Super-Connected Cities Programme (Round 2 for Smaller Cities)

Executive Summary of DigitalYork's Proposals for an European Digital Showcase

INTRODUCTION

The Department of Culture, Media and Sport (DCMS) announced in December 2012 that York was one of 12 successful cities that had submitted winning bids as part of the Super-Connected Cities Programme (wave 2) for smaller cities. The City of York has been awarded £2.75m for implementation in 2013/14 and 2014/15 on 8 innovative projects with the details to be approved by DCMS.

This summary sets out the focus of York's submission and describes the key proposals together with the proposed approach for managing the programmes' implementation. It sets out the immediate steps that would need to be taken forward so that implementation can commence from the beginning of the 2013/14.

The partner organisations supporting and associated with this bid are: York Economic Partnership, Leeds City Region LEP, York, North Yorkshire and East Riding LEP, York Clinical Commissioning Group, Visit York, Joseph Rowntree Foundation, Aviva and TransDev (Yorkshire Coastliner).

THE YORK FOCUS

Digital technology and a fast, reliable and secure infrastructure have become as important for businesses, residents and visitors as traditional infrastructure including roads, rails and utilities. Increasingly fibre networks together with wireless/ Wi Fi in areas with a high footfall are seen by DCMS as the preferred way of enhancing coverage and the quality of broadband services.

Over the last two decades York has transformed its economy and now has one of the strongest economies in the north. We have used our relatively prosperous economy as a basis for attracting private investment in digital technology. Separate to the Super-Connected Cities (SCCs) submission, but connected to it, are ambitious private sector led proposals in place to transform urban York.

BT has led the way in York through the roll out of its national superfast programme in York. The programme is largely based on fibre to the cabinet technology and properties are likely to receive download broadband speeds from their Internet Service providers of 25 Mbits

(and 5 Mbit/s upload) although in some areas download speeds might be as fast as 80 Mbit/s. CityFibre has taken a strong interest in York as one of its vanguard cities and is generating competition in the wholesale market by putting in place an alternative open access wholesale network "The York Core". The network is to be largely fibre based with connections direct to premises with potential speeds of up to 10 gigabit per sec 10,000 megabits per second, or Mbps), for most of York which would typically be 1000 times zippier than typical internet speeds. Practical implementation of YorkCore is planned to commence in summer 2013.

York's eight Super-Connected City projects will benefit from BT's new superfast investment and ultrafast speeds from the YorkCore. CYC has already piloted the provision of Wi Fi in specific public realm hot spots. In rural York and areas which are challenging to the market plans are being implemented to upgrade broadband services, funded by the Broadband Fund provided by government funding overseen by DCMS which will provide speeds of up to 25 megabits (upload and 5 megabits download) in many villages and smaller towns.

