

# Super-connected Sheffield



A Sheffield proposal to the Urban Broadband fund



### APPLICANT INFORMATION

**Project Name:** Super-Connected Sheffield

**Lead organisation:**

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

Sheffield City Council (co-ordinating authority)  
Digital Region Limited

**Proposed start Date of Project:** (1/9/2012)

**Proposed end Date of Project:** (31/3/2015)

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

#### **A1.1 Economic growth**

The Sheffield City Council proposal for the Urban Broadband Fund will build on over £90m public/private investment in existing digital infrastructure through Digital Region Limited – <http://digitalregion.co.uk> - and co-ordinate with established programmes to deliver significant economic growth to the city. In particular, the investment from the UBF in the city centre and along the lower Don Valley to the Sheffield/Rotherham Enterprise Zone will create a contiguous area of high bandwidth connectivity in the parts of the city where the majority of SMEs are located, consistent with the Enterprise Zone strategy of the Sheffield City Region LEP - <http://www.sheffieldcityregion.co.uk>. The funding will also ensure that the other two City Region Enterprise Zones along the M1 Technology Corridor have appropriate connectivity. In addition to this, 1Gb capacity will be delivered to 7 existing managed workspaces within this area and a further 10 centres in the surrounding region to create a network of 'Gigacentres'. This will support the Collaboration Centre Network, a LEP project to which all the centres are signed up.

Specifically, the proposal will seek to increase the start up rate and survival rate of new businesses. It will also look to grow jobs and GVA in existing businesses, especially SMEs.

Sheffield City Centre is a hub for creative and digital industries and it is therefore critical to connect as much of the city centre as possible to next generation broadband. The Digital Region network which is already in place across the region offers great value for money when enabling areas to do this.

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The targets of this proposal will dovetail with the Digital Direction project - <http://digital.direction.biz> - which is seeking to engage with over 200 businesses and deliver a transformational ICT project in at least 30 of them and the Collaboration Centre Network project - <http://collabojam.net> - which is looking to create 1500 new jobs in 3 years.

The provision of ubiquitous wireless connectivity within the inner ring road area will also support the growth of the local economy. It will make the urban core a more attractive place to do business, support increased leisure and business tourism, and assist in generating inward investment and enable Sheffield to attract more major conferences like the Doc/fest <http://sheffdocfest.com> where over 2500 visitors attend the annual event.

Alongside this, there will be the provision of both fixed and wireless connectivity in selected neighbourhood centres, linked to the Sheffield Community Network (SCN) programme - <http://sheffieldcommunity.net> - a collaboration between SCC, schools, FE, HE, and specialist

third sector agencies to promote new digital opportunities, jobs and social enterprise in disadvantaged communities, and backed by £4.7m of ERDF/DCLG investment.

### **A1.2 Take-up of broadband services**

Alongside the UBF capital investment, there will be numerous strands of activity funded by local partners to support take-up following the provision or greater levels of connectivity.

The strategic objectives will be to:

- Work with SMEs to adopt more efficient business processes, such as cloud computing technologies which require increased bandwidth, and building on the £300k investment in transformational ICT of the Digital Direction programme
- Attract and grow digital content developers, who will require high bandwidth connectivity, in the city, and linked to the LEP Collaboration Centre Network
- Work with local businesses to develop applications for the wireless platform and drive usage of the city wireless, working with the LEP TechCity project and its Appathon initiative involving Sheffield University and Sheffield Hallam University
- Support new users engage with internet technology either through fixed or wireless connectivity and building on the Making IT Personal (£3m ESF) and the Sheffield Community Network (£4.7m ERDF/DCLG) investment, running to 2013

### **A1.3 Social objectives**

Through investment in a public wi-fi network in the Sheffield urban core and support for fixed and wireless connectivity in 10 selected neighbourhoods the investment will contribute to increased digital participation and a reduction in the number of people who rarely or never use the internet – the latter including 17.7% of the South Yorkshire adult population, or 189,000 adults, according to the ONS Quarterly Internet Survey (Q3, 2011).

The social objectives will include a focus on connecting neighbourhoods with high levels of deprivation and engaging those who face social and economic barriers to digital participation. This will deliver various social and economic benefits including greater consumer choice; improved access to information on jobs, health and well being; improved access to public services; formal and informal learning opportunities; greater social cohesion and civic engagement; opportunities for self-publishing and digital content creation.

This component will contribute to delivering the Big Society agenda of community empowerment, social action and new approaches to the provision of public services. Through links with the SCN programme, the UBF investment will contribute to the sustainability and growth of new and developing, digitally-enabled social enterprises which harness digital opportunities to create jobs and deliver social objectives.

