

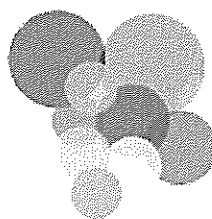


department for
culture, media
and sport

Super-Connected Cities

Leeds and Bradford Submission

February 2012



leeds city region
intelligence driving growth



Leeds
CITY COUNCIL

CONTENTS

NOTES ON COMPLETING THE APPLICATION FORM

APPLICANT INFORMATION

SECTION A – SHORT-FORM BUSINESS CASE

SECTION B – DIGITAL-LED ECONOMIC GROWTH

SECTION C – COMMITMENT OF RESOURCES

SECTION D - STIMULATING TAKE UP & DEMAND

SECTION E – STREAMLINING PLANNING PROCESSES

SECTION F – COMPLIANCE WITH STATE AID RULES

SECTION G – FUNDING

SECTION H – DELIVERY

SIGN OFF

APPLICANT INFORMATION

Project Name: Leeds Bradford Super Connected Cities

Lead organisation – Leeds City Region Local Enterprise Partnership

Lead Contact Details (*Name*) and position held:

Colin Blackburn

Digital Infrastructure & Broadband Lead

Leeds City Region

Contact telephone number: 0113 3952261

Email address: colin.blackburn@leeds.gov.uk

Postal address:

Leeds Civic Hall

3rd Floor East

Leeds

LS1 1UR

If the bid is a joint proposal, please enter the names of all participating bodies and specify the co-ordinating authority

- Bradford Metropolitan District Council
- Leeds City Council

Proposed start Date of Project: (01/09/2012)

Proposed end Date of Project: (31/03/2015)

SECTION A – SHORT-FORM BUSINESS CASE

A1. Define the strategic objectives, measures of success and targets of the proposal with respect to:

A1.1 Economic growth

With a population of over 3 million, the Leeds City Region is the largest city region in the country outside London (see Appendix figure 1). Producing approximately 5% of national GVA annually (at £53 billion) and over half the Yorkshire and Humber's GVA and employment, our city region is truly an economic powerhouse of the North. It is the largest employment centre both for financial and business services and manufacturing outside the capital, and has one of the largest concentrations of higher education institutions in Europe (with 8 in total, where 36% of the research is world class, and 10% is world-leading).

Leeds and Bradford are the core economic areas driving growth and competitiveness across the city region and are developing this bid together to ensure maximum economic impact and social integration. Leeds and Bradford will set the standard for digital infrastructure across the other towns and cities of the city region, building on, for example experience of the innovative roll out of fibre and wireless in York.

The Leeds City Region's Local Enterprise Partnership's (LEP) long-term vision as set out in the LEP Plan is for a City Region that is a "world-leading dynamic and sustainable low carbon economy that balances economic growth with a high quality of life for everyone".¹ The Digital Infrastructure Plan (DIP) recognises that infrastructure has a major contribution to make to this vision as it can underpin economic competitiveness, extend opportunity and move us away from environmentally damaging patterns of production and activity.²

Partners across the Leeds City Region have recently developed the DIP which sets out the long term strategic framework for securing and exploiting the digital infrastructure across the Leeds City Region. Our priorities will focus attention on securing a competitive infrastructure alongside rolling out public services, driving up levels of adoption and securing high levels of business exploitation (Appendix figure 2). The DIP sets out a long term and wide-ranging set of priorities for the different locations across the City Region and which the LEP will be taking forward. The framework (Appendix figure 3) shows in Red where there are immediate opportunities to pursue our objectives with support from the Urban Broadband Fund and through the parallel BDUK initiative. Leeds, Bradford and York as regional cities are the LCR key priorities for roll out due to their economic importance to the city region. York is already well underway in rolling out superfast broadband and wireless within the city centre and wider York area. For this reason, this bid focuses solely on Leeds and Bradford.

Through the BDUK programme, West Yorkshire is now well on its way to delivering access to SFB to its households and businesses, and ensuring that everyone can access at least 2 Mbps. The roll out of the two major private sector networks has gathered pace in the last year, and we now believe it is feasible to aim for close to 100% coverage of superfast broadband capability by 2015 by targeting just those areas which we do not expect the private sector to reach (Appendix figure 3).

¹ Leeds City Region LEP Plan 'Realising the potential'

² Leeds City Region Digital Infrastructure Plan

This proposal builds on the BDUK programme and sets out the ambitious Leeds and Bradford aim to deliver ultra fast broadband to a Super Connected Cities Priority Zone (Appendix figure 4) with the potential for massive economic growth with 16,000 businesses and 88,600 households. The objective of this proposal is:

- Roll-out the delivery of ultra-fast broadband (80-100Mb+) across the defined Priority Zone
- Provide full wireless connectivity in the two city centres, the transport corridor between the two city centres and the principal employment areas
- A targeted programme of support to enable high growth businesses to access speeds in excess of 100Mb
- Utilising ultra-fast broadband to transform the delivery of public services through telehealth and e-education initiatives

Bradford and Leeds collaboration

Leeds and Bradford, the two regional cities, share a common history and together are the driving force behind the city region economy, with the potential to become an economic power of international standing. Leeds and Bradford have a connected economy and together form a location on a significant European scale. It is these factors that offer real benefits to further collaboration.

The scale of the two cities working together has an added impact that is greater than the sum of its parts. This is particularly true when competing on the European stage, and raising sufficient profile and mass to attract inward investment. Collaboration rather than competition makes sound economic sense. The relationship is a partnership of equals – equal but different – and that difference is an asset, allowing the two regional cities, to play to their respective strengths in a way that benefits both the two districts and the region as a whole. The joint economy is diverse in terms of both its demographics and industry base. There is predicted to be significant job growth in both Leeds (11.5%) and Bradford (11.9%)³ between 2011 and 2021 and Bradford's population is predicted to increase quicker than any other city outside of London at 8.6% in the same period.

There are strengths in Professional & Financial Services, Healthcare Technologies and Creative and Digital Industries that can be improved further to the benefit of all, and transport links that can be improved and development land that can be brought forward in the Leeds/Bradford and Airedale Corridors. Together there is significant untapped potential to the strength of the economy.

The Bradford and Leeds area is a location of significant scale with a population of 1.33 million, and is over double the populations of several major districts including Glasgow, Sheffield and Manchester. Importantly the combined population displays a relatively young age profile, and population projections suggest a growth well above the city regional average. With a combined working age population of 880,000 Leeds and Bradford provide 45% of the city region's total working age population. And the combined GVA is bigger even than the population: at £22 billion it forms 45% of the city region's total. This is reflected in the number of jobs in the Leeds and Bradford area at 516,000.

Leeds and Bradford are the economic engine room of the Leeds City Region and the key driver of the knowledge based economy. Its 100,000 businesses account for 71% of the business base for the Leeds City Region, with 18,000 of these in knowledge based industries (75% of the total for LCR).

³ Regional Econometric Model, Autumn 2011 update

This proposal builds on this relationship and focuses on the spatial and thematic areas identified as having the greatest potential for generating new growth. The proposal covers an area transcending administrative boundaries of 20 sq miles and 15 miles in length which contains two Urban Eco Settlements (UES), one Enterprise Zone, one Growth Zone and two city centres (Appendix figure 4). We consider this Priority Zone to contain enough scope and ambition to deliver without overstretching limited resources. The key ambitions of the bid are to:

- Increase inclusion and opportunity for all residents with the Priority Zone
- Provide ubiquitous and free wireless coverage across both city centres and the Leeds Bradford transport corridor joining the two city centres
- Support the development of the Enterprise Zone
- Support businesses and residents in exploiting improved broadband connections and services to both improve business competitiveness and productivity
- Set the standards for broadband across the city region
- Pilot public service delivery initiatives for wider city region roll out

There are 24,300 households in the Super Connected city centres and 88,600 in the wider Priority Zone as a whole. There are 10,700 businesses in the Super Connected city centres. This represents 9% of all businesses in the Leeds City Region. There are a total of 16,000 businesses in the wider Priority Zone. Although we have issues with the reliability of the data, it is estimated that approximately 90% of these are SMEs.

