



Business Plan

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Summary

Broadband internet access is now widely accepted as a necessity for an economically viable community. Most individuals and businesses depend on effective access to information and many services, and the internet is rapidly becoming the dominant means of access.

Northumberland is well served with broadband within its main community centres (towns and larger villages), but there remain many more remote rural areas which are too far from their telephone exchange to receive broadband services. These remote locations are a vital part of the overall economic and social community in Northumberland. It is increasingly important that they are able to access broadband services.

“The lack of access to high-speed broadband is putting many of those who work in rural communities at a severe disadvantage.”

The Prince of Wales, 10th October 2009

Complete Solution

Although the need for broadband in remote rural areas is widely accepted, it is also accepted that simply providing infrastructure connectivity is not sufficient. Existing trials of community broadband services in remote rural areas have identified specific requirements that are not always addressed.

Access to Services

Individuals and businesses require broadband internet access to access services. Many community broadband services provide only a limited range of ISP services, and consequently a reduced overall value compared to services that are open to competition.

Access to Skills

Because the more remote rural communities have not been able to access broadband internet services, they are often “behind the learning curve” compared to less remote locations. There is a need to address this skills gap directly and support them in making full use of the services as they become available.

Awareness

By their nature, remote communities may be unaware that broadband services have been made available to them. A promotion campaign is necessary to ensure the take-up of services as they are delivered.

Genuine Demand

The Northumberland Uplands presents a significant challenge for total broadband coverage. The Uplands area includes significant areas that are very remote – being both distant from their nearest exchange and sparsely populated. However, despite their remote location, these areas remain a significant part of the wider Northumberland community and economy.

The small-scale community broadband service at Fontburn has shown the importance of broadband in the Northumberland Uplands:

“We’ve got to know our neighbours much better than we did previously, it was nice to work co-operatively together and to achieve something, it gave us confidence to tackle other projects such as the Centenary and re-surfacing the playground. We now are establishing a community liaison group with Northumbrian Water. The confidence wouldn’t have been there before, people used to feel rather isolated and that the community here was too small to matter to anyone except ourselves. We were very proud of all that we achieved and enjoyed through the Centenary.”

Fontburn resident

The availability of broadband is not some “nice-to-have” feature simply to enhance the local community; it is increasingly seen as an economic necessity for the Uplands area.

“We have approximately 16 properties in the Coquet Valley that currently have limited or no broadband access. The properties all form part of individual farm holdings and as such would benefit from broadband access in addition to the domestic element. Some individuals have, in the past attempted to obtain increased connectivity, but they have either found it to be extremely expensive or logistically unachievable (eg distance from the nearest exchange).

Whilst the numbers involved are not large, the benefits of better access to broadband would greatly improve the quality of these people’s lives, more so, as we continue to see the internet as a principal source of information, services and choice.”

Senior Estate Advisor, MoD, Otterburn

Critical Expertise

GreySky Consulting brings exceptional expertise in the delivery, application and use of broadband services. GreySky’s Consulting Director has extensive experience in the development of broadband services in both private sector (BT and Cable & Wireless) and public sector (Advantage West Midlands). This expertise allows us to deliver a complete and focused solution to achieve maximum value for money within the required project timescales.

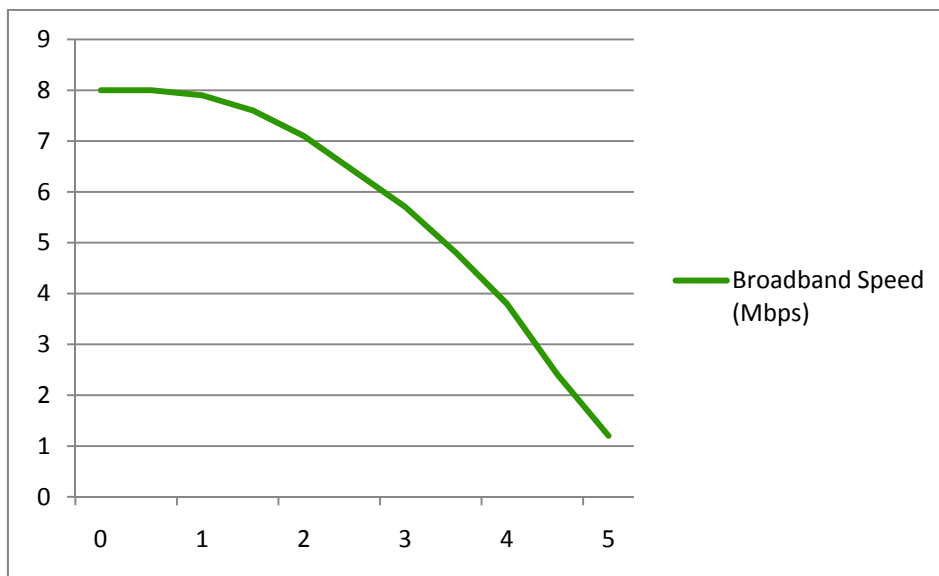
Background

Intervention by One NorthEast in 2002-03 ensured that all telephone exchanges in the North East region were enabled to deliver ADSL broadband – initially at 2 Mbps, later at 8 Mbps. Northumberland benefited along with the rest of the region, and all 72 BT exchanges in Northumberland deliver broadband services. As a result 96% of homes and businesses have access to broadband at over 512 Kbps.

