wireless broadband.

Ofcom – The Office of Communications.

PCT – Primary Care Trust

PEN - Public Enterprise Network – a network which carries voice and data traffic between public sector offices and provides access to and from other networks.

Performance Reward Grant – an unringfenced grant shared between local authorities for meeting past targets.

PSN – Public Sector Network or Public Services Network - a network which is configured to allow traffic to be treated very securely at a variety of security levels and complies with specific Cabinet office guidelines on traffic separation.

RDPE – Rural Development Programme for England.

Slow spot – A geographic postcode area where Customers have access to fixed line or wireless broadband at access speeds below 2Mbps.

SME – Small and Medium Enterprise.

SRO - Senior Responsible Owner.

Standard Broadband – BDUK has defined standard broadband as a service available at the edge of the network that allows a quality home working experience, for which a headline access speed of 2Mbps can be used as a proxy.

Superfast Broadband – BDUK has defined Superfast Broadband as having a potential headline download access speed of greater than 24Mbps, with no upper limit. Typically, at a wholesale level, the underlying capability can be measured in gigabits. The retail market then takes this capability and delivers affordable propositions.

Take-up – The acceptance of broadband services by an end user where offered.

Technology neutral – in the context of Broadband it means all carrying mediums can be used to create the best possible wholesale broadband service.

Wide Area Network – a network which covers a large geographical area, such as a County Council's own network, which is used to transmit data among employees, partners and service users from various geographical locations.

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