The Super Connected Cities Priority Zone contain a large number of businesses in priority sectors. The most significant clusters are:

- 300 financial services businesses in the city centres, accounting for 15% of the total in Leeds City Region
- 600 creative and cultural businesses in city centres, accounting for just under 10% of the total in LCR.
- 1,100 manufacturing businesses in the wider Priority Zone accounting for 13% of the total in LCR.

There are around 166,000 people employed in the city centres, with over 70% of these (124,000) in Leeds city centre. There are 214,000 employees in the wider Priority Zone.

A1.2 Take-up of broadband services

Usage

OFCOM data⁴ shows that overall take up of broadband is 64% in Leeds and 62% in Bradford. This includes both businesses and households and is lower than the national average of 68%. The West Yorkshire average is 63%. Point Topic data⁵ is generally consistent with the OFCOM data and shows take up among businesses to be higher, at around 65% in Bradford, 64%. Household take up is similar in Bradford at 65% but lower in Leeds at 61%.

Across the city-region as a whole, there are just under 93,000 businesses which will not have access to NGA by the end of 2012, representing around 62% of all businesses⁶. Of these, over 28,000 are in priority sectors. The total figure also includes around 11,000 businesses which are located in enabled exchange areas but which may not be able to access NGA (around 16% of businesses in these areas) due to expected capacity limitations in the roll-out plan.

⁴ Ofcom Infrastructure Report 2011

⁵ Point Topic Broadband data files

⁶ Business figures from MINT database

In Leeds and Bradford, around 80% of premises are covered by the SFB networks of BT or other providers. Average speed varies across the city region. Highest speeds are found in the urban areas of Leeds (7.9 Mb/s) and Bradford (8.3Mb/s).⁷

There is a clear role for superfast and ultrafast broadband to help address LCR's priorities and capitalise on emerging opportunities. There is significant scope for NGA to slow down or arrest the disparities in performance in LCR on some key indicators and improve productivity.

The LCR DIP sets out ambitions for the LCR regional cities of Leeds and Bradford to have access to plus 100mb/s and wireless by 2015. Although we are ambitious, we are also realistic about what can be achieved. A strategic approach to securing the best digital infrastructure is required which recognises the market realities and complements the investment plans of public and private sector investors.

We are committed to ensuring residents and businesses have access to competitive broadband speeds over the next 20 years with core speeds largely provided by fixed technology, and mobile connectivity providing a complementary overlay to the core fixed infrastructure.

We aspire for our businesses and residents to have the option of using fast mobile connectivity when on the move and more resilient fixed connections back at base. This strategy aligns the strategic objectives of BDUK and Europe 2020.

A1.3 Social objectives

Social Benefits

- **Access to Employment for Excluded Groups:** Ultrafast Broadband will enable greater levels of home and flexible working and will open up opportunities for people who previously faced barriers to employment, including disabled people and lone parents. It will also provide greater opportunities for new home based business start ups.
- **Raising Skills:** West Yorkshire has a highly skilled population compared to other parts of the North, however it still lags behind the national average in terms of graduate qualifications and has a higher share of people with no qualifications. Ultra fast Broadband can help raise skill levels for all age groups. Web based tools such as Virtual Learning Environments can help teachers deliver teaching to a higher standard and raise GCSE attainment levels. As internet speeds increase, we are also seeing Higher Education institutions rely upon the web as a teaching tool. The rising cost of conventional degree courses mean that online distance learning courses, such as those at the Open University, are likely to become increasingly popular in the future.

Transformation of Public Services

- **Telehealth:** The number of people with long term conditions such as diabetes, chronic obstructive pulmonary disease (COPD) and heart disease is extremely costly for the NHS. Greater use of web based telehealth technology has the potential to generate huge savings for West Yorkshire based health authorities through reduced admissions.
- **Public Transport:** trialing ultra fast broadband across Bradford and Leeds will open up opportunities for better transport information and management of an integrated service to all residents across West Yorkshire.

⁷ BDUK Mapping Files

A1.4 Other local objectives

Our key local ambitions include:

- Increased inclusivity and opportunity for all residents within the Priority Zone
- Support to the development of the Enterprise Zone and Growth Zone
- Support to the development of the two urban eco settlements within the Priority Zone
- Setting the standards for broadband speeds and accessibility across the city region
- Piloting public service delivery initiatives for a wider city region roll out to reduce costs and increase efficiencies for local authorities and other public sector organisations

Whilst our primary aim is to grow the economy we are committed to delivering equality for all. So we will target both the upwardly mobile professional and the socially disadvantaged through the provision of free wireless across the city centres.

The ambition of this proposal and subsequent implementation will send a clear message, both nationally and internationally about the economic growth ambitions, and inclusivity, of the Leeds City Region and its regional cities.

A2. Set out the rationale for public investment:

Based on Experian forecasting, the current growth trajectory shows the city region growing at an average of 2.2% per annum compared with a UK average of 2.3% over the period to 2030, suggesting that city regional GVA and productivity will continue to lag behind the UK average, and employment growth will grow at a similar rate to the UK forecast growth rate at around an average of 0.5% per annum. Such an outcome would see the gap between the region and the best performing parts of the UK continue to widen over the next twenty years.⁸

Further, without intervention, carbon emissions up to 2030 will remain roughly at the same level as they were in 2009. This outcome contrasts with national ambitions to reduce emissions by 34% by 2020.

However, should the city region effectively support a transition to a stronger private sector, the growth trajectory is forecast to increase up to an average of 2.6% GVA growth per year in the period up to 2030. This scenario not only depends on growth in the private sector, but a flourishing of new industries, including advanced manufacturing.

With effective intervention through the support from the Super Connected Cities initiative, the city region is likely to see not only faster output growth but also improved employment growth, achieving an average of 0.6% annual growth rate in the period up to 2030. As a general enabling technology, ultra-fast broadband forms the technical, economic and social basis for many other activities and innovations and its impact is ubiquitous and widespread

There is an urgent need for public sector organisations to realign the way they provide and deliver services. Investment now in digital infrastructure will allow public sector organisations the capacity to develop and roll out enhanced online services, delivering efficiencies and increasing productivity. We will pilot e-education and telehealth initiatives as a prelude to broader roll out across Leeds, Bradford and the wider city region.

⁸Leeds City Region LEP Plan 'Realising the potential'

This project is necessary to lever in significant investment from the private sector. It will enable delivery where the market considers it uneconomical to intervene but will complement the markets growth plans. With 16,000 businesses and 88,600 households the project will stimulate demand for ultra fast services from both businesses and households support competition in the market and drive down costs.

A2.1 What are the specific needs you are addressing?

Leeds and Bradford want to use this funding opportunity to radically changing the way residents, visitors and businesses interact and connect within and across the two cities.

High-speed digital infrastructure provides a platform for economic competitiveness, enterprise and growth. It can sustain new models of service delivery and open out opportunity to disadvantaged groups. Competitor city-regions across the UK and globally are gaining access to faster broadband and committing to long-term programmes of investment. Leeds City Region and its regional cities need to be at the forefront of infrastructure developments to maintain its competitive offer.

Our aim is to be the first two cities outside London with large scale access to free wireless and a comprehensive fibre infrastructure delivering ultra fast speeds. We will use this as a catalyst for new ways of delivering public services and stimulating economic growth.

1.Underpinning Economic Competitiveness

Leeds and Bradford together form the economic engine room of the Leeds City Region and the key driver of the knowledge based economy in the LEP, and wider area. There are however significant disparities with national performance on some key indicators, which this plan can help to address. In particular by:

Improving Productivity

Synchronicity is equally as important as speed of connection; the aspirations we have set out apply equally to upload and download speeds. Ultra fast broadband speeds can make productivity enhancing technologies more widely available and be instrumental in ensuring their increased uptake and more effective application to business. Increased broadband speeds will stimulate increased uptake of technologies that have a marked impact on the cost structure and production possibilities of all firms. For example, take up of cloud computing services (which reduce server costs and enable flexible working opportunities) will be enabled by increased broadband speeds and synchronicity. Similarly, real time video conferencing (which reduces the need for business trips and supports greater levels of labour productivity) and Voice Over Internet Protocol (which significantly reduces telecommunications costs) are likely to be adopted more widely as broadband speeds increase.