However, times change and it is important that Northumberland can keep up. 512 Kbps is no longer adequate for the delivery of modern services. The Digital Britain report identified 2 Mbps as the minimum acceptable. Delivering 2 Mbps broadband services throughout Northumberland, that can then keep pace with ongoing development is a significant challenge that needs to address issues of technology, geography, demand and market failure.

Technology

Existing broadband services in the Northumberland Uplands are delivered predominantly by ADSL technology. This provides up to 8 Mbps currently, but this is highly dependent on distance from the exchange. Available speeds reduce with distance, and beyond 5km have typically fallen below 1 Mbps. However, where it is available, ADSL broadband service is stable in all weather conditions, highly reliable, and gives access to the full range of services on the internet.



Broadband speed with distance from exchange

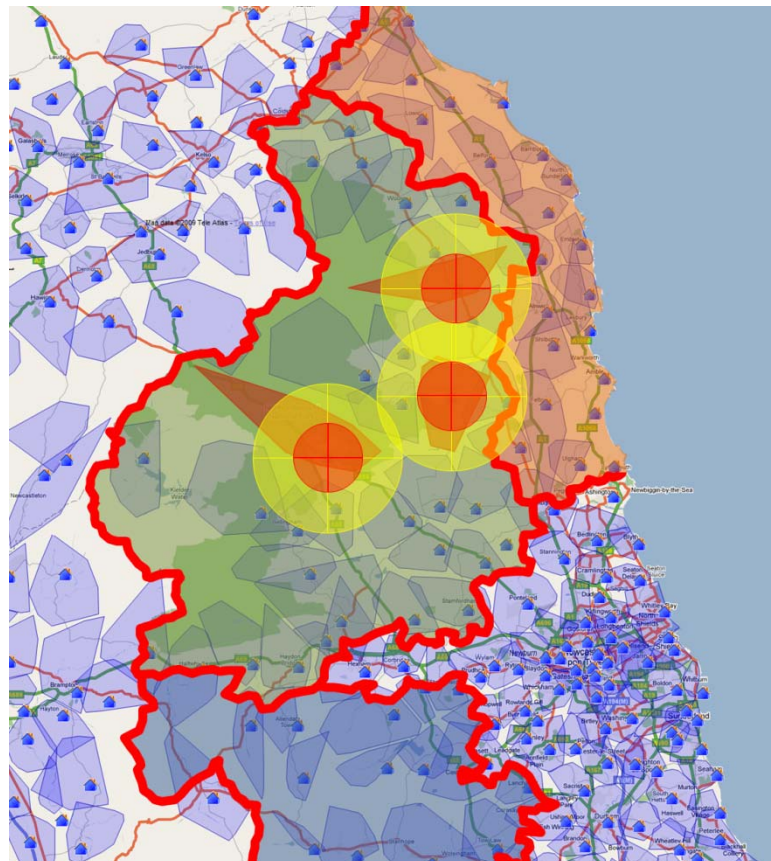
Broadband Enabling Technology

Northumberland is a very rural county, and the Uplands area especially so. Of the 37 exchanges principally serving the Uplands area, most serve exchange areas that extend beyond the 5km range for effective broadband services. As a result, only 82% of premises in the Uplands can access broadband – compared to 96% for Northumberland as a whole.

New ADSL technology has recently become available on a commercial basis that allows the current 5 km range from the exchange to be extended to 12 km. This allows full ADSL broadband services up to 2 Mbps to be delivered up to 12 km from the exchange – having a potentially significant impact on broadband availability in rural areas.

The Otterburn, Rothbury and Powburn exchanges are highlighted in the map to show the extent of the 5km and 12km reach on the area served. The limitation of service caused by the 5km restriction, and the potential of the 12km development is clear throughout the Uplands area.

However, BET infrastructure is expensive compared to conventional ADSL services. ISPs have so far not been willing to pay the additional costs to provide services to remote rural areas.



Satellite and Wireless

Other technologies are available and have been tested in Northumberland. A trial has been undertaken at Fontburn, supported by One NorthEast using satellite and wireless technologies. This has proved the importance of broadband services to remote communities, but also highlighted the weakness of some community services. Most notably, concern regarding the exit strategy of support packages, the poor availability of internet services, and some concern regarding reliability in adverse weather conditions.

Technologies such as satellite and wireless are potentially important in remote areas, but they do need to be considered in respect of their ability to deliver appropriate and sustainable services. All satellite services suffer from a delay caused by the transmission via the high orbit satellite – this makes them unsuitable for voice and video over internet services.

