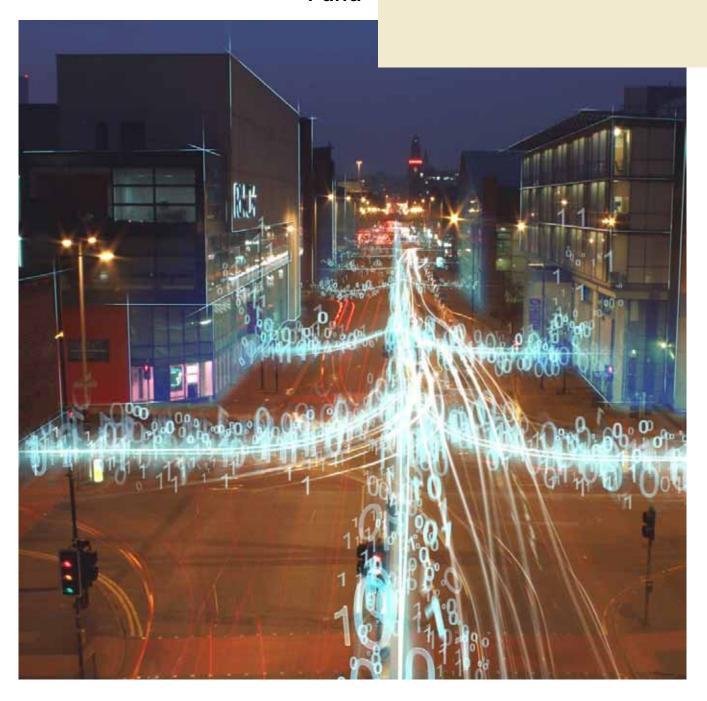
# Manchester Digital City

A bid to the Urban Broadband Fund







# **Application Information**

Project Name:

**Manchester Digital City** 

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Proposed start Date of Project:

1 August 2012

Proposed end Date of Project:

31 March 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
  - A1.2 Take-up of broadband services
  - A1.3 Social objectives
  - A1.4 Other local objectives

Manchester's ambition is to become one of the world's top 20 digital cities by 2020. This Urban Broadband Fund (UBF) application will deliver a world-class solution for the whole City of Manchester area that will see the provision of ultrafast broadband go deeper and faster than could otherwise be provided. Delivery of the project will mean that ultrafast broadband is available to a contiguous area across the whole of the City of Manchester covering a total of 235,000 premises (11,000 business and 224,000 residential). Of these 235,000 premises, UBF monies will be used to connect 55,000 residents and 5,000 businesses that otherwise would not get ultrafast services, provide fibre to the premises (FTTP) into multiple occupancy residential and business units, and additional funding to support SMEs requiring even faster connectivity (such as FTTP and Ethernet). The UBF project will also rollout high-speed wireless connectivity across key public areas and along major transport corridors.

The project has the following objectives:

#### **Economic growth**

To provide all residents and businesses with access to the Internet at high speeds, both in their premises and wirelessly across the city, including high-speed wireless in public spaces/squares, including the city and district centres, and transport corridors as an integral part of place shaping and public service transformation.

- To provide all residents and businesses with access to the Internet at high speeds, both in their
  premises and wirelessly across the city, including high-speed wireless in public spaces/squares, city
  and district centres, and transport corridors as an integral part of place shaping and public service
  transformation.
- To stimulate economic growth in specific sectors, especially our successful clusters of creative, digital & media industries growing in and around Manchester city centre, and the Sharp Project connecting into MediaCityUK.
- To support innovation enabled by ultrafast connectivity across all businesses, with a particular emphasis upon key employment sites, including the city centre, the Corridor Manchester, and Manchester Airport City Enterprise Zone.
- To help SMEs grow and generate new employment. The Manchester Independent Economic Review (MIER) showed that SMEs are under-performing. Only 10% of SMEs are currently using high-speed services, principally because of the upfront connection costs. Therefore, support to enable SMEs to access higher speeds through support for construction and connection charges is a particular priority of our programme.
- To equip Manchester's workforce with the technical skills, such as computer science and coding
  needed to complement our strong creative talent, which will enable our businesses to develop the
  online services of the future, in order to fully exploit the opportunity created by ultrafast broadband.

#### Take-up of broadband services

• To realise 100% broadband adoption by residents and businesses with more than 50% take-up of ultrafast services in advance of 2020, to outperform European targets.

To work with major operators, content providers and key institutions in the city to develop a demand stimulation package that leverages the operators' research on barriers to take-up. This will be Manchester-specific, making use of some of our most prominent local assets such as the football clubs, Manchester's main digital businesses (including the BBC and Cisco), and major retailers, such as the main supermarket chains.

#### **Social objectives**

- To make a difference on social inclusion within the most deprived areas of the city by ensuring that
  these areas outside of commercial market rollout have access to high-speed fixed and wireless
  infrastructure that can deliver information and public services to residents in new and more
  effective ways.
- To ensure that all of our residents, across all age ranges, have the skills needed to access and make
  use of these online services. In addition to greater social inclusion, a more skilled workforce will also
  have a substantial impact upon economic growth.
- To work with social landlords to facilitate the rollout of ultrafast broadband to encourage take-up amongst Manchester residents that are not online, 45% of whom are also social housing tenants. We are also working with social landlords to underwrite demand by adding broadband services to the service charge and thereby supporting the delivery of tenant services online. This focus is particularly important because our long-term unemployed are concentrated in our social housing.
- To deliver new and improved public services to all residents, using the ultrafast infrastructure provided by UBF. This will achieve a step change in the quality and cost-effectiveness of a wide range of services, from health and social care through to dealing with problem families, and can therefore form a central part of the delivery of Whole Place Community Budgets, for which Greater Manchester is one the Government's original pilot areas.