### **A1.4. Other local objectives**

The overall project will help with the aim of achieving greater efficiencies across the public sector. The need for channel shift has been identified as the Local Authority seeks to move to 'digital by default'. South Yorkshire is at the forefront of digital innovation with over £90m investment in the Digital Region Network and the LEP's TechCity proposals.

The LEP is driving forward proposals for next generation data centre development focussed around the Sheffield City Region alongside industrial collaboration via a 'Science Park' environment designed to stimulate business growth and innovation. The LEP's proposals are built upon the opportunities offered by the backbone of the DRL network are complimentary to this UBF proposals.

This proposal positions the UBF as a catalyst for stimulating demand and enhancing the achievement of these wider economic and social transformation opportunities.

### **A2. Set out the rationale for public investment:**

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

This project seeks to address the following needs:

- the need to increase the pace of business innovation and growth through use of digital technologies in order to stimulate greater economic activity and job creation
- the need to stimulate wider public access to and use of digital technology in order to reduce levels of digital exclusion
- the need to stimulate markets and development opportunities for digital companies in order to create new business opportunities

The Sheffield City Council Super Connected Cities proposal is therefore built on four pillars:

- (i) installing 1 Gbps capacity to a number of business centres within Sheffield city region and ensuring connectivity to the regions Enterprise Zones and main business locations in order to drive innovation and economic growth,
- (ii) offering a free to use public wi-fi network in Sheffield city centre in order to provide a step change in economic and social interactions across mobile media and provide a test bed for content producers and developers; and
- (iii) providing fixed and wireless connectivity in selected neighbourhoods to increase broadband take up and promote digital inclusion
- (iv) connecting additional street cabinets on the DRL network to extend the reach of the network

#### **A.2.1.1. 1Gbps to business centres and connectivity to Enterprise Zones and main Business areas**

Currently 17 business centres have been identified where providing 1Gbps fibre to premises would benefit not only the centre itself, but also the businesses located within the centres. There are also the Enterprise Zones and the other main business areas in the city region. Access for businesses to ultrafast broadband can transform the way they operate by offering time and cost savings, work and process efficiencies and the highest level of network security. It will enable the use of innovative tools, facilitating collaborative working, content rich applications and cloud computing technologies.

Sheffield has one of the fastest growing CDI sectors in the UK (Trends Business Research, 2011) and the Sheffield City Region LEP has identified CDI as one of the four sectors with the

greatest potential for growth over the next decade. However, in order to not only attract new creative and digital businesses into the area, but also to maintain those businesses which are already here, we must ensure that the services available are of the highest quality. Ultrafast broadband is all about enabling content rich applications and future-proofing networks, something which will be of crucial importance for most digital businesses.

Offering ultrafast broadband services at a selected number of business centres within Sheffield city region will address a number of needs. Business centres will benefit from increased tenancy, SME's will benefit from next generation services and increased efficiency, and Sheffield city region will enhance its position as a growing hub for digital industries.

### A.2.1.2. Sheffield city centre free wi-fi network

Global mobile data traffic growth between 2008 and 2012 is similar to the global Internet traffic growth between 1997 and 2001 (*Source: Cisco VNI Mobile, 2011*):

Global Internet Traffic Growth		Global Mobile Data Traffic Growth	
1997	178%	2008	156%
1998	124%	2009	140%
1999	128%	2010	159%
2000	195%	2011 (estimate)	131%
2001	133%	2012 (estimate)	113%

The continued growth of mobile data traffic creates a need for networks, which is the direct need being addressed by the

proposed Sheffield city centre free wi-fi network.

In 2010 overall mobile data traffic was 0.24 exabytes per month. This figure is expected to increase 26-fold to 6.3 exabytes per month by 2015 (*Source: Cisco VNI Mobile, 2011*). The amount of mobile devices available to enable mobile data growth continue to increase, while the usage of these devices also continues to increase, creating a massive demand for networks over which to operate.

The arrival of the smartphone has signalled a new era in networking, with more and more people wanting to use online content via their mobile handset. The growth in users of smartphones is expected to be 24% between 2010 and 2015, while the growth in mobile data traffic is set to far exceed that at 116%. This huge growth creates a need for a network for people to connect to wherever they are. Given the vast amount of people that flow through Sheffield City Centre on a daily basis, it is becoming critical to offer a free wi-fi network over which mobile content can be downloaded.