Next Generation Services

As the current dominant technology for broadband provision, ADSL provides a strong platform for technological development. Since its introduction standard speeds have increased from 2 Mbps to 8 Mbps (available throughout Northumberland) and speeds in excess of 20 Mbps are now possible in larger exchanges enabled with ADSL2+ technology. However, ADSL2+ infrastructure is expensive and currently only appropriate for larger exchanges. ADSL2+ is not currently not available or planned anywhere in Northumberland.

Demand

Compared to the high speed “Next-Gen” broadband services developing in more urban areas, broadband services delivered throughout the Northumberland Uplands area suffer from slow speed and inadequate reach. However, addressing both aspects with high-speed broadband for all would require a massive change, probably demanding widespread fibre provision. Estimates for “fibre to the premises” broadband for all suggest a £20 billion investment requirement for the UK. Whilst some think this should be the target, it does not appear financially viable in the near term. Consequently prioritisation is required.

Reach vs Speed

The first question of prioritisation is the balance between greater speed and greater reach. A small-scale telephone survey among existing broadband users, and those without broadband connection showed the need for greater reach at 2 Mbps to be by far the greatest priority for the Northumberland Uplands.

The experiences of the residents at Fontburn give the strongest evidence of the need for broadband. Fontburn is served from the Rothbury exchange, but is too far away to receive existing ADSL broadband services. They currently receive broadband via a community satellite and wireless service as a trial. Comments from Fontburn residents show the importance of broadband in rural areas.

“We were seriously thinking that we had made a mistake coming to live here and would have to move house to an area with a better connection.”

“Our oldest son has gone up to High School and has been told he needs to use the internet for revision, projects, work etc. This would have been impossible on our previous connection.”

“It has opened up lots of new sources and made it fast and easy to research ideas, organizations, services – previously we felt very cut-off and frustrated when others spoke of being able to do these things.”

“Have used it for this purpose many times. Homework from school increasingly has to be researched on the internet.”

“Access to more information, researched products before buying them, easier and quicker to work online applying for cattle passports etc.”

The desire to get broadband for those who don't yet have broadband connections is **far** greater than the desire of those who do have a reliable broadband connection to increase their connection speed. The strongest demand of all is from those who have slow or unreliable broadband services.

"I live on a farm 1 mile from Longframlington and 1 mile from the phone exchange and currently have 1 Mbps, of which I am grateful as it is a vast improvement from dial up. However there are three businesses run from the farm and the internet is an integral and valuable tool for all of us, I run a B&B my husband has the farm and my son runs a recycling business. There are times when the internet is impossible to use, i.e. 4.30pm when children arrive home from school and weekends. If there was a possibility of an improved service I would be very interested."

This demonstrates the importance of broadband access on demand – once users have it, they do not want to lose it. But also demonstrates the need to "keep up". 1 Mbps would once have been considered relatively fast broadband, but now is seen as not adequate.

Reliability

It is clear from feedback, that once a broadband service is obtained, that reliability of the service is of paramount concern. This applies both to the technical reliability of the service, and to the commercial reliability of the business model. The users of the Fontburn community service again highlight the importance.

"It could do with being faster and it sometimes struggles in bad weather."

"I am concerned what will happen and hope costs can be kept to an affordable level so that we can continue to use and enjoy the internet."

"We cannot stress enough how much we need this service to continue....the thought of going back to the "dark ages" is unbearable! As for the speed of connection, we are still wallowing in the joy of having what we have now, but it would be nice to keep up with the rest of the world now that we've come this far."

"We are very happy with the service and the only worry is what happens after the subsidised period ends."

Services

One of the important messages from community services is the importance of the services that are accessed, not the availability of the connection. Feedback from Alston (Cyber Moor) is that the limited ISP services available are a restriction to the service for some users.

Broadband services from the major service providers have the clear advantage that they are open to use by all ISPs. So residents and businesses can choose which service they want (including “free” services) and they can be provided. This open access to the full range of ISPs is an important consideration regarding supplier choice.

Public Support

The need for public support is well recognised and there is strong support throughout Northumberland.

Initial investigations of demand for broadband in the areas surrounding Rothbury led to strong interest. The local Councillor (Steven Bridgett) has taken a lead on focusing demand and is actively generating support. He has discussed the need for improved broadband at the Rothbury Business Club, and written a press release for the local papers. This has led to direct feedback from other locations throughout Northumberland identifying the need for improved service in remote areas.

The public support is also matched by business support. The Northumberland National Parks Authority has identified the benefit it would gain through greater availability of broadband services.

We think it would be a great idea, and support it fully. This would allow us to improve our office provision for all public sector agencies at the Coquetdale Centre, including potentially running the Defra funded videoconferencing solution that is being rolled out for all English National Parks. It would also enable us to move and host our web “GIS” to the Centre, and the greater speed would enable us to offer a better service in this area to all members of the public accessing this data. Finally the Coquetdale Centre is our Business Continuity backup site and this would greatly improve the functionality and day to day running of this process, as currently quite a large amount of data is physically transferred via the road, and this would not be necessary if there was improved connectivity.