#### Other local objectives

- To act as a pilot for our wider programme, focused on key employment sites and town centres across the rest of Greater Manchester, drawing from ERDF, BDUK, and private sector investment. This is a key objective for both the City and Greater Manchester as we seek to integrate further our overall economic policy. This policy recognises interdependencies across the whole of the Greater Manchester economy. The ERDF and BDUK funding of up to £13M, together with the matched private sector funding, will provide ultrafast broadband across key employment sites and town centres, white areas, and up to 7,500 further SMEs across Greater Manchester.
- To be the only UK city outside London with two Internet exchanges offering direct interconnectivity to London, Amsterdam, and across the Atlantic, supporting our digital business base by allowing Manchester businesses to reach global markets cost-effectively.
- To ensure that digital infrastructure is embedded within the planning system, with ducting and ultrafast broadband provision being planning requirements for new business and residential developments.
  - A2. Set out the rationale for public investment:
    - A2.1 What are the specific needs you are addressing?
    - A2.2 Have all options to meet these needs by the stimulation and encouragement of private sector investment been explored?
    - A2.3 What resources and skills are you uniquely placed to contribute to the project?

From our detailed discussions with the private sector it is clear that they are making significant investments in ultrafast infrastructure across Manchester that are already increasing speeds for business and residential users. Priority employment sites such as MediaCityUK on Salford Quays and

the Corridor Manchester have fibre to the premises (FTTP) networks rolled out onsite. However, gaps in the commercial viability of ultrafast broadband investment remain, with the private sector currently unable to build a sustainable business case for investment in ultrafast broadband in 'white' areas across the city, which includes some of our most deprived communities. Without public support, ultrafast connectivity would not be available in an uninterrupted way across the whole city, denying our most marginalised communities access to the fastest broadband speeds and therefore to the services they can support, limiting our ability to reach out in more innovative and effective ways online to our citizens that are most in need of, and the greatest users of, public support.

Manchester is home to the largest cluster of creative & digital businesses in the UK outside London, with significant further growth across Greater Manchester, with the relocation of the BBC and the expansion of MediaCityUK on Salford Quays, and locations, such as the Sharp Project and the Northern Quarter of Manchester city centre. These businesses have leading edge connectivity needs, but are often micro businesses of limited financial means. Whilst the private sector is able to offer very high-capacity services, such as Ethernet, to locations across Manchester, these often involve significant construction and/or connection charges upfront that SMEs cannot afford. We will therefore use UBF monies for these upfront capital costs that will allow SMEs to take advantage of the very high capacity services the private sector is able to provide on a commercial basis.

We have worked with the private sector to accelerate and broaden the provision of ultrafast broadband to households and businesses across both the City of Manchester and the rest of Greater Manchester, from the Corridor Manchester FTTP pilot project (which connects 500 businesses and 1,000 residential premises) through to detailed discussions with the private sector, both existing operators and new market entrants, about opportunities for investment across the whole of Greater Manchester. The most recent example is the intention by Sohonet to invest in the Manchester market to provide specialist services to creative, digital & media businesses that interconnect to the digital sector in London and globally. However, the market will not provide coverage to white NGA (next-generation access) areas without further intervention from UBF.

As noted below in Section C there are a number of resources we are able to contribute to support this bid including:

- A rigorous approach to project management with a proven track record in the delivery of major projects across the city, which is being provided without cost to the UBF monies to deliver the project
- Duct capacity is available along Metrolink lines through the city, and TfGM is developing the means to make this capacity available to third parties for fibre backhaul
- Access to powered street furniture in public ownership, which can be used to host high-speed wireless equipment
- A coordinated approach to information, education and demand building, including the Business Growth Hub
- In-depth learning generated by the Corridor Manchester FTTP pilot project around State aid, wayleaves, procurement, and planning.
  - 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).

Alongside this Urban Broadband Fund bid, Manchester and the Business Growth Hub - which targets high-growth potential businesses across Greater Manchester - will work in partnership with the private sector to deliver a coordinated programme of education, information and demand building, involving:

- General awareness-raising activity using traditional and digital media, and promotion of the benefits
  of ultrafast connectivity, with a particular focus upon SMEs and the potential business benefits from
  ultrafast connectivity and associated cloud services
- A range of activities designed to address the problem of digital exclusion amongst sectors of the population (especially the elderly and unemployed)
- Focused and bespoke business support with the Business Growth Hub to help at least 2,000 SMEs adapt their business models to maximise the benefits from the take up and exploitation of ultrafast broadband
- For up to 1,000 SMEs in Manchester, financial support for the excess construction and installation costs of services at even higher speeds than available through the existing rollout of ultrafast broadband

The 'white label' programme will complement the existing activities of service providers (such as BT Retail, Virgin Media, TalkTalk, Sky, etc.) and will be service provider agnostic.

A4. What new infrastructure does your proposal require?

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

A4.2 Wireless connectivity.

There are four main types of new fixed infrastructure required by our project:

- Fibre infrastructure required in white NGA areas to provide 100% coverage across the whole City of Manchester area. This will make ultrafast broadband available to all 235,000 premises in the city (11,000 business and 224,000 residential), with UBF monies connecting an additional 55,000 residents and 5,000 businesses not currently in line to receive these services.
- Ducting for the early-stage development sites of the Manchester Airport City Enterprise Zone.
- Final 10-100 metre connections for SMEs requiring very high-capacity services (e.g. FTTP or Ethernet) that need upfront capital expenditure on excess construction and/or connection charges.
   UBF funding will be used to target up to 1,000 SME connections.
- Direct fibre infrastructure into multiple occupancy residential and business premises, which are
  often served through exchange only lines and therefore not suitable for FTTC services. This
  will create FTTP connections to residential as well as business units. It will leverage commercial
  investment wherever possible (such as BT's pilot FTTP project to connect 1,000 apartment blocks
  in the UK).