### 2.1.3 Fixed and wireless connectivity in 10 selected neighbourhoods

The most recent ONS Internet Access Quarterly Survey (Nov 2011) indicates that 17.7% of the South Yorkshire adult population have never used the internet, compared to 16.8% of the total UK adult population. National initiatives such as UKOnline and Race Online 2012 have highlighted the fact that those who rarely or never use the internet are disproportionately drawn from groups and neighbourhoods that face other forms of



deprivation. The challenge of digital inclusion is at the heart of the regional Digital 20/20 partnership initiative <http://www.digital2020.org.uk/>, which is focused on establishing Yorkshire and Humber as “the connected region”, based on a holistic view of the digital capabilities required in all forms of economic activity and in everyday life.

South Yorkshire is a particular focus of investment. Digital Region aims to transform the South Yorkshire economy by improving access to business, entertainment, educational and public sector services, and attracting new investment and jobs. The Digital Region partners have recognised that addressing the social inclusion agenda will require additional measures to promote access and digital engagement. A consultation conducted for Yorkshire Forward by Analysys Mason (2009) identified a series of investment ideas that could contribute to maximising digital opportunities and that could be supported through ERDF funding. Among the ideas identified for support are digital media centres at community level as a focal point for digital participation and skills development, and linked to the production and exchange of local digital media content that can be distributed via the internet and other platforms.

The Sheffield Community Network (SCN) has been established in response to these needs and has a focus on harnessing digital opportunities to support jobs and enterprise in deprived communities. A network of neighbourhood-based centres is being supported as digitally enabled focal points for social enterprise. UBF investment would enable a number of these centres to be installed with ultrafast broadband and to act as community-based hubs for public access to fixed and wireless connectivity in selected neighbourhoods.

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Key to fostering a successful commercial and economic environment is ensuring that employees can improve their productivity by initiatives such as flexible working. The ability for a business to improve staff work-life balances, reduce their carbon footprints and lower traffic congestion, is only enabled because those connected to next generation services are able to work from home just as they would at the office.

As well as the significant benefits to businesses, residents will also be able to benefit from superfast broadband. On-demand TV, online music, high definition movies and online gaming are all made available with the use of superfast broadband, as well as the ability to

keep in touch with family and friends through the use of video conferencing tools such as Skype.

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

It is clear from the Sheffield economy that the process of business growth through digital technologies will lag the most competitive economies if left purely to the market. This proposal seeks to test and demonstrate the additional opportunities that can be gained through next generation connectivity as a way of increasing private sector led take up. Our delivery proposals have been tested with private sector partners in order to establish the appetite of the market to resource these activities. In doing so, we have focussed our dialogue with Digital region Limited and their suppliers as this best meets the strategic and operational relationships of the Council at present given its shareholding in DRL. However this proposal cannot exist in isolation from wider discussions - including those with Government and other potential partners in DRL. The precise nature of the private sector partnerships sought may therefore be required to flex.

### **A2.3. What resources and skills are you uniquely placed to contribute to this project?**

#### **A2.3.1. Digital Region Limited (DRL)**

Sheffield city council is a shareholder in Digital Region Limited, the operator of a superfast broadband platform with over £90m investment committed to next generation Internet access to the cities, towns and villages of the 4 Local Authorities within South Yorkshire.

The first phase of the Digital Region network is complete and has seen 545Km of fibre duct installed, enabling 80% of South Yorkshire to benefit from superfast broadband. It will eventually cover at least 97% of the region, creating a truly next generation network.

As a shareholder of the project, Sheffield City Council is in a favourable position to work with DRL and benefit from the expertise they have in operating a next generation network, as well as the expertise of their build partner, Thales, in building networks.

The fibre network which is already in place across South Yorkshire offers a major benefit and major cost saving when it comes to this proposal. 80% of the region is already enabled for superfast broadband, effectively providing a platform which can be built on. The backbone of the network is already there, which means huge cost savings will be achieved because much of the infrastructure needed to offer next generation services is already in place.

Enabling businesses and residents to connect to parts of the network which are currently unconnected will be highly cost effective compared to other areas as the network is already in place, the street cabinets simply need enabling.

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### **A2.3.2 Strong network of managed workspace / incubation centres**

This proposal will leverage the network of managed workspace and incubation centres that are already working towards greater collaboration and joint working - as captured by the signing of MOUs as part of the LEP CDI workstream. One of these, Barnsley Digital Media Centre (DMC) also proves what can be done with a connection scalable to 1Gb and acts as a pilot which we seek to roll out across the wider network in order to kick start private sector uptake and drive demand. (See following testimonials)

**Gareth Scargill, DMC manager:** “Superfast broadband is having a very positive effect. Businesses are choosing to relocate to the DMC because of the broadband available and those businesses are seeing growth and development as a result. Next generation broadband is critical to digital businesses and it gives the businesses based at the DMC a very real competitive advantage.”