As well as impacting directly on productivity, increased take up of these technologies across Leeds and Bradford can have indirect productivity benefits. The potential for these technologies to precipitate more widespread adoption of flexible and more remote working practices could have a considerable impact on labour productivity. For example, a study by BT suggested that productivity increased by 20% when remote working practices were introduced.⁹ Both councils will use the improved broadband speeds to accelerate their New Ways of Working programmes which in addition to productivity improvement will produce cost savings through the rationalization and reduction in their estate.

⁹ Leeds City Region Digital Infrastructure Plan

As well as enabling businesses to boost productivity by adopting various practices and techniques (including global 24 hour working), increased broadband speeds can help underpin sectoral change in the business base by making Leeds and Bradford a more attractive location for inward investment and stimulating the growth of high value sectors.

Boosting Innovation and Collaboration Performance

Improved broadband speeds and connectivity enable various applications and technologies that will increase capacity to share research and collaborate. Wider availability of collaborative applications will increase the potential for co production between businesses in different stages of the supply chain. Improved innovation performance in sectors reliant on exchange of information will be stimulated by allowing businesses to take advantage of faster upload speeds and new channels for distributing digital content.

Boosting Start-up Rates

Faster broadband speeds make it easier and less costly to start a new business and have potential to increase the rate of start ups in Bradford and Leeds. The rollout of ultra fast broadband in Leeds and Bradford has potential to lead to higher levels of business creation in much the same way as rollout of broadband has in the past; enabling cloud computing which means that businesses can rent computing power and storage and pay on demand for the services that they require.

Supporting priority sectors

The future growth of Leeds and Bradford and the wider city region is dependent on a number of high value, highly skilled sectors, including the creative and cultural sector, digital industries, life sciences, low carbon and financial services. These sectors are among the most likely to adopt and exploit ultra fast broadband since they depend on being able to share and analyse large quantities of data, and to access and supply new markets.

Attracting Inward Investment

The Leeds City Region LEP plan notes how West Yorkshire has underperformed in terms of attracting inward investment. A recent report by fDi intelligence¹⁰ ranked West Yorkshire behind several other major UK conurbations including Manchester, Birmingham and Newcastle. Other reports have found that telecommunications infrastructure is one of the most important determinants of Foreign Direct Investment. As such, the deployment of an ultra fast broadband network will help attract investment and improve West Yorkshire's position.

2.Extending opportunity

Direct impacts on the economic health of Leeds Bradford population will have noticeable social benefits by extending the number and range of employment opportunities in the area. In addition, there is potential for significant social inclusion benefits by:

Improving Access for Excluded Groups

Enhanced broadband speeds and connectivity will extend the possibility for home working for all groups. The benefits of home-working opportunities will be transformative for people who have previously been excluded from the labour market because of caring responsibilities or mobility issues (for example lone parents or disabled people).

While tele-working used to be most common amongst higher skilled and the self employed, faster broadband is increasing the range of occupations which can be carried out at home. For instance, contact centre work could be done using higher quality VoIP and cloud computing and synchronous speeds that NGA will enable.

The National Media museum, based in Bradford will in March 2012, open the world's first gallery to explore the social, technological and cultural impact of the internet. This permanent gallery will trace the history of the internet, uncover

¹⁰ FDI Intelligence, Financial Times

how it has changed people's lives and track the latest trends. This programme will work with the Museum to explore, the opportunities for building the public and media interest as part of the demand stimulation and education programmes.

Extending Opportunities for online learning

Online degree level learning is likely to be significantly enhanced by faster speeds due to higher bandwidth requirement for degree level learning which mean that there is potentially a greater requirements for interaction and collaboration. Faster speeds will enable greater take up of flexible online higher education amongst all groups.

There is also potential to improve school based online learning, enabling all pupils to participate in online teaching and learning platforms.

Providing broadband to deprived groups does not address the digital divide in itself. Inability to afford the PC or laptops required (in addition to the phone line and broadband service cost) would still create a barrier to access. However, an increasing number of people have access to smartphones which can provide connectivity to wireless.

3.Environmental Benefits

Moving away from damaging patterns of consumption and production activity is a key priority nationally and locally. The potential environmental benefits of enhanced connectivity are drawn from the following:

Increasing the Prevalence of Home Working

Improved broadband provision will create opportunities for people to work from home, which in turn will have a marked affect on the number of commuting trips and potentially reduce carbon emissions. The Priority Zone includes two Urban Eco Settlements (UES) which seek to complement the housing growth agenda whilst seeking to deliver the Eco-Towns principles in four major urban brownfield locations within the heart of the city region's major economic and population centres.

Enabling Growth in E Commerce

Improving access to faster speeds in Bradford and Leeds will enable further growth in take up of online shopping services from a range of retailers. This growth will continue to reduce the number of shopping trips made by car and enable further energy and emissions savings across the wider city region. However, free wireless connectivity enabled in the city centre will encourage those visitors who do come in the city centre's to potentially stay longer and spend more whilst visiting. Free wireless will also contribute to the development of vibrant city centre's.

Enhanced Supply Chain Management

Improved broadband connectivity will enable a variety of businesses to reduce inventories and associated holding costs using broadband enabled technologies such as automatic online ordering, transport management systems. Improve supply chain management practices will reduce the size of inventory storage facilities required, saving energy on servicing these facilities and will also have an impact on transportation requirements and associated energy use and emissions. enhanced supply chain management that broadband facilitates will help to reduce inventories, transportation costs by using web based transportation management systems.

4. Enhancing Public Sector Service Delivery

Implementation of this proposal holds significant potential for driving the transformation and efficiency improvement of Leeds and Bradford local authorities. The scope for the proposal to generate benefits for the delivery of public services encompasses both increasing the efficiency of service delivery as well as improving the accessibility of services to residents and businesses across the area.

Greater bandwidth, availability and adoption of broadband will enable the council to offer more services online and develop new and innovative ways of communicating with and providing services to their residents. This includes a range of services from telehealth through to smart parking solutions.

The potential for NGA to stimulate significant growth in telehealth and telemedicine technologies is notably high. Bradford and Leeds have a strong base of assets on which to build here (in particular the recently opened Telehealth Hub at Airedale Hospital). NGA will be instrumental in enabling the aspiration for Leeds, Bradford and the wider city region to become a leading location for this emerging and high value sector to be realised.

A2.2 Have all options to meet these needs by the stimulation and encouragement of private sector investment been explored?

The BDUK project will ensure that 90% premises have access to superfast broadband by 2015. The remaining 10%, where superfast deployment is particularly difficult, all premises will be able to access at least 2mbps. This in itself will bring significant economic benefits to West Yorkshire.

Leeds and Bradford acknowledge that left to its own pace, the market is likely to deliver ultra fast broadband and ubiquitous mobile connectivity to most areas within the next 15 years. To derive competitive advantage and drive forward the economic growth of our two major cities and the wider city region, however, we need to act to accelerate delivery now and make Leeds and Bradford an internationally competitive place to live, visit and do business. This sends a message to the wider world that Leeds and Bradford have the competitive edge and are committed to economic growth and innovative solutions to delivering this.

Discussions have been held with a range of providers including Virgin Media and BT to understand the extent of their upgrade programmes and the impact on the proposed UBF area. Information from providers and BDUK shows that there will remain areas within the Super Connected Priority Zone where ultra fast speeds will not be available. Our bid will fill these gaps and by doing so provide continuous coverage across the Priority Zone.

Furthermore we understand the importance of demand stimulation in encouraging the market to deliver to accelerated timescales. It is anticipated that the roll out of ultra fast broadband and ubiquitous wireless across our defined area will subsequently influence the market elsewhere in Leeds, Bradford and the wider city region.

A2.3 What resources and skills are you uniquely placed to contribute to the project?