Alongside fixed infrastructure, wireless connectivity is increasingly important to all users as new smart devices become the primary means of going online for both business users and consumers. This is generating exponential demand for mobile data capacity that requires the rollout of additional wireless infrastructure. UBF funding will be used to ensure high-speed wireless is available in key public areas, including the city centre and along the main transport corridors, where commercial demand is strong, and also into deprived communities, such as East Manchester and Wythenshawe, where take-up of fixed line services is low and therefore the social inclusion benefits are the greatest.

- A5. Define the area(s) over which ultra-fast or superfast broadband is to be delivered:
  - A5.1 By existing networks and already-announced rollouts by existing communications service providers
  - A5.2 By investment in in-fill (areas not covered by commercial suppliers)
  - A5.3 By new networks
  - **A5.4** Wireless connectivity

The proposal will provide coverage across the whole City of Manchester area. Existing providers currently have extensive ultrafast rollout, with BT offering fibre to the cabinet services offering up to 80Mb/s but ultimately upgradeable to 100Mb/s to 14 of the 23 exchange areas covering the city, with a further six announced by Openreach.

Improving business connectivity is a key part of our plan for economic growth. Virgin Media currently provide 100Mb/s services to 102,155 premises across Manchester, which will be upgraded to 120Mb/s before the end of 2013.

UBF will be used to in-fill the NGA white areas not served by the existing operators with ultrafast broadband. These white areas are illustrated on the map in Appendix A, which shows that there are small white NGA areas across the city, but with a single large area in East Manchester served by the Collyhurst exchange. This is one of the city's most deprived communities but also the location of some of Manchester's key economic assets, including the Sharp Project, Etihad Campus, and Central Park. For multiple occupancy business and residential premises – which are often served through exchange only lines and therefore not suitable for FTTC services – direct fibre infrastructure will be installed, creating FTTP connections to residential and business units, leveraging commercial investment wherever possible.

Support for up to 1,000 SMEs for high-capacity services will be available on demand across the whole of Manchester, though is expected to focus on existing employment areas, particularly the city centre, including the Northern Quarter which is home to many of Manchester's creative & digital businesses, Airport City Enterprise Zone, employment locations in East Manchester, and other concentrations of businesses.

Manchester has near universal coverage of 3G mobile (with 99.8% of premises covered, according to the latest Ofcom data), and also has the third highest data usage rates in the UK, which is putting strain on the capacity of existing networks to meet mobile data needs. A priority for the UBF bid is rolling out high-speed wireless connectivity to increase this data capacity across public spaces, particularly the city centre and key transport interchanges, and out along main transport corridors and Metrolink lines, such as to the Airport Enterprise Zone, Manchester City/Etihad Campus, and MediaCityUK/Salford Quays. In addition high-speed wireless is an excellent complement to fixed infrastructure in residential and business areas, especially deprived residential areas such as East Manchester and Wythenshawe, where the take-up of fixed lines is low (less than a third) and mobiles are preferred for communications. Without UBF support, commercial rollout of high-speed wireless will not happen outside the city centre area.

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

To deliver the full programme above, it is estimated that £12M of funding from the Ultrafast Broadband Fund will be required to provide universal fixed coverage across the entire City of Manchester area. However, the programme is scalable, and a lower coverage of the NGA white areas would reduce the amount of funding required.

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

A7.2 from the EU

A7.3 by other partners.

Alongside the UBF programme, the information, education and demand building programme will be delivered across the whole of Greater Manchester supported by ERDF funding of £2M, BIS funding of £0.9M for business support, and local authority outreach work in target communities, plus private sector contributions from existing operators and the chosen suppliers.

The programme of final connections to SMEs will also be delivered on key employment sites and town centres across the rest of Greater Manchester through an ERDF programme of £10M, matched with private sector contributions from service providers and the recipient businesses.

In parallel with the UBF, we are intending to use the near £1M of BDUK money, matched by ERDF, to in-fill white areas in the rest of Greater Manchester.

The total private sector contribution to be leveraged by UBF investment is expected to at least match the UBF funding.

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

Manchester City Council have approximately 50,000 lamp columns, in which the private sector are already expressing an interest to host high-speed wireless equipment. This is therefore an asset that the Council is able to contribute to the achievement of the objective of rolling out high-speed wireless.

Transport for Greater Manchester (TfGM) have a range of other physical assets with access to power, including bus shelters, bus stations, interchanges, tram stops, overhead line equipment poles along tramlines, and road traffic signals (which are owned by the Greater Manchester Combined Authority), access to any of which can be made available to wireless service providers.

Duct capacity is available along Metrolink lines through the city, and TfGM is developing the means to make this capacity available to third parties for fibre backhaul.

## **Section B - Digital-Led Economic Growth**

#### Demonstrate an ambitious vision for growth.

Manchester's ambition is to become one of the world's top 20 digital cities by 2020. This Urban Broadband Fund (UBF) application will deliver a world-class solution for the whole City of Manchester area that will see the provision of ultrafast broadband go deeper and faster than could otherwise be provided. Delivery of the project will mean that ultrafast broadband is available to a contiguous area across the whole of the City of Manchester covering a total of 235,000 premises (11,000 business and 224,000 residential). Of these 235,000 premises, UBF monies will be used to connect 55,000 residents and 5,000 businesses that otherwise would not get ultrafast services, provide fibre to the premises (FTTP) into multiple occupancy residential and business units, and additional funding to support SMEs requiring even faster connectivity (such as FTTP and Ethernet). The UBF project will also rollout high-speed wireless connectivity across key public areas and along major transport corridors.