**Lindsey Watson, Bigfoot Digital (Located in the DMC):** “We moved our business to South Yorkshire to benefit from the services available. Our previous Internet connection didn’t provide the capacity we need and it was too expensive to upgrade. We can now upload 40 or 50 web pages in seconds and the improvements in work efficiency have been amazing. I can’t imagine being based anywhere that didn’t have the services we receive now, we also know these can be upgraded when we need more.”

The DMC in Barnsley is a business model which works, and one which has been a huge success both for the business centre itself, the businesses within it and the region as a whole. SME’s are moving into the region to take advantage of its services and the more centres that have these services, the more SME’s that will want to be part of those centres. This is why the DMC is being used as the benchmark for all services being offered to the 17 business centres in this proposal.

### **A2.3.3. The Cloud**

The Cloud operates more city centre hotspots than any other organisation, and is located in a large proportion of the main branded beverage and retail outlets. As such their connectivity is recognised and users look for the Cloud locations. Further, they are the only organisation to have successfully deployed and operated a significant metrozone wi-fi deployment in the UK – in The City of London, since 2008.

The Cloud’s deployment teams understand the challenges of urban wifi deployment and how to deliver a high quality experience to its end users. As a wholly owned part of Sky, The Cloud is committed to ensuring their deployments meet or exceed the exacting standards set by Sky for service delivery to its end users.

Sheffield city council has developed a relationship with The Cloud via Digital Region Limited and has held discussions with them to come up with a first class city centre wi-fi proposal.

### A2.3.4 Sheffield Community Network

Sheffield Community Network (SCN) is a unique collaboration between Sheffield City Council, local schools, FE and HE, and specialist third sector agencies, to harness digital opportunities to create jobs and social enterprise. The SCN partnership has matched capital funding from DCLG for ICT enabled learning facilities with £2.3m ERDF investment to assist and develop 10 neighbourhood-based digital media centres, to provide equipment grants and specialist support to digitally enabled social enterprises, to build a platform for creating and sharing digital media content, and to facilitate a virtual learning network.

SCN will assist in supporting the social and economic inclusion objectives of the project, brokering partnerships with neighbourhood-based centres, promoting public awareness of digital opportunities, enabling knowledge sharing around innovative tools and technologies (mobile, cloud computing, physical computing), and providing specialist advice and support.

### 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).

For the SME community there are a number of initiatives to aid in stimulating demand. Firstly the transformational ICT project, Digital Direction which offers consultancy support for businesses wanting to adopt new digital technologies. BIS has taken a seat on the steering group of this project, recognising it as an innovative delivery vehicle for the Department's 'transformational ICT' vision for small businesses. There is also the LEP Collaboration Centre Network encouraging interactions between companies in the city and facilitating joint working – a business plan for this project has been produced and it should be operational by mid 2012. Making IT Personal has recruited and created a network and accreditation for 500 Digital Outreach Trainers across South Yorkshire, closely linked to SCN and Totally Online Barnsley commitments. There are also initiatives within the public sector supporting smarter working including the use of mobile devices and home-working.

SCN is facilitating a network of people and organisations supporting digital participation and involving local authority, educational, CDI and third sector providers. It will organise a series of thematic knowledge sharing events to highlight new digital opportunities and will provide specialist advice and support for neighbourhood-based digital media centres and for digitally enabled social enterprises. SCN will also commission a series of digital innovation pilots using participatory action research to build understanding of new digital tools and technologies.

### A4. What new infrastructure does your proposal require?

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**A5. Define the area(s) over which ultrafast broadband is to be delivered:**

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

An existing superfast broadband network (Digital Region network) is already in place across South Yorkshire, and currently covers 80% of the region. This network will form the platform off of which the ultrafast capabilities will be delivered, and will accrue no added costs to the proposal. The backbone the network provided will offer huge cost savings as it means not only that the core network is already available to use as a starting point for any further network build, but operationally, the support and ISP services needed to commercialise the services do not need to be added to the proposal.

The Digital Region network is fully operational and has in the region of 20 Service Providers and resellers offering both superfast and ultrafast services to the residents and businesses within South Yorkshire. This proposal would aim to use some of the funding available to bring coverage levels up to 100% in what are seen as the two key areas of Sheffield.

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

The Digital Region network currently covers 80% of South Yorkshire after the first phase of the network build was completed in early 2012. As the region benefits from such great coverage the aim of this proposal is to enhance the connections currently available to SMEs, increasing speeds and focussing on specific areas of interest.

### **A5.3. By new networks.**

In terms of new network build, new fibre will be installed in numerous places across the region to connect a number of business and neighbourhood centres to the core digital region network. The new fibre connections will mean increased broadband speeds, enhancing their ability to attract businesses and customers and to offer them the best services available.