Tim Fuller, IT Manager, Northumberland National Park Authority

Market Failure

Provision of broadband services in the Northumberland Uplands present a significant problem for infrastructure and service providers. Current assessment of demand shows that the priority in the Northumberland Uplands area is for widespread “2 Mbps broadband for all” with little demand for high speed “Next-Gen” services. This suggests two different aspects of market failure that require solution.

2 Mbps for All

All exchanges in the North East region are broadband enabled. It is clear that this would not have happened in Northumberland without public sector intervention. However, following enablement, demand for broadband services in Northumberland is high – on a par with demand in affluent areas in the South East.

Current ADSL technology, however restricts broadband services to 5km from the exchange. The rural nature of the Northumberland Uplands means that there are many locations in the area without broadband services. The satellite and wireless trial at Fontburn demonstrates that technology solutions are available that can deliver broadband services throughout the area. However, the trial also demonstrates the need to be able to deliver a long term solution at prices equivalent to mainstream ADSL services within the 5km range.

Supply-Side Market Failure

Feedback from Northumberland Uplands residents demonstrates that there is clear demand for reliable 2 Mbps broadband services throughout the area, but supply side market failure in the ability to provide the services at standard market prices without public sector intervention.

Next-Gen Services

Several businesses and individuals with existing broadband connectivity at 2 Mbps or higher have been contacted to identify their desire to access high speed “Next-Gen” broadband services. There is very little apparent interest in such services, and no willingness to pay a greater amount for more advanced services.

Demand-Side Market Failure

Although the lack of interest in high-speed Next-Gen services does demonstrate a clear market priority for “2 Mbps for all”, it also suggests a demand-side market failure for the more advanced services.

Public Sector Intervention

Although the final selection of the technology provider will be a part of the proposed project, discussions with BT have been undertaken to ensure the validity of assumptions, and the technical and commercial possibility of solutions.

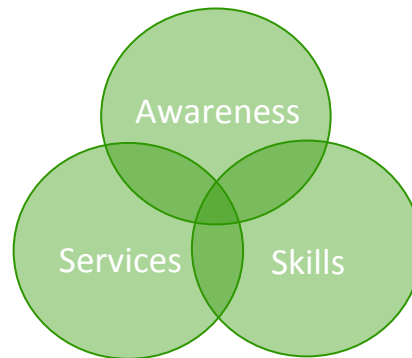
Discussions with BT have determined that one-off public sector interventions can provide the incentive to private sector providers to deliver infrastructure that will allow standard commercial broadband services to be provided in areas where they are neither currently available nor planned to be available.

Based on the discussions with BT, a range of public sector interventions have been identified that are believed to enable different levels of coverage across the Northumberland Uplands area. The coverage provided will depend on the solution and service provider selected as a part of this proposed project, but the levels identified (see table on page 17) can be considered minimum levels, since they have already been confirmed.

The discussions with BT have also confirmed that there is no plan to resolve the gap in provision of 2 Mbps broadband service beyond the 5km range prior to the “Universal Service Commitment” (USC) implementation in 2012. It should also be noted that although Stephen Timms has committed to see USC and other aspects of the Digital Britain report through treasury before the next general election, Ed Vaizey (Conservative Shadow Minister for Culture) has stated his intention not to support the “50p tax”. Without this it is not clear that USC can be delivered as proposed in the report.

Requirement

The development of broadband services in the Northumberland Uplands requires three elements – Access to Services; Access to Skills; Awareness. It is important that these three elements are presented together to ensure maximum impact.



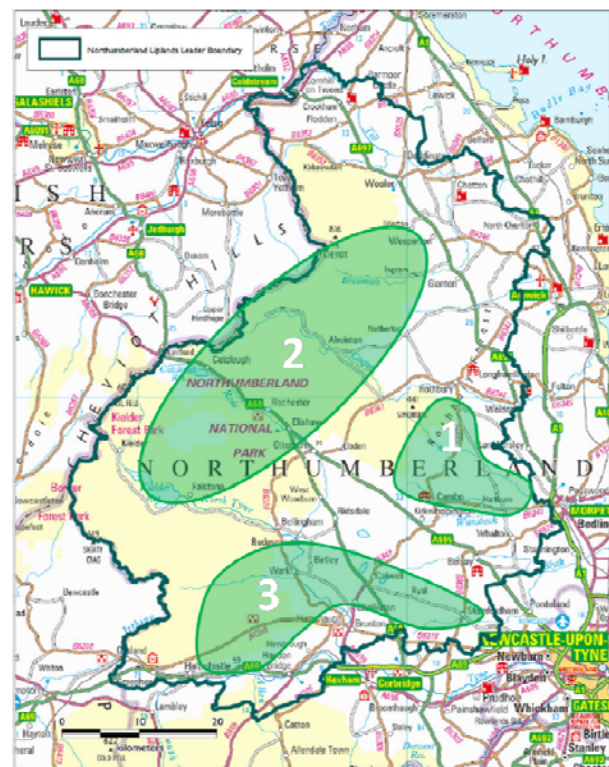
Services

Access to services is the most critical aspect of the project. Access to services is driven by the availability of broadband infrastructure, and the connectivity of this infrastructure to online services. Infrastructure providers will be required to demonstrate maximum reach of the infrastructure, and strong connectivity to online services.