The strategic objectives of the project are summarised in section A1.

#### In particular:

A8. 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?

A key focus of our proposal is promoting Manchester's brand as a world-leading digital city. We will therefore develop collateral on Manchester's global standing as a super-connected city for promotion through:

MIDAS, Manchester's dedicated inward investment and development agency - MIDAS will use
Manchester's ultrafast connectivity as a key part of their inward investment strategy for attracting
new businesses into the city. Where necessary, funding support will ensure that sites being
considered by inward investors have the connectivity they require.

- We have commitments from our leading digital businesses, including Cisco, to endorse our bid and the promotion of Manchester as a super-connected city.
- Telecoms operators we will work with the existing providers and the chosen suppliers to promote
  the high levels of connectivity available in Manchester and the business benefits of locating in the city.
- TelecityGroup have confirmed that they are significantly increasing data centre capacity in Manchester, and believe that a successful UBF bid would help in "Manchester's journey to become a major European internet and digital hub [that will] help attract international businesses and jobs to the city".

Alongside new businesses, the business support programme detailed in Section D1 will directly support the adoption and take-up of ultrafast services in order to increase business efficiency and effectiveness, enabling growth and employment creation amongst the existing business base.

The Manchester Airport City Enterprise Zone represents an opportunity of transformational significance for the whole of the North of England. The long-term vision for the Enterprise Zone is to attract global businesses that would not otherwise come to the UK, creating up to 13,000 new employment opportunities and stimulating economic growth – locally, regionally and nationally. The Enterprise Zone sits within the City of Manchester and is therefore an integral part of our plans for ultrafast and not just superfast connectivity. Specifically:

- The Airport is continuing to work closely with existing providers to ensure that its development plans are fully factored into their network rollout programme.
- There is an immediate need for investment in ducting for the early-stage development sites. Seed corn funding from the Urban Broadband Fund will enable this to happen and will drive private sector investment in ducting for the future phases of development.
- Wireless coverage at Manchester Airport is currently very good with 120 transmitters in place delivering high-speed (54Mb/s) wireless and the market should provide any additional investment needed.

We believe our overall approach to the Enterprise Zone leverages maximum value from the market and provides seedcorn intervention where necessary that will instil market confidence and make an important statement of intent about Airport City having the best possible digital infrastructure available for its developers and inward investors.

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

UBF will provide ultrafast infrastructure that will provide routes for businesses, particularly SMEs to:

- Operate more efficiently by reassessing their cost base and business processes
- Improve customer engagement
- Increase and improve routes to market, at home and abroad.

However, this will only happen if businesses are able to effectively adopt ultrafast connectivity in a transformational way. Therefore the business support programme detailed in Section D1 is an integral part of our programme. The programme will target 2,000 SMEs, and be delivered by the Business Growth Hub – which targets high-growth potential businesses.

This approach will create a pipeline of businesses that understand the benefits of high-speed connectivity to their operations, with UBF monies available to fund the up front connection costs of providing ultrafast broadband into their premises.

We are working closely with other core cities, notably Bristol, Nottingham and Birmingham, building on the Digital Challenge initiative, to take forward our shared ambition to use ultrafast connectivity to drive the development of media services within our SME communities. We will explore opportunities in partnership with the cities and DCMS during the full business case development phase, with options including an aggregation market place across the four cities to realise cost savings for SMEs, and collaborative intercity networks for the digital & creative industries to promote innovation and investment.

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

Currently only 74% of residents access broadband, with take-up particularly low in our most deprived communities. This has resulted a digital divide that this bid will address. Access to ultrafast broadband for all residents will allow new innovative services to be developed that the whole population can take advantage of, improving access and efficiency of service delivery.

The following innovations will be explored:

- Real time data collection Local Neighbourhood Delivery Teams (Council, NHS and police) will be able to upload information in real time to neighbourhood spaces to ensure they are relevant, locallyspecific, and up-to-date.
- Online health and social services assessments social services officers will be able to complete
  assessments in residents' homes, which can be updated in real time to inform better decisions
  across all public services.
- Complex Families assessments as part of its complex families pilot, Manchester is investing in technical solutions to join up information across public services to better inform interventions and support, using wireless and broadband infrastructure to deliver these solutions across the city and on the move.
- Virtual communication with communities providing more services remotely utilising video conferencing, including collective case management, neighbourhood sessions, and some home visits. This will enhance citizen access and the speed of outreach work, and as travel time between each visit is reduced, assessments will be more cost effective.
- Teleheath pilot projects will be able to be undertaken once ultrafast infrastructure is in place as currently bandwidth is inadequate. Services include real-time home monitoring of conditions such as diabetes, as well as monitoring of vulnerable residents in their own home. This approach will improve care services, whilst reduce the travel time for GPs or nurses and reduce the need for review visits.
- Joined up transactional services ultrafast broadband will enable more online payments (with the Council launching MyAccount in March 2012), allow the Council to streamline its back office services, and enable residents to self-service (as promoted by the 'do it online' campaign).
- Ability to develop and deploy pervasive wireless sensor-based networks for traffic, environment and air quality monitoring; such networks can provide valuable services for transport, local authorities, health bodies and emergency services.
- The development of the Manchester App or Mapp a hub where Manchester apps (developed by the private sector) are trialled and downloaded (a similar approach to New York's Big App). These would incorporate all public services from job centre plus to health, police and council services etc. We are currently planning the UK's first Hackathon to take place in May this year, which will invite developers to attend a 36-hour event where open source data is made available in the right way for developers to programme into useful apps.