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The neighbourhood centres will be in locations to be selected through a competitive procedure on the basis of criteria including levels of multiple deprivation, the existence of established and well run public access premises, additionality to existing provision, and the likelihood of contributing to targets for jobs and social enterprise.

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

The City and its partners will be contributing the following:

- Managed workspaces owned by the local authority
- Street Furniture for wireless network
- Enterprise centres and neighbourhood centres as connectivity hubs, including as providers of physical locations for wi-fi infrastructure.
- Thales are DRL's build and manage the infrastructure of the DRL network. Thales would provide pre-sales engineers for the design and planning of any build work. DRL would provide project management for the development and delivery of the project. Thales engineers will deploy the solution/proposed network and Thales (Network Operation Centre) NOC engineers will monitor the network.



### 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?**

This proposal underpins SCR's wider job creation and business attracting activity in two primary ways

- (i) It builds upon the existing £90m investment in Digital Region and successful impact of 1Gbps connection demonstrated in Barnsley Digital Media Centre. It seeks to roll out that model to the city region's key economic nodes, incubation and managed workspace centres. This is where the city region's most innovative and digitally savvy businesses are located. The activity will support the growth of those companies and enhance the attractiveness of the city region's overall offer to external companies making location decisions. Creative Sheffield, the city's economic development organisation has a well developed strategy and dedicated resource in each of the key business sectors to promote the benefits of locating in the city and to assist businesses with their relocation and expansion.
- (ii) The Sheffield City Region has secured an Enterprise Zone on a series of sites along the M1 corridor, which will stimulate growth in the modern manufacturing and technology sectors and secure a long-term source of investment. The proposal delivers broadband capacity to the SCR Enterprise Zone, ensuring that the city region's future areas of intensive development are fully able to benefit from the advantages of ultra fast connectivity. There is also resource at city and LEP level to support the promotion of the Enterprise Zone opportunities and on-going activity looking to attract new business to the region.

**B2. How will the proposed development enhance the capability of businesses, particularly SME's, to increase efficiencies and revenues?**

By connecting up the city region's key economic nodes, incubation and managed workspace centres this proposal will stimulate business development opportunities for the city region's most innovative companies. Critically though, experience tells us that simply transforming bandwidth does not of itself stimulate uplift. The project will therefore leverage and focus other sources of support such as the Digital Direction project to target and support companies looking to grow through digital innovation, increase efficiency and generate increased revenue.

The benefits of 1Gbps fibre are already being experienced by the many SME's based in Barnsley's Digital Media Centre, as referenced earlier in this proposal. The costs savings and time and work efficiencies are major benefits to businesses that have already connected to the type of services we are proposing.

Innovative tools, content rich applications and cloud computing technologies can all run quickly and securely on an ultrafast broadband connection. Sheffield city region is becoming a hub for digital industries so the availability of up to 1Gbps speeds for SME's to benefit from

such tools as those above is integral to attracting more and maintaining current digital businesses within the region.

WiFi enabled city centres attract and retain staff with the skills needed to work in SME businesses ie computer literate, social media savvy, mobility comfortable. SME's within the city area will further benefit from the increased footfall and dwell time in those locations as they can derive revenues directly or indirectly from the individuals there. On street demonstrations of products and services will increase the vibrancy of the area and enable sales to be made in the street.

WiFi can help SME's to reduce their own IT costs by utilising the free system more often and reducing bills. Events will be attracted that generate work, employment and opportunity for SME's ie concerts, promotions, shows, Arts related entertainment and media

Over 80% of homes in South Yorkshire will now have the capability to benefit from superfast broadband services via the Digital Region network and in addition to this many more businesses will be able to gain access to improved connectivity. This will enable more flexible working, including home-working which is becoming more commonplace as the benefits are being experienced by many people across the UK. Working from home has been proven to increase work efficiency and having ubiquitous ultrafast broadband across the key business centres would enable video conferencing abilities. This is also a low carbon activity reducing the need travel.

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

We know that digital channel shift has the potential to transform delivery of public services, delivering better value for money and greater choice and flexibility to our customers. Whilst the opportunity is enormous, the UK's progress against this agenda is mixed. One of the barriers to overcome is that coverage needs to be ubiquitous; simply relying on commercial roll out of next generation broadband capacity will not of itself deliver the reach and coverage to ensure every customer has choice and that the digital divide is not simply increased. The South Yorkshire Digital Region network is different in that it already covers 80% of South Yorkshire. This ubiquitous platform is one of the key infrastructures underpinning strategic initiatives from SCR LEP to further grow the regions economy. In particular there are two specific projects, the Collaboration Centre Network and the Public Sector Service Platform.