2 Mbps for All

Gaps in broadband services at 2 Mbps extend throughout the Northumberland Uplands area. Solutions offering the maximum impact on this weakness are sought. However it is accepted that a full solution throughout the whole area may be outside the scope of funding available. To reflect this, priority areas with the greatest concentration of locations without broadband connectivity have been identified.

The priority areas are identified in the map to the right. A more detailed identification of these priority areas is presented in Appendix A.



Estimated consumers (individuals and businesses) without 2 Mbps broadband access

Northumberland Uplands overall	2,300
Priority area 1 (Rothbury Moor)	120
Priority area 2 (Cheviot)	380
Priority area 3 (Tyne Dale)	260

Next-Gen

Although identifying approaches to address the gaps in provision at 2 Mbps is identified as the priority for the Northumberland Uplands area, we are keen to begin to address the apparent demand-side market failure for high speed “Next-Gen” services. The first generation of broadband rollout proved that access to services was a strong driver to demand – exchanges were enabled and demand grew.

The maximum speed of broadband access anywhere in the Northumberland Uplands area is 8 Mbps. There is a requirement to understand the potential impact of Next-Gen services (at 20 Mbps or above) to the area. Solutions will be encouraged that allow provision of Next-Gen services to key locations within the overall infrastructure delivery plan. The location of these Next-Gen services within the Northumberland Uplands area is flexible, but the economic impact of their location should be considered.

Price

Feedback received from users of the community broadband service at Fontburn, and from potential beneficiaries questioned regarding Next-Gen services in Northumberland show there is strong price sensitivity. Users expect to pay the same price for services that is available to less remote users – including wanting the “free” services available from some ISPs.

Price sensitivity appears to be standard. Alston provides a community broadband service at prices lower than the normal market rate. This reflects the reduced choice of ISP services available on the service, and there is considered to be no scope to increase prices without significantly impacting take-up.

Skills

It is important that businesses and communities are able to obtain full benefit from the broadband services as they become available. Training in key internet applications is an effective means of encouraging wider use of internet services. The Fontburn project has demonstrated the importance of a community website in encouraging use of the internet, and maximised the impact of the connectivity to the community. Training in similar applications within the areas covered by the new broadband services is an integral part of the requirement.

Awareness

It is clearly important that businesses, individuals and communities are aware of the new services as they are delivered. The priority areas represent some of the most remote locations in the Northumberland Uplands. Ensuring awareness of the services and their potential impact is an important part of the requirement.

Exit Strategy

The need for broadband as a permanent and sustainable service is of paramount importance. There are two aspects to this – the need for the service delivered to be a permanent service, and the need for the service to continue to be updated as technology and expectations develop over time.

Permanent Service

The need for any service delivered to be permanent is highlighted by experience at Fontburn. They currently benefit from a community broadband service supported by a grant from One NorthEast. This provides subsidised broadband services by satellite and wireless delivery, but the subsidy will end and there is great concern about what will happen:

“We are very happy with the service and the only worry is what happens after the subsidised period ends.”

It will be a requirement of the Northumberland Uplands broadband project that the selected infrastructure provider will be responsible for the ongoing management and maintenance of the infrastructure, and will be required to provide services at standard market rates (obtainable elsewhere in Northumberland).

Updating the Service (Next-Gen Compatibility)

Technology and expectations continue to develop. The Digital Britain report has identified the need to deliver 2 Mbps service for all as the minimum requirement. This project will make substantial progress toward this in the Northumberland Uplands area. However, the report also identifies the need to promote higher access speeds. This need to keep up with developments has also been identified at Fontburn:

“We cannot stress enough how much we need this service to continue....the thought of going back to the “dark ages” is unbearable! As for the speed of connection, we are still wallowing in the joy of having what we have now, but it would be nice to keep up with the rest of the world now that we’ve come this far.”

The selected service provider will be required to propose approaches to address the apparent current demand-side market failure for high speed “Next-Gen” services, and include solutions for Next-Gen services in the Northumberland Uplands area.

Addressing the apparent demand-side market failure is considered the greatest priority for the Next-Gen services in the Northumberland Uplands. This may be achievable through small-scale implementations of high-speed services within the wider 2 Mbps delivery to allow the services to be tested within the Northumberland Uplands environment.

Solution

A project is proposed that will deliver the three integrated parts of the requirement (Services, Skills, Awareness) to ensure the maximum overall resolution of the gap in service provision at 2 Mbps in the area, and the maximum economic and social impact of the services delivered.

The project will use public sector intervention to lever maximum additional investment from other sources – including linking with other projects, and integrating private sector investment.

Infrastructure

Implementation of appropriate infrastructure solutions to deliver improved broadband to the Northumberland Uplands area is central to the overall project. The choice of infrastructure provider will be determined by a procurement exercise which will form the first element of the project.

An infrastructure provider will be sought to deliver significant improvement to the Northumberland Uplands. This procurement exercise will establish exactly what can be delivered for the budget available. However, an analysis has been undertaken to establish the priority areas within the Northumberland Uplands, and an appropriate budget to improve access.