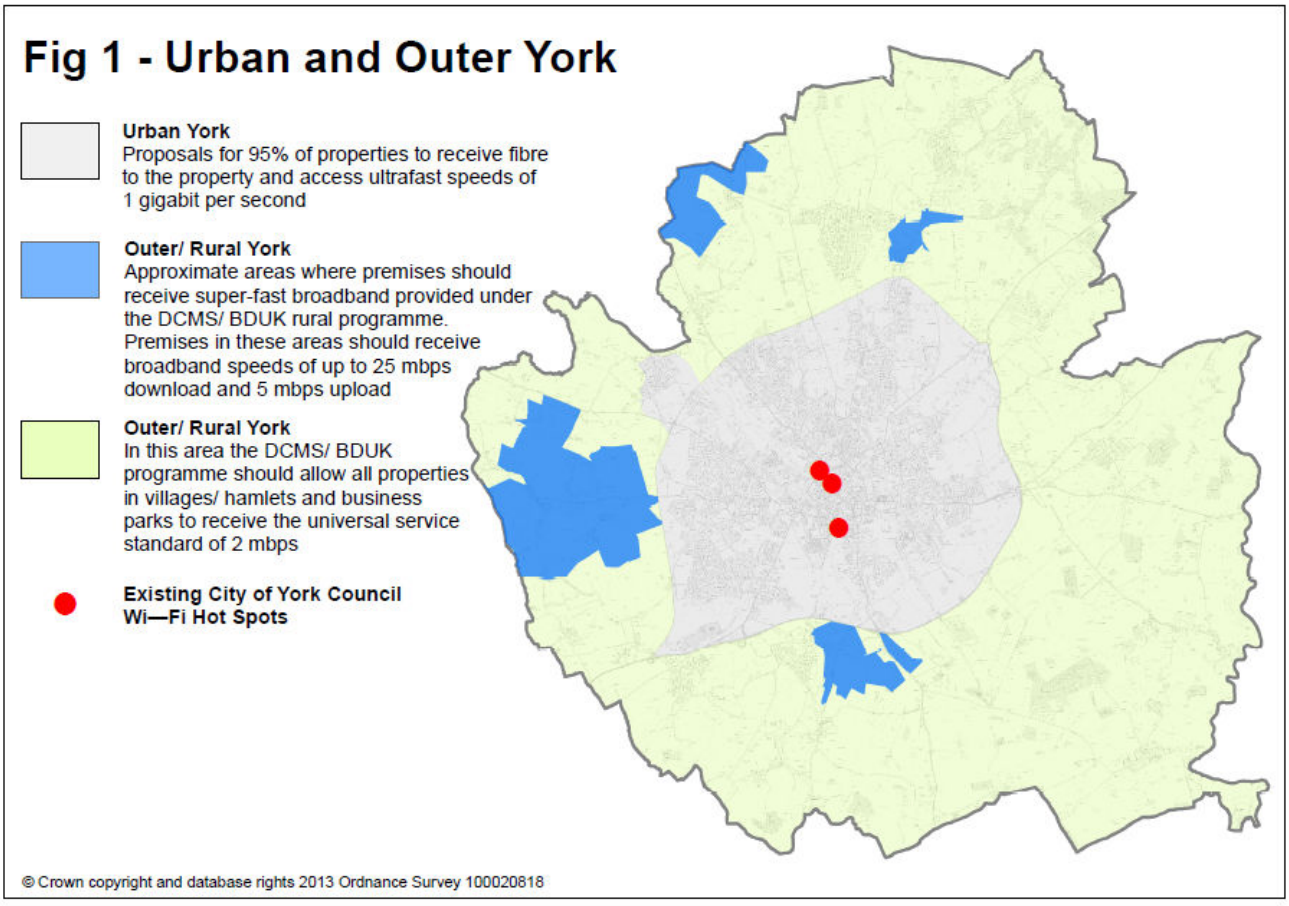


Figure 1 highlights Urban and Outer York and those areas and the areas where businesses and residents will have the opportunity to receive ultrafast and superfast broadband, and also highlights the existing CYC Wi Fi areas. [1]

VISION

CYC and its partners are working towards establishing a comprehensive digital highway by 2015 that would propel the City into becoming the best digitally connected within Europe. The Super-Connected Cities Programme would provide a critical role in accelerating the deployment process. In particular the super-Connected City programme would minimise the extent to which York developed a two speed digital economy by focussing on the opportunities which the market would find challenging without support. The vision is:

"to secure and exploit world class digital technologies and infrastructure that will accelerate the City's transformation into the most digitally connected city in Europe by 2015. The exploitation of digital communication will be maximised to: boost economic competitiveness; to enhance the quality of life and wellbeing of residents; and to transform the delivery of public services".

PROPOSALS

The Super-Connected City proposals are based on three interconnected strands and 8 innovative projects (A1, B1 to B3 and C1 to C4) which are described below. Strand A is targeted exclusively at businesses, strand B sets out three wireless/ Wi Fi projects whilst strand c is based on 4 pilot projects which are seeking to show case the potential of ultra-fast and superfast digital connections.