The primary purpose of the Collaboration Centre Network is to facilitate an environment where collaboration can occur, bringing together various actors from across the region and beyond, including public sector, academics, students, entrepreneurs, large corporates and SME expertise. It will drive large-scale transformation projects, SME supply chain opportunities, and delivery processes by creating a dedicated collaboration research, product and technology development and deployment facility. In this way, the Sheffield City Region seeks to overcome the two key challenges facing new business development and

innovation in the UK, namely high upfront costs and isolation from networks and opportunities.

Open collaboration is the core principal which underpins this programme, creating a framework for ideas to be traded and exchanged with ease, and where early stage innovation is not constrained by the requirement to raise significant upfront funding or intellectual property rights. Open collaboration and the resulting open innovation is not easy to do, as reflected in numerous articles (including NESTA March 2010, March 2011, May 2011). Key barriers include IP ownership, the complexity of the teams involved and interdependence between stakeholders. To address these issues the Collaboration Ecosystem will be developed using an approach built from other successful models, including the international Business Innovation Network and NESTA pilots such as VJam (March 2010). It will build on the existing low levels of collaboration in the city region, provide a framework of support for collaborating teams and embed the approach in the local business culture.

The Public Sector Services Platform is being developed alongside the Collaboration Centre Network and seeks to deliver efficiencies for the public sector by utilising web technology and improvements in connectivity.

The provision of fixed and wireless connectivity in selected neighbourhood centres will assist in inclusion of those least likely to access public services online. By providing internet access points and free public wi-fi in selected location the project will contribute to meeting the challenge of reducing the number of adults who rarely or never use the internet.

#### **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?**

South Yorkshire already has access to the fastest broadband in the UK with a specific aim of improving business growth, increasing inward investment and realising social and economic improvement. Stimulating additional private sector investment is therefore targeted at marketing (see the Cloud partnership) and SME uptake to complement capital expenditure. Work will also be done to attract service providers to operate on the network.

#### **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?**

National initiatives to improve basic ICT skills, such as the UK Online network have been embedded locally through partnership programmes including Making IT Personal, a joint initiative of South Yorkshire local authorities and public service partners. A £3m ESF Transnational Innovation project is the first major programme under this sub-regional initiative and is already assisting to build capacity through the recruitment and accreditation of a network of 500 Digital Outreach Trainers across South Yorkshire since 2010.

In 14-19 provision, Sheffield has led the way as one of the three national Beacon authorities, winning funding to develop and connect specialist delivery settings across the city – such as Red Tape Central, the retail centre at the Source (Meadowhall) and the Health and Wellbeing Centre (Shirecliffe). The coverage of these facilities and their community reach is a vital part of the city's strategy for raising the age of participation in full time education and training and for equipping young people with knowledge-based and digital skills.

The Sheffield University Technical College (UTC) - <http://www.sheffieldutc.co.uk> - to be launched in 2013, has a dual focus on advanced manufacturing and creative and digital media skills, and seeks to support young people in Sheffield to gain entry to employment in these two key growth sectors. The UTC ITC strategy proposes to ensure that every one of the 600 students is equipped with a laptop or tablet for real time use in the college, on their placements and at home.

**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.**

South Yorkshire is in a unique position in that we do not have an allocation from BDUK's superfast broadband programme, given the region's existing investment in the Digital Region network. This presents a complexity and an opportunity to this proposal that we suggest may require further dialogue between Sheffield City Council and DCMS.

We have positioned this proposal around the specific circumstances of our area and the joint opportunities we feel this presents which set South Yorkshire apart from anywhere else in the Country and which we would be keen to explore in more detail.

### 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**

Sheffield City Council is willing to offer the use of street furniture for the wireless connectivity, subject to agreement. The city will also use existing finance. Legal and project management resource allocated to Digital Region Limited to support this project. For the delivery of this project, Digital Region Limited is best placed to manage this.

There is also resource from the Business Growth and Enterprise Teams within Creative Sheffield and the Creative and Digital Industries Team as part of the LEP.

**C1.2 from the private sector.**

Private sector partners such as The Cloud would be able to commit project management resource to the roll out of wifi and also significant resources for marketing and promotion of the service. The Cloud operate more city centre hotspots than any other organisation, and are located in a large proportion of the main branded beverage and retail outlets. As such their connectivity and services recognised and users look for The Cloud locations. Further, The Cloud are the only organisation to have successfully deployed and operated a significant metrozone wifi deployment in the UK – in The City of London, since 2008.