- Information services to public transport users Transport for Greater Manchester (TfGM) is committed to developing, and has identified opportunities, with potential additional funding from the Local Sustainable Transport Fund and Better Bus Fund, to provide high-speed wireless coverage for passengers and other users at all bus stations and major interchanges. UBF can be used to extend this valuable service along transport corridors, including transport corridors, including transport corridors, including transport corridors, and bus routes.
  - 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?

There are a number of areas where UBF funding will help to unlock additional private sector investment, in particular:

- Gap funding NGA white areas will make the commercial case for investment in these areas viable, thereby unlocking additional private sector investment
- The private sector will provide fibre connections to multiple occupancy residential and business units if access into buildings can be made as easy as possible - we will work with private and social landlords to unlock this private investment
- High-speed wireless rollout is attractive to the private sector in high footfall areas we will use UBF
  to support rollout where the commercial case is not viable, but leverage private investment into
  those areas where it is
- Existing private sector providers are willing to invest up to £1M for a white label education, information, and demand building programme to ensure that take-up meets the target of at least 50%. In addition, this will be complemented by company-specific marketing campaigns undertaken by the operators on purely commercial grounds.
- This demand programme will include demand registration tools that in some areas will create commercially viable cases for investment without the need for intervention.
- Specialist service providers are expressing strong commercial interest in entering or expanding
  within the Manchester market and UBF investment can encourage and facilitate this for example
  TelecityGroup have confirmed that they are significantly increasing data centre capacity in
  Manchester, whilst Sohonet, the world's largest private media network, will expand into Manchester
  and requires additional fibre capacity in the city.
- The Council has a longstanding and ongoing commitment to improve the amount, quality and functionality of open space in and around the city centre. This has seen the creation of major new spaces as part of key regeneration initiatives, investment in existing spaces and the introduction of a broad range of new activities and events based around a targeted events strategy. Through this process, city centre spaces have become a focus for communication and education and the development and introduction of new technologies will enhance opportunities to develop this process further.

More broadly, it is expected that ultrafast investment in Manchester, together with existing commercial investments in ultrafast infrastructure on sites such as MediaCityUK at Salford Quays, will raise awareness and encourage adoption amongst businesses elsewhere in Greater Manchester, which the private sector will then be better positioned to respond to.

- 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?
- Broadband adoption is highest amongst the more affluent and better educated demographics, and progressively lower amongst individuals with multiple social exclusion characteristics.
- The Council is committed to developing a digital inclusion programme focused on Manchester's most deprived communities, as identified by IMD rankings. The programme will focus on getting the digitally excluded in Manchester online through two main activities:
- Funding and placement of digital champions in priority neighbourhoods
- Development, trials and rollout of specific targeted propositions for the digitally excluded segments
- The Council is also committed to enhancing education provision through exploitation of ultrafast broadband, including:
- Videoconferencing services to be provided in locations when pupils are unable to physically attend (such as at home, or in hospitals) – this will be particularly beneficial for young people with Special Needs
- Cloud services for teachers to access homework, curriculum planning, and other school resources at home
- A cloud-based education service that enables students, teachers and other stakeholders (such as governors and parents) to access their own 'virtual learning desktop' from any connected location and from most devices
- Webinars and videoconferencing for training and support to deliver high-quality learning

Manchester wants all its citizens to be equipped with the skills not only to access and make use of online services, but also the technical and creative skills (including computer science and coding) needed to develop the online services of the future for the city and globally in order to fully exploit the opportunities offered by ultrafast broadband.

Manchester has some significant existing strengths in this area, with 100,000 students across Greater Manchester's four universities, of which 3,405 are studying Computer Science, the majority (2,570) as postgraduates. The University of Manchester is ranked 7th in the UK for research in Computer Science. But Manchester is committed to improving educational policy and provision based on best practice elsewhere in the world, such as Israel, Korea, Singapore and Finland, where computer science is a growing compulsory subject, and New York, where schools have embraced technology-enabling collaborative learning and real-world lesson plans.

Drawing from this experience, Manchester Academies will develop specialisms that support jobs in the creative & digital sectors. Two current examples include the Creative and Media Academy sponsored by Microsoft and the Communications Academy sponsored by BT, which are both capitalising on potential curriculum changes to develop the skills to meet the jobs which will be created in this sector in Manchester.

Finally, the education, information and demand building programme amongst SMEs will include business support to provide the skills needed to understand and adopt new technologies in a way that will improve business performance and provide access to new markets.

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.

The 10 Greater Manchester authorities have submitted an Expression of Interest to BDUK and an allocation of just under £1M has been made. In parallel with the UBF proposal, the same team is currently finalising a Local Broadband Plan (LBP) in agreement with the 10 local authorities, which will be submitted prior to the end of February 2012. The UBF project sits at the heart of the Greater Manchester LBP - geographically, economically (because of the presence of the city centre and the EZ), and strategically, acting as the pilot for ultrafast rollout across the rest of Greater Manchester. The GM LBP encompasses the following elements, all of which will leverage significant private sector investment:

- Ultrafast connectivity for businesses and residents within the City of Manchester through the UBF
- Superfast connectivity for businesses and residents across the whole of Greater Manchester, with ultrafast connectivity across key employment sites and town centres, with support for last mile connections to SMEs through ERDF where needed
- Universal coverage of basic broadband to all businesses and residents across Greater Manchester in white areas through BDUK
- A comprehensive information, education, and demand building programme across the whole of Greater Manchester funded through ERDF aimed at driving SME take-up of superfast and ultrafast services

### 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):

from the city

The following physical and administrative resources will be made available to support the achievement of the objectives set out in this proposal:

- Access to 50,000 lamp columns and other powered assets for wireless service providers
- Access to duct capacity along Metrolink tramlines for fibre backhaul
- Resources for planning, procurement, delivery and monitoring of the infrastructure delivery project
- Resources for information, education and demand stimulation.