Strand A: Business Growth via Ultrafast Connectivity.

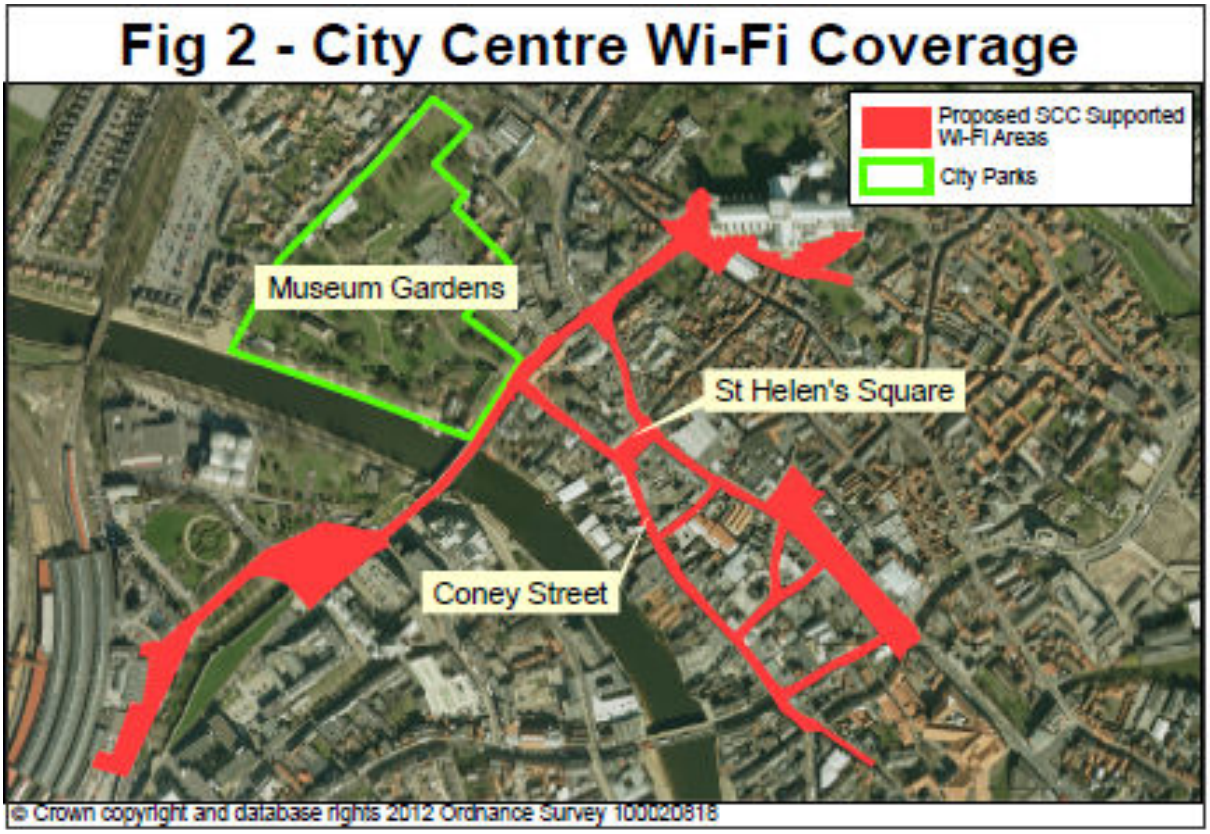
A1. **Business Growth via Ultrafast Connectivity (the Voucher Project).** Creativity and innovation are at the heart of York's economic growth and York is instrumental in supplying knowledge and innovation to the Leeds City Region. There are two aspects to this project. a) Firstly the project will provide an opportunity to businesses in Outer York who are not likely to benefit to access to YorkCore. Some 21% of York's business stock is in outer York and there is a risk that a two-tier digital economy could emerge, polarised between inner and outer York – a divide that would only become accentuated over time as the knowledge economy becomes increasingly central to the continued growth of York's economy. Therefore, for those businesses in outer York (Fig 1) that require ultrafast broadband a voucher (grant) will be available that would contribute towards connection costs. We are