**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.**

Sheffield runs a comprehensive system of programme-led delivery. Project management is a core competency for its managers but in addition it has a pool of dedicated Project Managers deployed as required on transformational and other projects. These range from substantial PFI projects (currently progressing a Highways and Street Lighting PFI contract) to a major CRM investment ('Customer First'). We have a strong history of successful delivery on projects including Schools PFI and the installation of an Energy from Waste facility with District Heating, to name just two. We would also have available the project delivery resources of DRL with its specific sector expertise.

**C3. How will value for money be assured?**

The city has processes and procedures in place to ensure that value for money will be achieved in relation to selecting partners and providers. Utilising the existing Digital Region network with much of the backbone infrastructure for next generation provision in place, will also provide significant cost savings.

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**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.**

It will be possible to monitor the take up and usage of the city wireless to identify the numbers using applications developed for the platform.

The ERDF funded projects mentioned above (Digital Direction and Sheffield Community Network) also have specific outputs which will be measured including business starts and businesses assisted, jobs created and jobs safeguarded. Any future ERDF projects, such as the Collaboration Centre Network will also have defined outputs.



### SECTION D –STIMULATING TAKE UP AND DEMAND

**D1. Detail you proposals for education, information and demand building activities generating greater demand by businesses (including SME's) and residences for ultrafast broadband services, aiming for 50% take-up across all areas.**

As previously referenced in this proposal, the Digital Direction, Collaboration Centres Network and Sheffield Community Network projects will be investing significant resource in education, information and demand building activity. In addition to this, Creative Sheffield and the LEP will be involved in promoting the benefits of ultrafast broadband services

The Cloud would also agree a dedicated marketing plan to promote City centre and neighbourhood WiFi. This could include “point of sale” information which could be located on street furniture, local advertising, and “big bang days”. Typically a day would involve Cloud teams on the streets showing how to use the WiFi and educating passers by.

To provide expertise and support in the promotion of WiFi for and on behalf of councils, The Cloud has a dedicated in house marketing department. The Cloud has access to Sky Creative (team of 160), dedicated resource at a retained marketing agency (Digital and Direct) and dedicate resource at a retained PR agency (Harvard PR). Through working with numerous partners from Café Nero, McDonalds, Westfield and City of London Borough Council, The Clouds experience tells us that successful Wi-Fi comes from effective promotion to end users. A suite of existing online and offline assets can be deployed for use.

*Identified audience:* residents, visitors and commuters. Different usage requirements will drive media selection and engagement parameters to ensure effective communication.

*Suggested timings:* Launch activity, on-going awareness and support, peak activity around events such as Concerts, Sports events, Christmas lights, local events etc.

*Communication channels:* To maximise reach it is proposed that a range of communication channels including existing and paid for channels are investigated

	Owned media - existing channels	Paid for media	Earned media – PR
Launch period:	· Council data driven activity: DM / Email / mobile / bill inserts	· Geo-targeted media campaign: outdoor, mobile marketing	· PR announcement – on and off line
Awareness / announcement	· Web and social page announcements		
	· Ads-local print media		
	· Signage on outdoor furniture e.g. 'Wi-Fi now available'		
On-going awareness	· Presence on The Cloud hotspot finder		· On- going PR presence around attractions / new processes for residents
and support	· Web presence – FAQs /help section inc. user & help guides / link to help desk		
	· Signage on outdoor furniture e.g. 'Wi-Fi now available'		
Event – Peak activity	· Web page re-skin / ads	· Geo targeted media campaign	· PR support – on and offline
	· Council data driven activity: DM / Email / mobile / bill inserts	· Creation of event specific apps	· Social media management
	· Web and social page announcements		
	· Ads-local print media		
	· Signage on outdoor furniture e.g. 'Wi-Fi now available'		

### 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 Council and its partners such as Sheffield Homes, like most public bodies, have embarked upon a substantial programme of service redesign. In Sheffield, the customer service transformation programme is called Customer First. A key strand of Customer First is to utilise channel shift to offer greater customer choice and value for money. The UBF will provide the opportunity to accelerate this shift through greater access and awareness to online services and by providing the platform for innovative product development utilising the 'demand pull' of the public sector service agenda and the open access technology platform of city centre Wi-Fi.

This will also be assisted by the Collaboration Centre Network and the development of the Public Sector Service Platform

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

The UBF in Sheffield will be part of a wider, coordinated agenda around digital innovation. Throughout this proposal we have sought to demonstrate the fit with other activity – particularly the wider investment that local partners will make around the UBF specially designed to capitalise on the economic and social opportunities of enhanced digital connectivity such as online commerce (through the Digital Direction project) and engagement with civic society (through the Sheffield Community Network project).