Working together. Leeds and Bradford have a strong history of working together. Leeds Bradford Corridor is a strategic economic collaboration between Leeds and Bradford Councils. Its aim is to deliver improved economic, social and environmental conditions for neighbourhoods and communities to the west of Leeds and the east of Bradford (the centre of the Super Connected Priority Zone). This is being achieved by focussing on four key areas of work:

- housing growth and improvement,
- improved connectivity (road, rail, cycle and foot),
- improvements to green infrastructure, and
- increased business competitiveness and growth.

Delivering major projects. Both authorities have the capacity and skills to bring to project managing major projects. Examples of major projects delivered and managed via the Leeds City Region include the Enterprise Zone, and the authorities can provide project teams with both capability and seniority to ensure the successful delivery of the project.

Both Leeds and Bradford have experience of planning and delivering broadband projects. The Garforth Schools Partnership Trust has developed over a number of years into a community wide network of schools (Secondary and Primary) and educational environments (Garforth College) linked to the Leeds Learning Network (LLN). This service provides learning resources including e-mail and class work folders for access outside the school location.

The trust has developed a concept of a 'Learning Locker' which is available to children\students as they progress through the educational system. The locker contains coursework, lessons and resources to support life long learning. Access to this system is the core requirement of Project Cirrus. The main objective of the project is to provide reliable access to the educational resources held in the 'locker'. This is being delivered as a private network available to all entitled users in Garforth. This is approx 3500 pupils\staff and over 1500 students\parents.

ICT expertise. Whilst both the BDUK project and the Urban Broadband Fund Project are being led by Economic Development, technical support and assistance from ICT is essential. Working with government, the two councils will bring together the best skills from a mix of technical support models from the public and private sectors. Leeds City Council have in house ICT provision employing 250 staff. Bradford City Council has a different model, outsourcing to SERCO. Together these offer complementary approaches.

Street furniture. Both Leeds and Bradford are able to offer up street furniture and/or high rise buildings (if useful) to potential bidders. Leeds City Council entered into a PFI agreement with SSE contracting in 2006 to replace approximately 82,000 street lights. These new street lights have been designed with the functionality of separate power lines running through them to provide access for additional services, e.g. Christmas lights, advertising, or telecoms equipment.

Leeds also has the successful 'Marketing Leeds' and Inward Investment teams who will be widely used as part of the marketing and demand stimulation activities as well as Key Account Management teams in the authorities and strong existing relationships with business.

Furthermore, a third of the UK's internet traffic is routed through Leeds and the city is home to the IXLeeds Exchange a neutral, not-for-profit Internet Exchange Point based in Leeds. Because it is neutral it means that they don't favour a particular ISP or telco and are open to all Internet companies. Local expertise and assets such as this will be invaluable during the planning and delivery of this project.

Bradford is the only UK city that makes it into a list of the top 100 broadband spots in the world, produced by web content firm Akamai in 2011. According to this, Bradford's broadband speed was highest of all UK cities at just over 6 mbps.

A3. Outline the information, education and demand-stimulation (consumers, business, public sector and third sector) activities to be undertaken (more detail should be given in Section D).

We are aware that 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. Demand stimulation is a highly resource intensive activity and we expect significant funding will need to be set aside for this purpose. Both authorities recognise the significance of demand stimulation to the projects success.

Demand stimulation activity to support the NGA rollout needs to be informed by an appreciation of how and why businesses adopt and integrate technology into their operations and, critically, the barriers that can prevent them from doing so. The evidence suggests that, as with other technologies, businesses will adopt broadband where they see a real

commercial benefit to their organisation and will invest in higher speed connections where the case for them doing so is convincing.

We will utilise, where available, the existing, trusted networks already in place. These will include, but will not be limited to the Chamber of Commerce, neighbourhood forums, business networks and advisors (e.g. Rising Stars programme in Bradford), digital networks (MAD in Bradford and Leeds Digital, Creative Networks and Leeds Media), and Key Account Management teams across the authorities.

A4. What new infrastructure does your proposal require?

Leeds and Bradford want solutions to be sustainable and flexible to take account of emerging requirements and technologies. Without specifying particular technological solutions, there are particular issues we want addressed, in particular the infill of areas where commercial providers are not currently planning to go due to commercial viability.

A4.1 Fixed. (Fibre, cable, &c)

Leeds and Bradford are seeking innovative and unique solutions to ensure all premises (both business and residential) within the defined Priority Zone are able to access ultra fast broadband of between 80-100mbp (with capability and flexibility to increase). This includes key employment growth areas such as the Enterprise Zone.

The cities want 80 -100mbps download speeds (and an ambition for 40-60mbps upload) available to all residential and business premises across the Priority Zone for an affordable monthly cost. Whilst BT and Virgin are increasing the speeds they are offering across the cities their will remain areas unable to access these high speeds. This is the focus of this part of the proposal.

We want those 10% of businesses who are in high growth business within the Priority Zone to be able to access speeds greater than 100mbps and this will be achieved through a FTTP roll out. It will be available to business premises that can show a business need for the speed and can evidence that the financial argument for the investment does not stack up.

A4.2 Wireless connectivity.

By 2016 the traditional internet access via a copper wire and a desktop PC will fade into the background and will be replaced by an increase in mobile technology. This predicted increase in the number of mobile devices by 2016 when about 80% of all internet users will access the web from a mobile device is driving the need for more capacity.

A public wireless service would increase connectivity services, provide opportunities to drive channel shift, boost business and accelerate digital inclusion.

Through this bid Leeds and Bradford plan to introduce ubiquitous free wireless connectivity across the two city centres with minimum speeds of 5-10mbps to ensure a quality connection. We want to ensure all visitors to the city centres (whether for leisure, business or tourism) can access a reliable and consistent on the move connectivity. This will complement the existing offering already being accessed through commercial wireless zones, cafes and restaurants, including the current WiFi installation at Leeds City Station.

The services will be rolled out within the city centre boundaries. Both Councils are committed to ensuring appropriate street furniture is utilised to facilitate roll out, and planning support will be made available to enable this deployment. To exploit this full coverage, unique **city centre information Portals** will be developed.

The ambition extends to rolling out wireless connectivity to the entire Priority Zone, with the Leeds Bradford Corridor (linking the two city centres), Enterprise Zone and the northern (Shipley) end of the Bradford-Shipley Canal Road Corridor being the initial priority area for this bid. The initial proposals are to create a continuous wireless offer along these key road and rail corridors utilising existing and new street furniture along the road corridors and on train equipment for the rail corridors. These will be the prelude to the intention to roll out wireless across Leeds, Bradford and the wider city region over time.

Leeds and Bradford have had discussions and have explored various models with multiple providers including free to the end user approaches, and will be building on the experiences of city region partners such as York who are currently piloting a free wireless offer in the city centre. Both Councils are clear that the target provision should be unlimited, free wireless access for all across the two city centres.

[REDACTED]

We expect the model which is proposed by the market should enable a future proof solution including wireless and be capable of expansion to also include 4G services and beyond.

A5. Define the area(s) over which ultra-fast or superfast broadband is to be delivered:

The roll out of Superfast broadband is covered by the BDUK Local Broadband Plan. Leeds and Bradford are confident that 90% of premises will be in areas enabled with super fast broadband, including the city centres.

It is anticipated that separate procurements will be needed for the BDUK project and the Urban Broadband Fund, although the most efficient and cost effective UBF solution may be to create scheme packages across both cities. It is also expected that the wireless solution and ultra fast solution will be different procurements due to the 'ready to go' nature of the wireless proposition.

The Priority Zone in which ultra-fast broadband is to be delivered transcends the administrative boundaries of both cities and is a contiguous area which stretches from and includes the Leeds Aire Valley Urban Eco Settlement (encompassing the city region Enterprise Zone) to the Bradford-Shipley Canal Road Corridor. This Priority Zone includes both Bradford and Leeds city centres (Appendix figure 4).