The Council has approximately 50,000 lamp columns, in which the private sector is already expressing an interest to host high-speed wireless equipment. This is therefore an asset that the Council is able to make available for the achievement of the objective of rolling out high-speed wireless.

Transport for Greater Manchester (TfGM) have a range of other physical assets with access to power, including bus shelters, bus stations, interchanges, tram stops, overhead line equipment poles along tramlines, and road traffic signals (which are owned by the Greater Manchester Combined Authority), access to any of which can be made available to wireless service providers under negotiated agreement.

Duct capacity is available along Metrolink lines through the city, and TfGM is developing the means to make this capacity available to third parties for fibre backhaul.

The programme will be delivered through the Greater Manchester Investment Team, reporting to a Project Board providing strategic oversight and monitoring of project outcomes (see Section C3). A dedicated project team, and administrative support resources, will be drawn from the Council and its partners, including the Business Growth Hub, New Economy Manchester and Transport for Greater Manchester. The team will ensure the delivery of the programme of work including the development of the full business case, information and demand stimulation activities, procurement, and ongoing contract management to ensure the delivery of infrastructure and project outcomes.

Finally, the city is working with the rest of Greater Manchester on securing additional public funding from ERDF to support the information, education and demand building programme, the rollout of ultrafast infrastructure to SMEs in key employment sites and town centres elsewhere in Greater Manchester, and to match BDUK funding. This ERDF bid will be submitted by the end of March 2012, supported by a contribution from BIS for the business support element.

#### C1.2 from the private sector.

Work done by the Council and partners to date has accelerated investment by the private sector in ultrafast broadband across Greater Manchester. BT estimate their investment into Greater Manchester to total £135M, a substantial proportion of which is in the city, whilst Virgin's current network upgrade in Manchester alone is approximately £2.8M.

A key objective of this proposal is to build upon this existing investment and leverage further private sector investment to create net additional value for the city.

The procurement process will include private sector leverage as a key selection criterion, and the expectation is that successful bidders will leverage existing assets and make additional investments alongside any public monies. This is expected to include, but not be limited to, funding for the information, education and demand building programme (matched with ERDF), contributions to the cost of 'last mile' ultrafast connections to SMEs, and commercial investment in response to positive demand building and facilitation (for example, investing in multi-dwelling/occupancy units where fibre access is facilitated through wayleaves, or in response to demand building that hits commercial investment trigger points). Finally, the Council may decide to buy access services for certain residents in order to better supply public services, and would expect this income stream to underwrite any upfront capital investment required by the private sector to provide these services.

In addition, the private sector has already made a significant commitment in Manchester to working with the public and third sector to address digital inclusion, community engagement, inspiring young people, and so on. We will request that proposals leverage these resources in a coordinated way to deliver even greater impacts.

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.

The Council is committed to ensuring the successful delivery of ultrafast broadband to realise the transformational benefits to Manchester. The Council will, together with support from the private sector, deploy the necessary resources to successfully deliver the vision set out in this application.

Programme governance and management capability will be provided as follows:

- The programme will be delivered through the Greater Manchester Investment Team, reporting to a Project Board (section C3); this will ensure robust and rigorous programme governance, alignment with regional governance structures, and consistency with the strategic direction of the LEP.
- Drawing on the experience of over 100 project managers employed by the Council in a wide range of disciplines, delivering projects using the Manchester method of project management which is

based on Prince II principles and techniques.

 Additionally drawing on the project management capability of Transport for Greater Manchester (TfGM) which has a track record of major capital programme delivery in public transport and road infrastructure across Greater Manchester, including related information and communications technology (ICT). TfGM is currently delivering a £1.6 billion expansion and improvement programme of the Metrolink tram network.

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

Overall value for money will be assured in five ways:

- by achieving the optimal mix of fixed and wireless connectivity and thereby reducing overall delivery costs
- by running an efficient and cost-effective procurement process
- by maximising the amount of private sector investment and thereby minimising the public sector ask
- by maximising the return on public investment
- robust governance procedures

The preferred supplier or suppliers will be chosen through OJEU restricted procedures in accordance with a procurement strategy taking into account the different characteristics of the fixed and wireless infrastructure elements (as detailed in Section H), to ensure that providers of all sizes and with expertise in only one or other element are not excluded from the opportunity for bidding, with value for money a key selection criterion for suppliers. For the wireless element in particular, it is anticipated that this will be a very competitive procurement with many interested providers, which should therefore deliver strong value for money for any public investment.

The Council, and Greater Manchester as a whole, have robust programme governance arrangements which, in particular, provide a rigorous prioritisation process and ensure strong feedback during projects. A Project Board will be established with oversight of the project, coupled with responsibility for the wider broadband initiatives across Greater Manchester. This board will include senior representatives with operational responsibilities from the preferred suppliers, Manchester City Council, and representatives of the other Greater Manchester authorities, the digital sector in Greater Manchester, SMEs, community groups, and other public sector bodies, as necessary. Representation from DCMS on this Board will be welcome if desired. The Board will oversee the delivery of the project, to ensure that its aims and objectives are being met, and to provide strategic direction in response to any change in market circumstances, with a particular remit to ensure maximum value for public investment.

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

The key metrics for the project will be:

- Speed of rollout, density of connectivity
- Progress against our target of at least 50% take-up of ultrafast services
- The changes made to the delivery of public services
- Measures of social inclusion.

Metrics will be defined in detail, monitored and evaluated using existing robust project and programme management processes and procedures, and will form a critical element of programme governance arrangements and reporting to track the delivery of desired benefits.

Ofcom data on existing levels of take-up will be supplemented by information sourced from existing suppliers, and records on take-up that the preferred suppliers will be required to keep as a condition of public funding.