[1] Ultrafast broadband delivers download and upload broadband speeds of 100 Mbitss and above. Superfast broadband delivers download speeds of 25 Mbitss and above although upload speeds will be slower.

planning on the basis of businesses funding 20% of the capital connection costs that achieved ultra fast speeds. b) The Council's focus on economic development, and job creation, will be enhanced by using the voucher programme to stimulate and accelerate demand for ultrafast. The reach of the voucher scheme within urban York requires scoping, although Business Parks are seen as the priority.

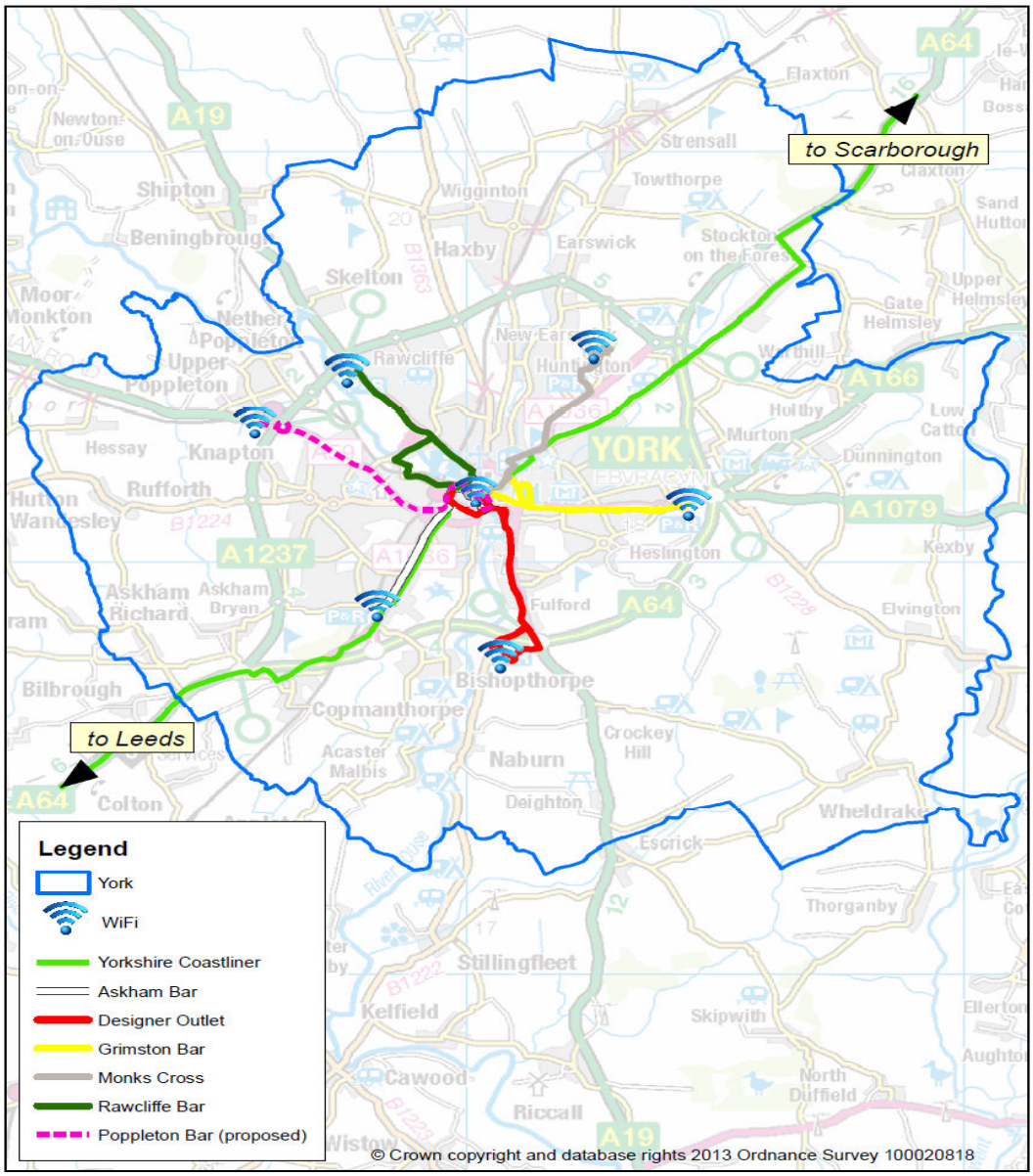
Strand B: Enhancement of the Wi-Fi network in the City Centre, Business Parks and Principal Public Transport Corridors (in both Urban and Outer York)