The proposal concerns ultra fast fixed infrastructure and mobile connectivity and includes the following core proposals:

- Access for all residents and businesses within the Priority Zone to 80-100mbps speeds (largely through FTTC enabling)
- Targeted business access to speeds of above 100mbps via FTTP
- Mobile wireless in two city centres, two community hubs, Leeds Bradford transport corridor and the Enterprise Zone
- Mobile portal for access in the city centres

A5.1 By existing networks and already-announced rollouts by existing communications service providers

BT and Virgin are the most prominent ultra fast broadband providers across Leeds and Bradford. Initial discussions with these providers has elicited some information on future roll out plans and priorities (see below). We will seek to

continue our dialogue with them in order to understand their +80mbp roll out programmes and their demand stimulation activities to encourage the market to provide on a commercial basis. We will not be subsidising overbuild on a commercial basis.

We do acknowledge that whilst being the most predominant providers, BT and Virgin are by no means the only providers and we have been, and will continue to actively seek interest from smaller providers who can meet the requirements specified. A core element of our proposal is to support the growth of SMEs, and we see that as continuing throughout the supply chain.

A5.2 By investment in in-fill (areas not covered by commercial suppliers)

The Priority Zone is covered by nine exchanges and 600 cabinets. Six of these exchanges have been announced in BT's roll out (three can already access superfast broadband and three more will be able to do so by the end of 2012). One of the exchanges (Harehills) has been announced for an upgrade to FTTP so should be able to receive ultra fast speeds, although the BDUK data is based on FTTC so it isn't clear what the final speed will be for premises served by this exchange. This is also the exchange which covers a large part of the Enterprise Zone.

Virgin Media has a large presence in the wider Priority Zone. Around [REDACTED] of premises [REDACTED] are in postcodes which can access Virgin Media, however only [REDACTED] of businesses can access VM [REDACTED]
[REDACTED]

[REDACTED]
[REDACTED]

[REDACTED]
[REDACTED]
[REDACTED]

A5.3 By new networks

The city centre, transport corridor and Enterprise Zone wireless proposition is likely to be a new network however it could be built upon an existing wireless/mobile network.

In terms of the fixed infrastructure, whilst we anticipate this will not be a completely new network, we and we will be exploring this with the market through the procurement negotiations.

A5.4 Wireless connectivity

Leeds and Bradford require (as a minimum):

- ubiquitous free wireless connectivity across the two city centres,
- a pilot for two community free wireless hubs,
- connectivity linking the two city centres along the Leeds Bradford transport corridor including Saltaire/Shipley
- Enterprise Zone free wireless

A6. What funding from the Ultrafast Broadband Fund are you requesting? (Details in Section G.)

Our initial proposal set out the wireless requirement of ubiquitous wireless connectivity in both city centres with trials in two community wireless hubs. Our ambition has now developed and our scope has widened to include additionally the Leeds Bradford transport corridor which joins the two city centres and the Enterprise Zone.

We estimate this project to be of a value of £50m. Based on discussions with providers (including BT and Virgin Media) we estimate the requirement from the Urban Broadband Fund to be £14.6m.

A7 Briefly set out what additional funds will be contributed to the project (more detail to be given in Section G):

A7.1 by Local Authorities

Local authority direct capital funding of [REDACTED] will be committed to this project (split equally between Leeds and Bradford).

The local authorities will also be committing street furniture to the value of [REDACTED] for the deployment of wireless connectivity.

A7.2 from the EU

[REDACTED] ERDF funding is being sought for two aspects of the proposal: FTTP for selected high growth businesses and Demand Stimulation.

A7.3 by other partners.

[REDACTED] is sought from a private sector provider to roll out the proposals included in this submission.

Further discussions with external partners will continue as the process develops particularly in terms of the potential savings to the NHS and any match funding for the telehealth proposals

Opportunities for private sector investment will continue, especially with utility companies like [REDACTED] who can identify new ways of working through smart metering etc.

A8 Any physical resources the city or its partners are contributing to the project. (Details in Section C.)

Leeds, Bradford and the Leeds City Region will provide the resources to project manage the planning, implementation and delivery of this proposal .

The authorities will provide non exclusive access to street furniture. Discussions with Metro and network rail will continue to look at the opportunities with bus stops, buses, trains and other non council street furniture.

SECTION B – DIGITAL-LED ECONOMIC GROWTH

Demonstrate an ambitious vision for growth. In particular:

B1. What job creation initiatives and strategies for attracting new businesses into the city are in your proposal including, where relevant, linkage to the delivery of a successful Enterprise Zone?

The LEP plan¹¹ details how the LEP will increase job opportunities and attract new businesses into the area. The LEPs plans seek to achieve not only GVA growth, working to enhance market opportunities where the growth potential is greatest, but also an increase in overall employment, whilst working to facilitate a decrease in carbon emissions (Appendix figure 5). Specifically, it will target:

¹¹ Leeds City Region LEP Plan 'Realising the potential'

- An absolute increase in GVA growth rate per annum, with the aim of achieving a minimum of 2.6% per year in the period up to 2030
- An absolute increase in employment rate in each area per annum, with the aim of returning to pre-recession employment rate for the city region by 2016, creating in the order of 60,000 jobs.
- A substantial and continued decrease in carbon emissions

There are 4 key priorities with the LEP plan:

1: Unlocking the growth potential of business and enterprise including key growth sectors: Life sciences and related industries, including particularly healthcare and medical technologies; Digital and creative industries, including particularly telehealth, printable electronics and creative content; Low carbon industries, including particularly manufacturing of environmental technologies, renewable energy and green construction; Advanced manufacturing, including particularly industrial biotechnology and engineering; Financial and business services, including personal finance particularly major building societies and the full range of service to business.

2: Enabling a flexible, skilled workforce

3: Facilitating a low carbon economy

4: Creating the environment for growth including facilitating provision of the **digital connectivity demanded by competitive businesses**, working to develop an ambitious but deliverable digital infrastructure plan for the city region and working with BDUK and telecoms providers to attract and coordinate investment accordingly.

The proposals links to areas of major employment and business growth: Bradford City Growth Zone and the Leeds City region Enterprise Zone.

Bradford City Centre Growth Zone

The Growth Zone is critical to the rebalancing of Bradford's economy, building on a great entrepreneurial culture and great businesses in growing sectors. Bradford needs more great businesses and it needs its existing businesses to grow and thrive. This project is the step change needed to bring a fully-functioning city centre to the market – with a revitalised private sector economy, increased (and improved) retail and office space and sustainable employment opportunities.

The Growth Zone has secured investment of £17.6m (RGF) and £17.2m (Council) support to create a local business rate relief scheme for businesses based within the Westfield development and elsewhere in the city centre, as well as to complete the enabling infrastructure for Westfield and the essential preparatory works for the proposed Central Business District.

The main components of the project are:

- Enabling works that provide high quality connections around the Westfield site and across the city centre.
- Support for businesses based within Westfield and elsewhere in the city centre, where the focus will be on stimulating growth in new, growing or unique businesses, thereby building variety in the city centre's business base and creating quality jobs in the city centre.
- Provide skills support to the businesses supported to ensure the job opportunities they create are taken up by local people, including the long term unemployed and other disadvantaged groups.

Initial works to redevelop the former Police Station, as the next step towards the development of the Central Business District. The investment will create an estimated 2,800 jobs in the city centre by March 2014.

Aire Valley Leeds

Aire Valley Leeds is one of the most significant areas of investment opportunity in the Leeds City Region and one of the LCR Urban Eco Settlements which are LCR priorities for sustainable economic housing and growth. Already home to 400

businesses employing around 15,000 people, mainly in the manufacturing, wholesale and distribution sectors, along with more recent office and service employment in business park and waterfront locations. The area also includes existing residential communities with 6,500 residents in the Hunslet, Richmond Hill and city centre fringe areas.

Leeds City Region Enterprise Zone

The Enterprise Zone is being established to promote economic growth and investment, attract employers and the creation of jobs, and make the area the location of choice within the city region, whilst discouraging displacement. The strategy has therefore been developed with this at the forefront of considerations. Displacement raises two issues, not only do we not want companies simply to move into the area from elsewhere with no growth, we also want to ensure they stay following the end of the scheme, so the area can continue to be a key economic driver for the city region for years to come. The following objectives and actions have therefore been developed to ensure that we mitigate against displacement.