Possible infrastructure capability opportunities

Option	Option 1			Option 2	Option 3
Area	Area 1	Area 2	Area 3	All Uplands	All Uplands
2 Mbps Connections enabled	100	330	230	1,800	1,800
20 Mbps Connections enabled	-	-	-	-	1,000
% of problem lines addressed	83%	87%	88%	78%	78%
% impact to Uplands overall	4%	14%	10%	78%	78%
Expected take-up	30	75	55	575	1,000

Option 1 – Priority Delivery

The first option is to deliver 2 Mbps broadband to one or more of the priority areas identified in the Requirement section (page 13) and detailed in Appendix A. If all three priority areas are addressed, this could resolve 38% of existing “not-spots” in the Northumberland Uplands.

Option 2 – Complete Coverage

The second option is to provide 2 Mbps broadband throughout the whole of the Northumberland Uplands area to address as many of the “not-spots” as possible. This has the potential to resolve 78% of the existing not-spots, and increase coverage in the Northumberland Uplands from its current 82% to 96% or higher.

Option 3 – Next Generation

The “Next Generation” option provides 2 Mbps broadband throughout the Northumberland Uplands area, plus high speed broadband at an appropriate location (in agreement with the selected infrastructure provider). This would address 78% of existing not-spots, and provide a clear development path towards a Next-Gen infrastructure for the Northumberland Uplands.

Vendor Selection

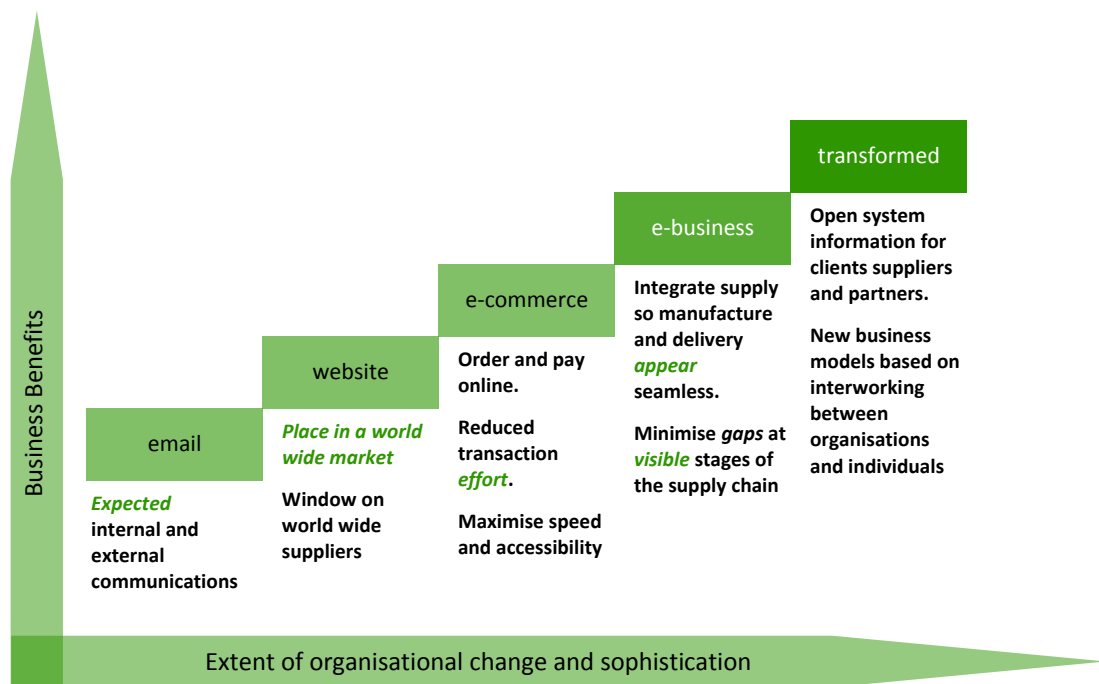
Once a budget for infrastructure provision is agreed, an infrastructure provider will be sought to deliver the best solution for the available budget. The procurement exercise to select the most appropriate infrastructure provider is required to ensure maximum value for money (connections per £) and to comply with European Union requirements.

If a single priority area within Option 1 is chosen, then a full selection exercise may not be appropriate and would not represent good value. In this case, a restricted number of possible infrastructure providers would be approached to identify their willingness to complete the test project in partnership.

A range of budget expectations for the different options is presented in the Finance section (page 25).

Skills

Analysis of the impact of ICT on business development for the Transformational ICT project for BERR identified the strong impact of website developments for small businesses.



adapted from "Learning through reinforcing synergies" n-e-life.com

It is clear that the ability to support their own website is a critical aspect of business development. Using a business website is an important step in its own right and provides a vital platform for higher transformational stages of e-commerce and e-business developments. Feedback from Fontburn also emphasises the importance of their community website on the strength of communications and community involvement that has arisen as a result of the community broadband project

The overall broadband project for the Northumberland Uplands will include training in designing, building, publishing and maintaining websites. The training will include workshops focused on websites for tourism based businesses to cater for their specific requirements.