The Digital Direction project will support transformation in local businesses through events, workshops and expert support to promote adoption of digital technologies that can assist back office operations, flexible working, processes and production, sales and marketing

The SCN project brings together a unique partnership of local authority, educational, health and third sector stakeholder to mobilise strategic intervention to promote digital participation. This includes a network of digitally enabled centres in selected neighbourhoods, support for digital social enterprises, development of a city-wide platform for digital content sharing, a virtual learning network and a programme of knowledge sharing events and digital innovation pilots to test new ways of working.

### 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.**

Having recently completed the first phase of the Digital Region network ahead of schedule, delivering fibre to cabinet across 80% of the city, Sheffield has demonstrated the ability to respond to large scale infrastructure projects. The high level commitment within the local authority to this proposal will ensure that the city continues to be responsive and accommodating as the new infrastructure is deployed.

With regard to street furniture, Sheffield City Council will soon be awarding a Highways PFI contract. This contract will state that Sheffield City Council retains the right, in appropriate circumstances, to fix attachments, including telecoms equipment, to lighting columns and also to utilise electricity within them. In principle, the Local Authority is willing to negotiate a suitable commercial agreement with infrastructure providers and offer the use of street furniture for the provision of public wireless, subject to any technical interface issues between the WiFi solution and the PFI street furniture solution being capable of being satisfactorily resolved.

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

The owners/operators of the managed workspaces (Gigacentres) and the Enterprise Zone sites are supportive of this proposal and will be willing to facilitate access to their sites / buildings for the deployment of infrastructure. The managed workspace operators have memorandums of understanding demonstrating their commitment to the collaboration network activity being co-ordinated by the LEP.

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

In addition to the resource available in Digital Region Limited as an exiting Special Purpose Vehicle, Sheffield City Council will be able to dedicate resource to this project across a number of different departments. There will also be a single point of contact for the funding within the council.

### 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.**

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

As this project is being delivered by Digital Region Limited, an existing notified project for State Aid purposes, it is envisaged that this will fall within their existing exemption. Further clarification will be sought during detailed business planning.

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**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.**

Sheffield City Council proposes to use Digital Region Ltd to run and operate the new network. Digital Region is a Special Purpose Vehicle owned by the 4 South Yorkshire Local Authorities and Yorkshire Forward. The company already operates a Next Generation broadband network on a commercial basis, and so will simply integrate the new network extensions into its operational environment. This will eliminate any additional costs of Network support centres, or any issues with getting service providers to sell the ultrafast capabilities to the businesses and residential customers now served.

The commercial model proposed by The Cloud for the wireless solution is as follows:



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### SECTION H – DELIVERY

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

Sheffield is very well placed to deliver this project given the existing contractual arrangements via Digital Region Limited and their main contractor Thales.

Thales have already been through the complete OJEU process when tendering for the Digital Region project, and therefore would be able deliver much of the new development without a lengthy procurement process. They also have code power abilities that enable them to work with the Local Authorities on the construction of the network

Given the existing agreements in place, Sheffield is able to progress much of this activity almost immediately and complete the deployment well in advance of March 2015.

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

Digital Region will work with Thales, the current operator of the Digital Region network to procure the services identified in this proposal. Thales have been through a full OJEU procurement process when tendering for the original DRL project, and are committed to bring in suppliers that demonstrate cost effectiveness and value for money.

Upon confirmation that the proposal is successful, Digital Region and Thales will work with the identified partners to develop a project plan, complete with surveys, planning applications and notices and component ordering. The Digital Region network of c. 500km of fibre optic cabling, 36 exchanges being enabled, and more than 1300 street cabinets was completed in 32 months by Thales and its consortium partners.

The typical procurement timescales for the supply of equipment and access to BT Openreach cabinets is 90 days, so it is anticipated that we will be able to commence deployment of certain elements of the project within 3-6 months. Completion of the project would be anticipated to be within 12-18 months of project award.

#### **H3. The proposal should demonstrate its fit with the government's approach to using SME's in delivery.**

Sheffield City Council has recently developed a local procurement gateway for all public sector contracts across the city [www.buy4sheffield.co.uk](http://www.buy4sheffield.co.uk) and runs regular workshops with local businesses to ensure local SMEs are 'tender ready'. All tenders resulting from this project will automatically be placed on Buy4Sheffield in order to give local SMEs the best possible chance of winning the work.

<b>Sign off by Local Authority CEO, Section 151 officer or Portfolio-Holding Executive Member</b> Name of proposal: Super-connected Sheffield <b>I verify that this proposal to the Ultrafast Broadband Fund fits with corporate policy</b>	
Signed:	
Name: John Mothersole	
Job Title: Chief Executive	Date: 13/2/12