The economic objectives of the Leeds City Region Enterprise Zone are to:

- Attract companies to locate to, expand or start up in the EZ, discouraging displacement within the region
- Attracting high growth firms and supporting the vision for LCR to be internationally recognised for its strength as a location for key sectors
- Encourage companies to stay and improve in the Enterprise Zone
- Attract inward investment for the Region
- Assisting companies to expand and be sustainable
- Target the key growth sectors of advanced manufacturing, health and medical, distribution and logistics and low carbon industries, particularly with companies with significant R&D activities
- Provide new jobs for the region's population
- Enabling local people to access new jobs
- Promote sustainable development and renewable and low carbon energy opportunities to improve the environmental quality of the region and decrease carbon emissions

In order to achieve the objectives set out within this strategy. Delivery plans have been developed to maximised growth, exploit the potential of the LCR EZ, whilst minimising displacement including a Communication Strategy, Marketing Strategy, and Business Support Plan. An early proposal for the Enterprise Zone is the development of a Leeds Health Hub campus. This has clear links to the wider telehealth proposals for the Priority Zone.

B2. How will the proposed development enhance the capability of businesses, particularly SMEs, to increase efficiency and revenues?

There are approximately 90% of businesses within the Priority Zone which are SMEs, many of which are in the financial, digital electronics, manufacturing etc who have the most potential to benefit from ultra fast connectivity. Indeed at a recent business meeting with local developers hosted by in the Aire Valley it was suggested that one of the biggest attractions of the Enterprise Zone was the guaranteed high speed broadband connectivity.

Leeds and Bradford have a particularly strong concentration of Creative and Digital Industries, many of which are located within the Priority Zone. A recent study¹² identified 15,000 businesses in Leeds which employ around 30,000

¹² The Creative Industries 2011 Sector Assessment

employees. The majority of respondents were SMEs (98%) with huge growth potential. One of the key issues identified as a barrier for growth was lack of asymmetrical speeds. A quote from a SMEs in the area highlights the importance small businesses place on broadband speeds: 'From a video production point of view it would be a fantastic addition to the city because video is the millstone around the neck of data transfer. It's just so large in size (and growing with the advent of 4K and 6K digital video cameras) that it always has to be compressed in order to send it electronically. This takes time and degrades the original footage. There is a utopia where any type of video can be downloaded almost instantaneously to be worked on at full quality. We could then do a day's work on it and instantly send the edit to a client anywhere in the world. In theory we could be in competition to edit Hollywood films, or adverts made in London, without the need to be based in those cities because the director / studio needed to be there to oversee things. '

As part of the package being proposed, the intention is to operate a targeted scheme to support businesses to connect their premises to ultra fast speeds, particularly for SMEs, to support new connectivity and further encourage market competition to reduce connection fees and operational fees for local businesses. These proposals will be supported by a comprehensive demand stimulation and support programme operated jointly between Leeds and Bradford and procurement partners.

B3. What proposals are included for leveraging innovation and new broadband connectivity for the development and delivery of public services?

Leeds and Bradford view this as an opportunity for a marked shift in the way public services are delivered and as a way to help achieve our objectives around schools, libraries, health and our own offices.

The **telehealth** roll out programme will be delivered in partnership with the two local authorities, the new Airedale, Leeds and Bradford PCT , and the NHS Trust. It will develop the pioneering work already carried out in the area and help move the operation of these systems from pilots to the norm. This will help in maintaining and supporting the increasing number of elderly residents not only with dignity but also reducing overall cost. The programme will support ultra-fast broadband through direct fibre connectivity to between ten to twenty nursing homes, two hospices, and two of the new 'extra care schemes' across Leeds and Bradford: linking in with the programme of Older Peoples Homes provision being developed across Leeds. The telehealth hub has agreed to develop further activities with the PCT, the Trusts and local authorities to ensure that the equipment and staffing, training etc is in place to ensure maximum take up the systems. This will be matched by the owners of the centres and the appropriate health bodies. In addition the provision of 100mb broadband to residential premises will enable more residents to lead independent lives at home with monitoring facilities available online. The programmes will stimulate further activity in GP centres, clinics and enable the PCT to achieve its targets. The main focus of the project will be residential care homes The latest pilot project of twenty nursing homes showed significant financial savings and benefits included: Reduced emergency admissions; Reduction in out patient and A&E attendances; Reduced GP home visits (70%); Reduced out of hours home visits; Reduction in travel time, releasing time to care; Reduced ambulance journeys; Significant return on investment and opportunity to reuse/take out capacity.

There are significant opportunities from ultra fast broadband in delivering innovative projects in education. For example, two **e-education projects** will be piloted in liaison with Challenge College School, in the Bradford-Shipley Canal Road Corridor UES. One will explore education demand stimulation with the school acting as a community digital hub for homes that potentially will have access to 100mb broadband. This will engage pupils and the wider community in understanding the future benefits and opportunities of ultra-fast broadband. It will also provide opportunities for upskilling those residents beyond school age. The second will use schools as community hubs for wireless broadband

hubs and the city portal to initiate accessibility, understanding and use of the internet amongst more deprived communities.

This links in with the wireless proposals with the ambition to develop every school within the Priority Zone as a community hub for wireless broadband. This will particularly enable access to the more deprived communities within both cities and links in with the expected release of low cost refurbished smart phones by operators in 2012. Indeed Leeds City Council is exploring how the growth in smartphone ownership and use can be used to further develop the councils Customer Access Strategy and in particular to target deprived communities.

B4. How do you propose to stimulate additional private sector investment in order to generate greater accessibility to faster broadband services by businesses and consumers?

Pilots and initiatives such as those listed above will provide a clear indication of the levels of demand for such services which should encourage the market and public service providers to roll out further across the cities and wider city region. Discussions will continue with providers and operators to understand the market perspective.

Leeds and Bradford will make use of existing tools available such as the BDUK Demand Registration Tool to help stimulate the market and build the case for continued investment.

B5. What commitments to raise skills levels in the local population, providing greater accessibility to educational programmes to equip more people with better knowledge-based skills, will accompany this investment in faster broadband?

The skills agenda across the Leeds and Bradford, and the wider city region is driven by the Leeds City Region Employment and Skills Strategy, led by the Leeds City Region Employment and Skills Board, a new employer led partnership with bold ambitions. The plan identifies efforts to improve skills across the City Region, increasing productivity and employment through achieving five strategic objectives:

- Improve skills and boost employment in selected key sectors;
- Increase employer and individual skills investment across the City Region;
- Enable those out of work to compete in the labour market by ensuring that they have the necessary skills;
- Promote better information for learners, employers, colleges, universities and training providers to make more informed decisions; and
- Create an aspirational and innovative enterprise culture.

Employers report that getting the right staff, with the right skills and motivations for work, is often difficult. They believe that local authorities, Jobcentre Plus, colleges and other learning providers need to better target activity.

To build a more competitive, more productive economy across the City Region more investment is needed in strengthening the skills of our existing workforce and those entering the workforce. This will provide the foundation for raising aspirations, increasing employment, and boosting innovation. Leeds and Bradford are committed to the skills agenda and raising the skills and productivity of their residents.

B6. Describe, where appropriate, how the project will dovetail with existing Local Broadband Plans (for projects in England with allocations from BDUK's £530m superfast broadband programme) or with national plans for broadband rollout in Scotland and Wales.

Through the BDUK programme, West Yorkshire is now well on its way to delivering access to SFB to its households and businesses, and ensuring that everyone can access at least 2 Mbps. The Plan will be submitted in February 2012. The roll out of the two major private sector networks has gathered pace in the last year, and we now believe it is feasible to aim

for close to 100% coverage of superfast broadband capability by 2015 by targeting just those areas which we do not expect the private sector to reach.

The BDUK roll out will provide a 'blanket' of super fast connectivity across West Yorkshire. The ultra fast Priority Zone sits within that broader area with the intention to provide an area of ultra connectivity. The UBF wireless proposition will sit along this.