Local Delivery

The training will be based on workshops delivered by GreySky Consulting for Business Link. The workshops are proven and popular courses that have been delivered successfully throughout Northumberland.

GreySky maintains a suite of modern laptop PCs which will be used to deliver the workshops in convenient locations within or close to the communities that will benefit from the new broadband services – such as village halls, etc.

Awareness

It is vital that the communities benefitting from the new broadband services are aware of the services available to them. Publicity will be developed as the infrastructure is rolled out to ensure maximum awareness. However, there is already strong media interest in rural broadband issues, and the need for broadband in Northumberland has featured several times in local press. Marketing will be required for the training workshops – so the necessary advertising of these courses, combined with the existing interest is expected to provide the necessary awareness to ensure successful take-up of services.

Exit Strategy

The proposed project will seek an infrastructure provider who can integrate the service delivered in the Northumberland Uplands area into a standard commercial service within the rest of the North East region. It is believed that this provides the most effective solution for the delivery of a permanent service, with access to a full range of online services, and a service that will respond to wider developments in market demand and technical capabilities.

By incorporating the project into an existing service infrastructure in this way, the project is believed to deliver the maximum long-term benefit to users, with least intervention from the public sector.

This approach is supported by experience of the first phase of broadband rollout in the North East region. When all exchanges in the North East region were broadband enabled in 2003-04, BT provided 2 Mbps broadband services – the standard at the time. Shortly this standard was replaced by 8 Mbps services. All exchanges have been upgraded to the new standard as a part of BT's ongoing maintenance and development of their infrastructure and service. As a result the region (and Northumberland in particular) has benefitted from the availability of ongoing service developments.

Delivery

The project will be managed by GreySky Consulting Ltd. GreySky's Consulting Director (James Saunby) will lead and take ownership of all aspects of the project delivery.

Infrastructure

Once the available budget has been identified, the project delivery will begin with the selection of an appropriate infrastructure provider. GreySky will manage the procurement exercise. Technical advice with regard to best practice procurement procedures will be provided by the Northumberland County Council procurement team. Assessment of the bids received will be undertaken by a team comprised from individuals and organisations associated with the Northumberland Uplands Leader programme and regional business support organisations, such as the NECC.

The selected infrastructure provider will be required to manage the installation and commissioning of infrastructure in accordance with their own established management systems to achieve the agreed infrastructure and service requirements. Monitoring and reporting of the infrastructure delivery will be undertaken by GreySky's Consulting Director to ensure provision of appropriate management reports required by the project, and ensure execution of the project with delivery of agreed milestones and timescales.

Skills

The training workshops will be delivered by GreySky's Consulting Director. A total of four workshops will be delivered for each priority area selected for broadband provision. The workshops will be delivered at locations within or adjacent to the priority area. One workshop per week will be delivered for four weeks. The rollout of the workshops will be managed to match the rollout of the infrastructure. As the infrastructure is delivered, the workshops will be delivered. This scheduling will ensure maximum awareness of the project to promote maximum take-up of service.

Awareness

The awareness programme will run throughout the life of the project. If the project is selected, GreySky will work with the Northumberland Uplands Leader team to provide press releases and other promotional material to ensure awareness of the project. As broadband services are delivered, the workshops will be advertised in the local press – providing ongoing opportunities for press releases and follow-up case-studies to promote the take-up of service.

Project Management

The overall project will be managed in accordance with GreySky’s standard project management practices and quality system.

The infrastructure provider selected will be required to deliver their aspects of the programme in accordance with their own project management practices and quality system. The provider will be expected to operate systems with demonstrable evidence of successful completion of major broadband infrastructure projects. A key requirement of the infrastructure provider selection will be confirmation that their quality systems meet ISO9001 or similar recognised standard.

Timescales

	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Project Management										
Project selection										
Project completion										
Infrastructure Delivery										
Provider selection										
Delivery phase 1										
Delivery phase 2										
Delivery phase 3										
Training & Awareness										
Initial PR campaign										
Workshops phase 1										
Workshops phase 2										
Workshops phase 3										

The project timescales are based on a three-phase implementation of the infrastructure – based around the three priority areas. The detailed project plan and timescales will be determined with the selected infrastructure provider.

Replicability

The proposed project is designed to be easily replicated in other areas to address similar problems of access to broadband services due to remote rural geographies. The integration of the three aspects of the project (infrastructure, skills, awareness) means the project can be tailored to meet the specific detailed needs of different areas.

For example, GreySky Consulting have been asked to integrate a similar project into a wider programme of economic development measures in South Yorkshire. Here remote rural areas exist in areas of significant economic disadvantage. The training and awareness aspects of the project can be tailored to the specific needs of the South Yorkshire economic conditions, and infrastructure providers chosen to meet the specific geographic conditions. In all cases, the project presents a highly focused solution to the specific development needs of the area – allowing market failures to be addressed with minimum intervention and minimum distortion of surrounding markets.