B1. City Centre Wi-Fi. Promoting the availability of a quality and fast city centre Wi-Fi service, facilitating access to knowledge and data and high speed digital communications for tourists, business, retail and commercial visitors is a priority for a city centre that is both a tourism destination (with over 7 m visitors per annum), a business hub. The proposed coverage is set out in Figure 2 and represents the heart of the city, bus and rail arrival and departure areas, conference and exhibition venues, visitor destinations, central hotels and the main retail centre. Overall this would extend to 25.9 hectares.



B2. Public Transport Wi-Fi. This project focuses on the provision of Wi Fi on strategic public transport corridors, particularly the park and ride routes. Business no longer starts and ends "at work" and business personnel should be able to make use of reliable and consistent access on the move. The provision of Wi Fi on public transport routes will also add to the attraction of public transport and encourage further modal shift from the private car. Fig 3 highlights the existing and planned park and ride routes and the Yorkshire coastliner route, which connects York with Leeds and also Scarborough. We expect that the model, proposed by the market, will enable a future-proof solution and will include 4G services and beyond.

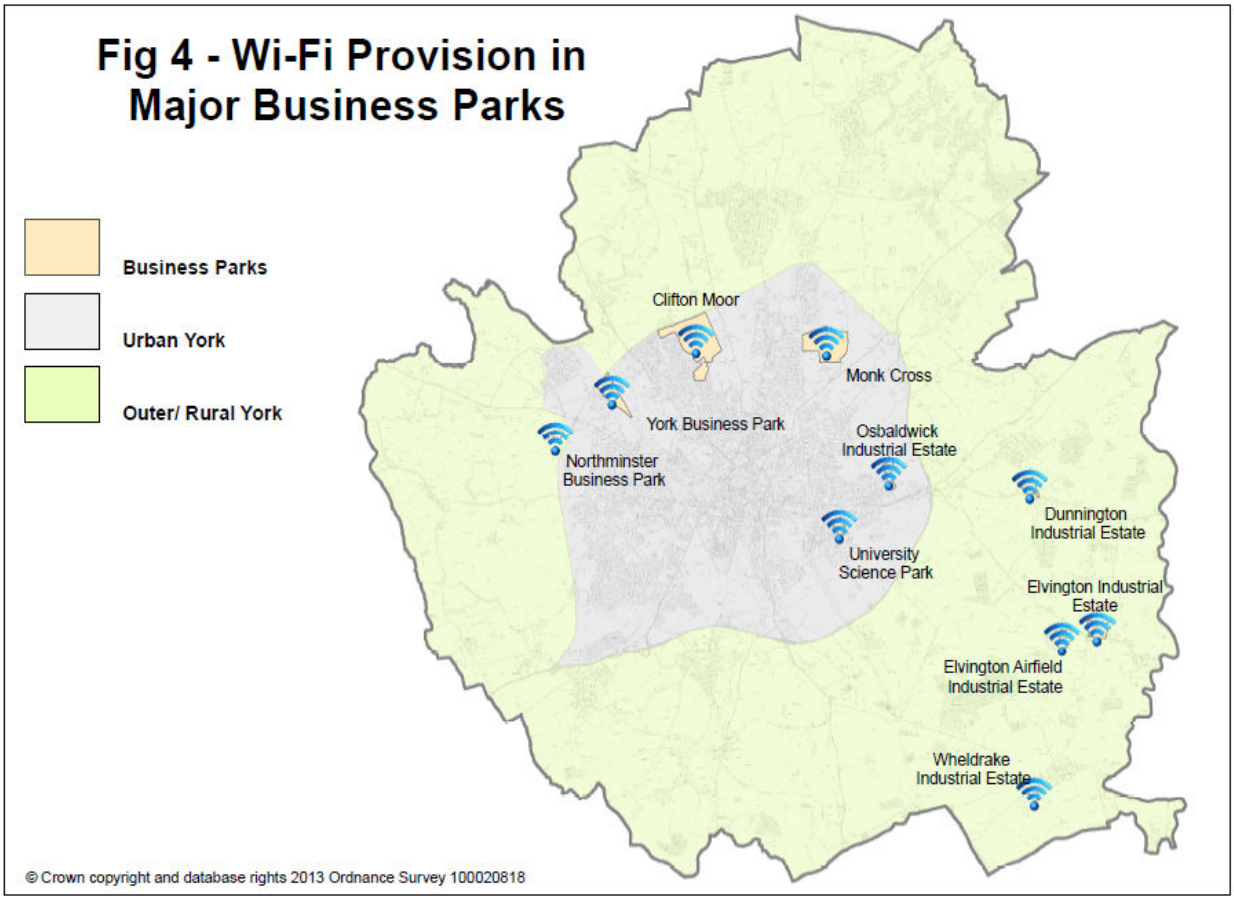
Fig 3: Park & Ride Wi-Fi Routes



The wide range of rolling stock which is not dedicated to a particular route meant that it was not possible to include rail Wi Fi as part of the SCC submission. Longer term we work with transport partners and promote Wi Fi on rail services, particularly when rail franchises are due for renewal.

B3. Business Park Wi-Fi Coverage. Recognising the importance of mobile technology and replacing slow and out-dated copper wire access, CYC's ambition extends to rolling out Wi-Fi provision to the 10 major Business Parks within York, presently covering 742 existing businesses (see Fig 4). We would build on existing initiatives, including the current Wi-Fi scheme covering York racecourse/ conference centre, the CYC city centre schemes and Wi Fi

hotspots provided in our libraries and learn from plans being taken forward as part of the Leeds Bradford Super-Connected Cities (Phase 1) Programme.



Strand C: Showcasing the potential of modern digital connectivity