SECTION C – COMMITMENT OF RESOURCES

C1. Detail those physical and administrative resources that will be committed to the achievement of objectives in this proposal (show financial resources in Section G – Funding):

C1.1 from the city

Leeds and Bradford have identified project team resources to deliver both the BDUK project across West Yorkshire and the planning and implementation of the Urban Broadband Fund. Lessons from the BDUK pilot projects suggest minimum resources are required for such a roll out. A Project Board is required to oversee the delivery of the project and it is proposed that regular reports will be taken to the LCR Leaders Board and LEP Board which will oversee both the BDUK project and Super Connected Cities project.

Projects also require dedicated teams to ensure successful delivery and we do not underestimate the scale of the challenge. As a minimum we anticipate the need for 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).

Street furniture to the value of [REDACTED] will be contributed to the project for the wireless element.

C1.2 from the private sector.

Through discussions with a number of providers, we have budgeted for a provider to contribute resources towards demand stimulation (to the value of [REDACTED] and project management [REDACTED]).

C2. Provide evidence that the City Authority has access to the project management capability and strengths in programme governance to deliver the programme of work.

Both authorities have the capacity and skills to bring to project managing major projects. Examples of major projects delivered and managed via the Leeds City Region include the planning and implementation of the Enterprise Zone, and the authorities can provide project teams with both capability and seniority to ensure the successful delivery of the project. Leeds and Bradford will provide complimentary ICT expertise to the project, with an in house ICT Consultancy and private sector firm.

C3. How will value for money be assured?

Value for money will be assured through the competitive joint procurement process. Providers have commented during discussions that a joint Leeds and Bradford proposal is more economically viable from their market perspective.

Leeds and Bradford will work with existing providers to ensure there is not overbuild or duplication of NGA.

It is proposed that the wireless requirement and the fixed requirements will be separate commissions which give optimum scope for the right solutions to be developed. Use of the BDUK framework will be explored.

In order to ensure sustainability and economies of scale the city information portals will be developed and run as joint systems.

C4. Broadband investment will lead to both quantifiable and non-quantifiable benefits. Outline how you propose to measure and monitor the delivery of such benefits that are quantifiable.

A Project Board will 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. Regular reporting to LCR Leaders Board and the LEP Board will monitor the BDUK and Super Connected Cities project to ensure there are clear links in place.

SECTION D –STIMULATING TAKE UP AND DEMAND

D1. Detail your proposals for education, information and demand building activities generating greater demand by businesses (including SMEs) and residences for ultra-fast broadband services, aiming for 50% take-up across all sectors.

We are aware that work to establish the likely level of demand across communities and businesses 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, we expect significant funding will need to be set aside for this purpose.

A survey of city region businesses was undertaken recently and provides valuable information to help target demand stimulation activity for this project and for the BDUK project. 60% of businesses disagree (or don't know) that their current speed will be adequate for future business needs. 68% of businesses consider current broadband speeds to be sufficient for business needs. However 64% also said that if increased broadband speeds were available they would be highly likely to take up the service. 31% of these respondents have speeds of between 2-8mbps, and 25.3% have speeds of between 8-20mbps.

Demand stimulation activity to support the NGA rollout needs to be informed by an appreciation of how and why businesses adopt and integrate technology into their operations and, critically, the barriers that can prevent them from doing so. The evidence suggests that, as with other technologies, businesses will adopt broadband where they see a real commercial benefit to their organisation and will invest in higher speed connections where the case for them doing so is convincing. To reach the stage whereby the business case for investment is clear, businesses need to go through a series of stages which can be summarised as:

- 1) basic awareness of the existence of current of next generation broadband availability
- 2) an appreciation of the potential for broadband to generate benefits for their business
- 3) an understanding of the options for and value of the additional investment required to connect to broadband and exploit the benefits
- 4) Procuring a connection and implementing the necessary business changes
- 5) Ongoing review of whether returns from the investment are being maximised and exploration of new ways to get more from the investment.

The type of interventions needed to stimulate demand extends beyond awareness raising activities and will encompass other types of support needed to guide businesses through this adoption process and to ensure that the commercial case for adopting broadband and broadband enabled technologies is clearly made.

A review of best practice in broadband and ICT adoption indicates that there are a number of critical factors in the design and delivery of activities to support various stages of the adoption process.

- 1.Target Activities Towards High Impact Businesses
- 2.Outreach Activities and Proactive Marketing and PR are Essential
- 3.Make a Clear and Compelling Case for Broadband
- 4.Encourage Businesses to Think Big
5. Link Broadband Support to Wider Business Support Delivery
6. Provide the Right Intensity and Mix of Support
- 7.Ensure that Skills Gaps Are Addressed

We will utilise, where available, the existing, trusted networks already in place. These will include, but will not be limited to city region Key Account Managers, Chamber of Commerce, neighbourhood forums, business networks and advisors (e.g. Rising Stars programme in Bradford), digital networks (MAD in Bradford and Leeds Digital, Creative Networks and Leeds Media in Leeds).

In 2012 the National Media Museum in Bradford will open the world's first gallery to explore the social, technological and cultural impact of the internet. This permanent gallery will trace the history of the internet, uncover how it has changed people's lives and track the latest trends. This gallery and its associated media and public interest will be harnessed as part of the demand stimulation programme all parts of this proposal.

D2. How will the proposed investment be utilised to transform the delivery of public sector services by making as many services as possible available online?

The objective of Digital by Default is embedded within the LCR DIP and the authorities regeneration, economic and well-being strategies and clearly articulates the economic and social benefits that increased digital inclusion will deliver.

This proposal includes the use of a portal in the city centre wireless zone providing access to both council services and the wider internet. This will not simply be the city council website but a bespoke and unique way of accessing services online.

By 2014 75% of the population between 10yrs and 80yrs will have a smartphone. The authorities are currently exploring how Smart Phones can be used to deliver public services to those in the city who most need to access them, by providing apps for services. Whilst these are early ideas, it demonstrates the ambition of the council to provide digital public services. Data and information can also be made publicly available enabling third parties to develop apps for the wider public.

Both Leeds and Bradford are committed to delivering their respective Customer Access Strategy and Changing our Council Customer and Citizen Service Strategy. The scope of these are customer and citizen contact with the Council via methods including: face-to-face, telephone, post and all forms of self service including the internet (website), social media, email, SMS (text messaging), digital TV, mobile phone applications (apps), automated telephony and payment

kiosks. The developments proposed within this urban broadband package will become part of the delivery plans and enable effective implementation.

The telehealth roll out programme will be delivered in partnership with the two local authorities, the new Airedale, Leeds and Bradford PCT, the NHS Trust, and the leading innovator the Telehealth Hub based in Leeds. It will develop the pioneering work already carried out in the area and help move the operation of these systems from pilots to the norm.

D3. Proposals for delivering social benefits, possibly including: online involvement in democratic processes; flexible working; more flexible local labour markets; changing patterns of work; more online commerce.

Both Leeds and Bradford authorities are in the process of rationalising assets and implementing new flexible working. The potential for these technologies to precipitate more widespread adoption of flexible and more remote working practices could have a considerable impact on labour productivity (a study by BT suggested that productivity increased by 20% when remote working practices were introduced.) This has significant implications for both the councils as employers and for the productivity of the city as a whole.

The investment from the Urban Broadband Fund will allow Bradford Council and Leeds City Council to accelerate their respective New Ways of Working schemes which has introduced flexible and home working for Council staff. In Bradford it is predicated that by 2018 this will have generated savings of over [REDACTED] for the council.

Digital by Default is embedded within the LCR DIP and authority regeneration, economic and well-being strategies and clearly articulates the economic and social benefits that increased digital inclusion will deliver.

[REDACTED]

In addition to these activities the Council has joined the community capacity builders programme (CCB) funded by UK-Online centres which seeks to increase the capacity of community organisations to provide support or training to residents within their communities.

Both councils play a leading role in their district's community, particularly a democratic role. The delivery of customer and citizen services is part of this role. However, as the Councils become smaller, we will need to shift the relationship we have with citizens. Our aim is to strengthen partnership working, and work with citizens to achieve the long-term well-being of people in the district. We will encourage citizens to play a part in their communities, and will provide support to help them do so. We aim to make the Councils a trusted source of information, advice and guidance, especially through our websites and the proposed dedicated mobile broadband portals. The demand stimulation, e-education and telehealth activities outlined in this document will create interest in, and greater use of, the internet.