Extensibility

It is also possible to extend the project into other Leader areas. This is particularly true of the Northumberland Coast and Lowlands Leader area. Extending Option 2 or Option 3 across the whole of the Northumberland Leader areas would allow greater impact for funding provided, while maintaining separation of outputs for each area.

Outputs & Outcomes

The project will achieve enhanced broadband connectivity in the Northumberland Uplands area, and provide business skills through the delivery of the associated workshops.

Broadband Connectivity

The principal output of the project will be the availability of broadband connections into areas previously unable to access the internet at a minimum speed of 2 Mbps. The following availability will be achieved (depending on budget agreed):

Area	Area 1	Area 2	Area 3	All Uplands
2 Mbps Connections enabled	100	330	230	1,800
Expected take-up	30	75	55	450

The actual take-up of services once they are available is far less certain. Take-up of ADSL services in the Northumberland Uplands is generally high where it is available – most exchanges have a take-up of approx 60%. However, the nature of the locations, and the service provided means a lower level of take-up should be expected, at least to begin with. A take-up of 40% of the connections enabled should be considered a maximum output if this is the measure of output required. Analysis of market expectations by BT suggests an initial target around 25%. Although this seems low, their guidance has been accepted for this report.

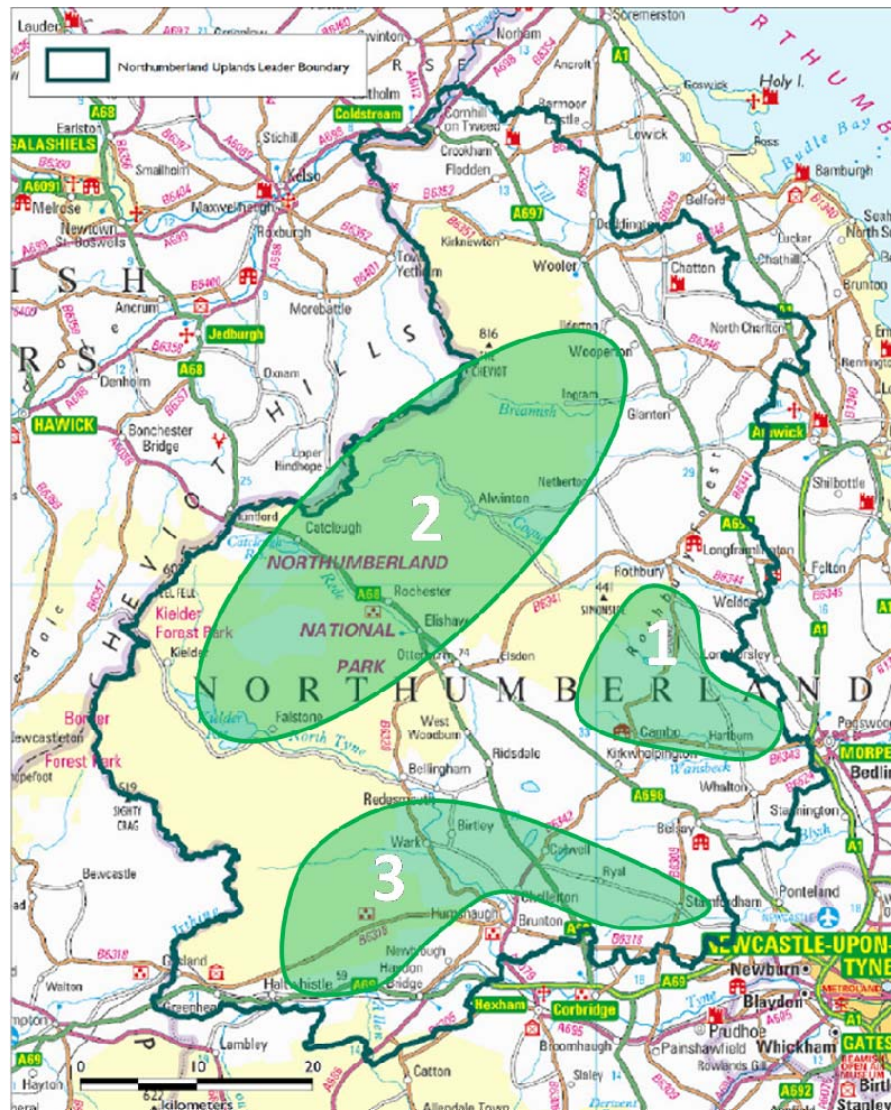
Business Skills

The project will provide training in website design to ensure the economic and social impact of the broadband availability. The following training will be delivered:

Area	Area 1	Area 2	Area 3	All Uplands
Training days provided	24	24	24	96

Appendix A – Detail of Priority Areas

Four areas have been identified to present priority need for intervention to ensure broadband availability due to current poor availability to meet demand.



Area	Total estimated lines	Estimated problem lines
Northumberland Uplands overall	16,000	2,300
Priority area 1 (Rothbury Moor)	235	120
Priority area 2 (Cheviot)	639	380
Priority area 3 (Tyne Dale)	500	260

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