C1. Digital Education. Digital connectivity provides an excellent platform to showcase a digitally enabled learning city. All secondary and primary schools in York are already well connected to the digital highway via the fibre metro network but the opportunity to exploit digital services and make best use of digital services has not been fully realised. We are proposing to provide an opportunity and the environment for schools to share best practice. The project would be based on a dedicated telepresence platform (videoconferencing) and interactive online tools to build on existing partnerships and develop joint learning and cross-school lessons, enhancing provision for learners in our schools.

C2. Telecare and Telehealth. York, through its GeniUS project, has led the way in developing new answers to service delivery challenges, particularly around public sector service transformation. GeniUs is an administered IT platform, developed in association with NESTA, which opens up an organisation's or area's challenges so that suppliers, users and providers all have an opportunity to contribute towards solutions. One of the exciting initiatives that has emerged the Council's innovative GeniUs project (an administered IT platform that has opened up the Council and York's challenges to a wide community) relates to Telecare and Telehealth. The Council is in the process of equipping a demonstration house (taken from its housing stock) to highlight how digital technology can enhance the quality of care for the vulnerable and elderly persons and allow them to remain in their homes. There is an opportunity to build on this initiative through SCC, which would be facilitated through superfast and ultrafast broadband. Working with the Vale of York Clinical Commissioning Group and the emerging Health and Wellbeing Board our plans are to identify a targeted area of York where we would provide the appropriate facilities to allow high-risk households with health issues to be the focus of a telecare/telehealth programme. The priority areas could relate to palliative care and those dealing with long-term debilitating medical conditions such as heart conditions, diabetes and Chronic Obstructive Pulmonary Disease (COPD). Assisting with those vulnerable to falls is also seen as an area where there could be real benefits to both residents and service providers. The initiative would include access to the internet through set-top boxes, the provision of specialist equipment including two-way monitoring equipment, transfer of data and two-way interaction with health professionals via high quality communications. We anticipate that the trial area would involve around 300 households, York District Hospital and 10 GP surgeries/medical centres, and the services offered would be developed in association with customers through a co-design process.