BDUK and UBF initiatives will extend the abilities of communities and citizens to access a range of resources, equipment and education improving confidence, skills and employability across the city.

SECTION E – STREAMLINING PLANNING PROCESSES TO SUPPORT INFRASTRUCTURE ROLLOUT

E1. Demonstrate how the Local Authorities involved will expedite the installation of new infrastructure by ensuring that wayleaves, streetworks and other permissions required for access to public land and properties are made available in a timely fashion.

Both Leeds and Bradford are committed to streamlining planning and highways processes and resolving potential barriers and blockages before they issues for a provider to fast track the delivery of the Super Connected Cities proposals.

The authorities recognise the recently published Microtrenching and Street Works guidance, important in terms of reducing provider costs, and will be exploring the implications of this across planning and highways departments.

Through discussions with providers and planning colleagues, it is anticipated that within the core urban areas there will be little impact on planning and highways through deployment. Nevertheless, Leeds and Bradford will take a positive approach to development and will enter into a **Planning Performance Agreement** with the appointed telecoms provider to ensure the rapid implementation and deployment of the appropriate infrastructure. This will build on Bradford's experience of working with BT in the deployment of its superfast fibre network in sensitive areas such as the World Heritage Site of Saltaire, and the experience of Leeds in developing Head of Terms for wireless solutions on the top of high buildings.

The authorities are also committed to embedding policy in local strategies and plans, ensuring all new builds are delivered with a guarantee of super fast or ultra fast connectivity.

E2. Indicate how engagement with large private owners of properties and land will be used to facilitate access for the deployment of infrastructure.

Leeds City Council already has developed strong relationships with landowners in both the Enterprise Zone and other key areas of the city such as Holbeck Urban Village (within the city centre boundary). In Bradford the area covered by the proposals is a composite of three current Masterplans. Regeneration and development work has taken pace in these over a number of years and therefore the development of strong relationships with large private owners of properties and land is part of a continuing process. These relationships will be used to enable access for the installation of infrastructure when required.

E3. Detail any other steps the Local Authorities will take to facilitate network deployment and up-grading.

The authorities are committed to this agenda to drive economic growth and have held discussions with a number of providers to understand from their perspective the issues they face in deploying ultra fast broadband and wireless. These discussions will continue through further preparation and the procurement process.

Both authorities are exploring assets which can be reused by providers to roll out both wireless connectivity and ultra fast fixed broadband speeds.

SECTION F – COMPLIANCE WITH STATE AID RULES

F1. Show how the proposed infrastructure investments and business models to be used will comply with State Aid rules.

Legal advice for this proposal has been sought from Leeds City Council on behalf of both councils. Leeds City Council is aware that the European Commission has published State aid guidelines for broadband and will ensure that, in so far as

those guidelines are applicable to the Council's proposals, it will comply with those guidelines and consult with the EC as necessary to ensure that any aid provided by the Council will not constitute unlawful State aid.

As far as end users are concerned, the Council believes that the majority of its proposals will not constitute State aid. Residential users are not subject to State aid rules and it seems likely that the majority of business users will be SMEs and that the advantage for each of them will be under the de minimis threshold (this will be monitored as the project progresses). It seems therefore that State aid is only likely to arise in entering into arrangements for the provision of the Council's proposals. In this respect the Council will ensure that either those arrangements do not constitute State aid or that where they do that they will be structured in such a way that they comply with the EC's guidelines and/or the existing block exemptions."

F2. Summarise any information you have received from the Commission that supports the view in F1.
See above.

SECTION G – FUNDING

G1. Please complete this funding table detailing proposed funding make up and profile. Non-monetary resources to be contributed to the project should be set out in Section C.

<i>Total capital funding required (GBP)</i>	<i>2012-2013</i>	<i>2013-2014</i>	<i>2014-2015</i>	<i>Notes</i>
£ millions	millions	millions	millions	
Private sector investment				
UBF funding				
Other funding (Local Authority &c.)				
Other funding (European/ERDF)				
Totals				
Approximate number of premises, residential / non-residential, covered by the funding	19,400 bus 3,600 res	19,400 bus 3,600 res	58,200 res 10,800 bus	

G2. Funding Structure:

G2.1 Describe any modelling that has been used to arrive as the funding estimate. (Full details not required at this stage.)

Enabling all cabinets to provide 80-100mbps. There are 600 cabinets in the Priority Zone (BDUK data). [REDACTED]

FTTP to 10% of business premises: 10% will need more than 100mbps of consistent synchronised upload and download provision [REDACTED]

Additional street furniture: assumed some additional street furniture will be required

Value of street furniture: Masts generate revenue for mobile operators and in private locations have a rental income to the owner. Private sales of masts are based on a valuation which is a multiple of the rental income ([REDACTED])

We have therefore calculated the value of our street lamps to be worth approximately [REDACTED]

G2.2 How will the capital funding be spent and who will own the infrastructure? For example, do you propose to lease equipment from a private sector contractor (cabinets) or own the capital investment (laying cable, installing wireless) or will the private sector contractor own the capital investment?

The private sector contractor will own the capital investment to minimise the risk and cost to the local authorities. However in the case of the wireless proposals, the street furniture will be leased on a non exclusive basis to a provider(s). All up keep and maintenance of the provider's equipment will be the responsibility of the provider(s).

G3. Describe the commercial model that you propose to use. Give the reasons for your choice and, if it is a JV/PPP or alternative model, the nature and key principles of the risk bearing arrangements.

These proposals have been developed to maximise success at scale whilst minimising the risk and cost to the councils. It is expected that the city centre wireless provision can be delivered with little public subsidy through the provision of the councils assets. In terms of the fixed infrastructure, a gap investment model is proposed.

SECTION H – DELIVERY

H1. Timely development, procurement and delivery timescales to ensure delivery is completed no later than March 2015.

This proposal is based on strong up to date data and modelling information and discussions are at an advanced stage with a range providers. Further discussions and project planning will continue by joint teams to ensure the Leeds and Bradford proposal is ready to move into the next phase should the bid be successful. As the wireless proposal is the most advanced part of the bid, the authorities are keen to explore opportunities to fast track this element of the bid. The Super Connected Cities project will be delivered alongside the BDUK Local Broadband Plan and both authorities are confident that the project can be delivered to a deadline of March 2015.


H2. Give the proposed timetable for procurement and demonstrate how cost effectiveness will be achieved.

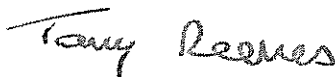
We anticipate the project to have a start date of the 1st September 2012, which would provides alignment with the BDUK programme. Where possible we will run the procurement alongside the BDUK project using the same team. Cost effectiveness will be achieved through the procurement process and through the development of strong relationships between existing infrastructure providers to ensure no overbuild of NGA.

H3. The proposal should demonstrate its fit with the government's approach to using SMEs in delivery¹³.

Leeds and Bradford are committed to growing and supporting the SME sector across the city region. As part of the procurement process we will ensure that SMEs are afforded opportunities where ever possible through sub contacting and service delivery.

Sign off by Local Authority CEO, Section 151 officer or Portfolio-Holding Executive Member

Name of proposal: Leeds and Bradford Super Connected Cities Bid	
I verify that this proposal to the Ultrafast Broadband Fund fits with corporate policy	
	
Signed:	
Name: Tom Riordan	
Job Title Chief Executive - Leeds City Council	Date: 10 th February 2012

Name of proposal: Leeds and Bradford Super Connected Cities Bid	
I verify that this proposal to the Ultrafast Broadband Fund fits with corporate policy	
	
Signed:	
Name: Tony Reeves	
Job Title Chief Executive - Bradford Metropolitan District Council	Date: 10 th February 2012

¹³ See <http://www.cabinetoffice.gov.uk/content/small-and-medium-enterprise-sme-action-plans>