Over and above take-up levels, however, it is the impact that this take-up has upon users that will generate benefits for the economy and society. Because the project involves a number of direct interactions with users – particularly through the information, education, and demand building programme, and the transformed delivery of public services – the deliverers of these services will be tasked with collecting performance and impact measures as part of the delivery arrangement put in place through the programme. Since the former programme will be funded through ERDF, a comprehensive monitoring framework will anyway be required for funding compliance purposes.

More generally, New Economy acts as the research centre of excellence for Greater Manchester, and will run an evaluation of the project in line with Government guidelines, taking current baseline measures and assessing the impact the project delivers over its lifetime, through primary survey work, particularly amongst SMEs, on the benefits ultrafast broadband has delivered, and secondary data analysis.

# 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.

The development of specific and tailored programmes of education, information and demand building is essential to increasing take-up by both businesses and in the residential market. We have worked with the Greater Manchester Chamber of Commerce (the largest Chamber in the UK, with over 1,100 business members in the City of Manchester alone), in developing three specific programmes to stimulate demand with businesses and particularly SMEs. We have also secured the agreement of major telcos to share their own learning from research and marketing on the blockers and drivers affecting adoption of ultrafast broadband. In addition, we will look to leverage social enterprises as a good route into hard-to-reach groups. This will be used to inform the final proposals we submit to the Government in due course.

#### **Stimulating Business Demand**

Currently SME take up of high speed services in Manchester is in the region of 10% and the early adopters have tended to be the digital and creative sectors. A significant proportion of the remainder of the SME community are not aware of the benefits that having high speed connectivity could have on their business performance.

Emerging services such as cloud computing and the availability of high-quality video communication has the potential to transform the way in which businesses operate and have a direct impact on costs and their access to market. To address this situation we will instigate a range of measures under the working title of the "Manchester Lightspeed" initiative. It will be developed in conjunction with BT, Virgin, and other providers, as well as Google, IBM, Intel, Cisco, Microsoft and their resale partners. We expect a package of services to emerge that can be promoted to the SME community – with specific sector targeting informed by market intelligence. This approach will be service/product led rather than selling connectivity to businesses for its own sake. Our business stimulation programme has three

strands:

#### Initiating take-up through business education

We will educate and mentor businesses about the potential of connectivity to change the way in which they operate. At the heart of our proposal is our already-established Business Growth Hub, a partnership between the Local Enterprise Partnership and the GM Combined Authority to drive business growth and which is targeting the city's fastest growing businesses. The Hub's support will include an assessment of the benefits that businesses can gain through improved connectivity, and direct contact with the businesses to promote access to ultrafast broadband to realise these benefits.

We will supplement this with seminars organised via the Chamber of Commerce and via a Manchester Lightspeed website that will promote the most advanced products available to businesses and specify the level of connectivity required to receive them. We will also create the Manchester Lightspeed Business Club, which will carry with it a range of benefits provided by communication and service provider business that would normally only be available to the large corporations. This in itself will create a community that will boast standards of connectivity that would give those businesses access to new market opportunities.

#### **Lightspeed Manchester information and promotion**

Websites, leaflets and seminars work for some businesses. But information delivered through viral marketing has a key role too as was demonstrated by the award winning "I love MCR" campaign launched following the riots in the summer. Aimed at businesses and the residential community, this was commonly considered to be one of the most successful coordinated marketing events ever in Manchester. A similar campaign strategy will be undertaken for Manchester Lightspeed, using established and social media to maximise the visibility to the business community. This campaign will promote to potential business and residential users, and encourage the service providers to invest their marketing spend in Manchester – where the cost of sale will be substantially reduced by this visible generic marketing activity. We are committed to seeking the engagement of key Manchester institutions, such as both Football Clubs and the BBC, to ensure that what we deliver has popular appeal.

#### Building demand for new "Lightspeed" services through the market to SMEs

Businesses will only take up higher speed connectivity if they can see immediate business benefits of having them. New services that exploit these speeds are now on the market – but up to now they have only been offered to the larger corporations that already have the necessary connectivity. We aim to bring those services within reach of SMEs for the first time as part of the business connectivity package, whereby UBF money is used to help fund the up front connection costs.

#### **Residential Demand Stimulation**

The market for increased bandwidth requirement for residential communities is predominantly being driven by usage by multiple people within the same household. Bandwidth hungry uses are currently file downloads, video streaming and gaming. The advent of internet TV will also drive demand for high-definition video streaming. Our residential demand stimulation programme will encourage take-up within households that already have some connectivity and those that do not currently use the internet. There are two strands to this programme:

#### **Leveraging Pester Power to demand Super Fast Connectivity**

In households with existing connectivity complaints about speed are likely to be most vocal from children unable to do their gaming or homework. This means that there is the opportunity to promote ultra fast broadband within Manchester schools. We will test this approach through the Manchester Communication Academy which opened in 2010 in north Manchester as a partnership between BT, Manchester College and Manchester City Council. We will pilot an ultra fast broadband promotion initiative through the Academy.

Targeting Social Housing to deliver to the digitally excluded

A significant proportion of the residential communities that are not engaged in the digital environment live in social housing. Research carried out by BT estimate that:

- 45% of people without connectivity are tenants in social housing
- 90% of those 45% have never used the internet
- Affordability is not the barrier internet access could save families up to £560 per year

We will work with the operators to promote discounted bulk purchase of connectivity to social housing landlords to provide a financial incentive for them to ensure tenants have access to ultra fast broadband. We will pilot an ultra fast broadband promotion initiative through the Academy. This has already worked very successfully in Cornwall where demand stimulation funding has been provided by operators to enable social landlords to promote the availability of connectivity. We intend to adopt a similar approach and to work closely with the operators and social landlords.