Access to ultra fast broadband will facilitate a change in the opportunity to exploit and benefit from telehealth/ care. To date provision has been constrained by telephone connectivity. York has 37 nursing and care and homes (1158 beds) and we will support them by ensuring they have access to super and ultrafast broadband which will allow the provision of support services such as tele-diagnostics by the health services

C3. Digital and Inclusion. A pilot project is planned which seeks to greatly reduce digital exclusion within areas of deprivation in the city. CYC has an ongoing project to provide computer skills (through its go Connect Programme), as does Age UK. The pilot programme in a pilot area to be selected would address the challenge of access to the internet by the provision of free or affordable Wi-Fi through a neighbourhood hub in a pilot area so that fast broadband access is not only available but also affordable. CYC and its partners would complement SCC with an extensive programme of support, which would include the deployment of a targeted mini-team to provide one-to-one and group education. But with a dedicated outreach worker acting as an enabler encouraging different services to bring resources to tackling problems in particular areas. The outreach worker would make links

with other services particularly those identified within the current Digital Inclusion Network. The development of volunteers and community champions is a key aspect of the project. This community capacity building approach is crucial to the project and would provide part of the legacy for the project.

C4. Big-Screen Technology.. York, as a major visitor destination (over 7 m visitors per annum) and with opportunities for inward investment, wishes to use big-screen technology as an additional channel to communicate local TV content to residents, provide visitor information and also promote York as a destination for investment, York is seeking two permanent big screens as a new mechanism for communicating and as high profile symbols that new technology is as significant for York's economic prosperity as its heritage and outstanding environment. In addition, we are seeking to complement the fixed nature of big-screen technology by developing smart and tablet applications for visitors. York is seeking to be at the forefront of creating an environment that attracts and retains visitors. An application that presents real-time visitor information is essential and CYC are also seeking to develop an augmented-reality visitor application that would interpret York's visitor both tourist and business destinations in new and innovative ways.

Next Steps

York has the potential to become Europe's most digitally connected city. It is already leading the process of demonstrating what can be achieved through enhanced wired and wireless technology. Clearly York benefits from potential private sector investment which has or will deliver substantial benefits. However, the significance of the Super-Connected Cities initiative is two-fold. Firstly, by promoting new infrastructure, it will enable York to fill in the gaps where the market is unable to invest and create a comprehensive and world-class wired network, alongside excellent wireless networks. This shift would elevate York to have the best digital network in Europe. Secondly, it allows a programme that would showcase what can be achieved through digital connectivity, particularly how digital networks benefit the economy and local communities.

Formal implementation of York's SCC programme would commence on 18 September 2012, the day after submission. Work is already underway to develop Heads of Terms with our delivery partners for the key strands, should our submission be successful. We already have a successful track record of innovative implementation, as our pilot city centre, open park space and library Wi-Fi initiatives and the successful deployment of the 110 KMs fibre metro ring have demonstrated.

Our partnership work, particularly as part of the Leeds City Region, and the availability of public money also brings with it responsibilities. York wishes to be in the vanguard of digital

developments. CYC is keen to use its knowledge and experience to disseminate lessons learnt as the process proceeds to those that follow.