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 proposed investment will enable the following activities to take place online:

#### Real time data collection

The widespread introduction of ultra fast broadband will enable local Neighbourhood Delivery Teams (Council officers and NHS and police colleagues on your doorstep) to upload information in real time to neighbourhood spaces (area based web sections, local e-bulletins, neighbourhood social media tools etc) to ensure they are relevant and inform the audience. Residents will be able to find when and where services are and also who and where the teams are that will deliver public services and have access to their local contacts at neighbourhood level.

#### Online health and social services assessments

Better digital access and infrastructure will enable social services officers to complete assessments in residents' homes. All the information collected on the door step would be updated in real time into the main social care management records to provide up to date status to inform better decisions across all public services.

#### **Complex Families assessments**

Manchester, as part of its complex families pilot, is investing in technical solutions to join up information across public services to provide a richer picture into families to better inform interventions and support - improved broadband and high-speed wireless will help with a rollout strategy across the city.

#### Virtual communication with communities

Ultrafast broadband and high-speed wireless will also enable Manchester to provide more services remotely utilising video conferencing. This would include collective case management and providing some 'home visits' remotely. This will enhance citizen access and the speed of outreach work. As travel time between each visit is reduced assessments will be more cost effective.

We are also exploring how neighbourhood sessions can benefit from teleconferencing with remote access to more residents to better understand the issues they face and find solutions to address them.

#### More responsive health and care services

Telehealth pilot projects will be able to be undertaken once the ultrafast infrastructure is in place. This would include the real-time home monitoring of conditions such as diabetes. This approach will reduce the travel time for GP's or nurses and reduce the need for review visits. Currently the scope for this is limited by poor bandwidth and connectivity access.

In addition we propose to provide more transparent care services to relatives. This will include continual monitoring of vulnerable residents in their own home using technology that can help in decision making and also emergency situations.

#### Joined up transactional services

The introduction of more widespread ultra fast broadband will:

- Improve the take up of online payment and direct debits for the Council's services
- Enable the Council to streamline its back office services
- Address the problem that most benefits claimants do not have access to high speed technology and enable the Council to work with DWP to pilot an online benefits support initiative.
  - 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.

#### **Better Democratic Engagement**

A record number of people are registered to vote in Manchester (95.8%). This is the highest percentage response to an annual registration in the core cities and enables access by more people to the democratic process.

Digital innovation has helped improve the number of those registered to vote with online communication campaigns targeted at underrepresented groups such as students and young people, the use of email and text registration and online forms to make registering simpler. However the online infrastructure required for these services is currently only accessible to three quarters of the Manchester population.

Improved connectivity will drive online services to further enhance the relationship with the electorate and their democratically empowered leaders. We aim to make it possible to meet your councillor online with live chat and hold webinars where constituents are invited to virtual surgeries.

Manchester is also looking at investing in providing a live streamed summary of full council meetings with playback functions on line as a record of decision making and providing transparency. The bid will provide an opportunity for everyone to access this level of involvement from their own home and an armchair view of accountability.

#### **Online Higher Education**

With the increasing costs of high education online options, including the Open University, are become more popular. The online content for the Open University is become very media rich – with growing video lecture content. More widespread ultra fast broadband will enable more young people the opportunity to choose this educational route.

#### More Flexible Working

Flexible working will become increasingly important for Manchester citizens seeking to achieve the right work life balance. High speed connectivity has now become a prerequisite for those seeking to achieve the highest possible high quality of life. We know that connecting the resident population will lead to more home working. This in turn will reduce business rental costs and congestion on our roads (a major problem effecting the potential growth of our 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.

In terms of street works, Greater Manchester has developed a process called the Greater Manchester Activities Permit Scheme (GMRAPS) which provides "end to end" co-ordination of the delivery of utilities infrastructure. This is a pioneering initiative that will minimise the procedural barriers to the installation of new infrastructure as well as ensuring full compliance with the provisions of relevant legislation. It is new joint permitting regime for all roadworks, which will simplify the process for installation, and thereby significantly reduce time and costs. Manchester City Council is the lead authority for this scheme, working with Bolton, Bury, Oldham, Rochdale, Salford, Stockport, Tameside, Trafford and Wigan across the rest of Greater Manchester. The scheme is administered by Transport for Greater Manchester (TfGM) on behalf of the ten local authorities, and is currently with DfT for approval.

The Council has an excellent track record working with existing providers. It has a single point of contact in place to deal with issues that arise from deployment. These proven arrangements will be used and developed in the delivery of this project, building on the success of, and learning from, the recent rollout of superfast broadband in the city by BT. The Council will take the lead in dealing with community relations issues and will work with the successful providers to minimise disruption to the programme.

Any installation of equipment in more environmentally sensitive areas, such as conservation areas, will be identified early by the Council and, working with the providers, will be dealt with as speedily as possible. A steering group will be established to ensure ongoing communication with providers, to address any blockages as they appear and find early solutions.

The Council's Planning and Highways, where possible, will agree the deployment plan for fixed and wireless infrastructure build with the preferred suppliers at the start of the project. This will help to ensure that any issues can be resolved within standard notice periods, and thereby not delay overall rollout. The Council will provide access to all its property to enable the rollout unless specific restrictions need to apply.

This will include providing access for multi-dwelling residential and multi-occupancy business units under its ownership, working in close collaboration with local Housing Associations to facilitate access to social housing, and helping to facilitate the case for commercial investment in fibre to the premises connectivity to blocks.

In addition, the Council will:

- Provide a dedicated single contact point within the Planning & Highways departments in order to
  ensure effective communications with the preferred suppliers, with regular and frequent meetings
  to exchange information in a proactive manner, allowing any issues to be dealt with quickly.
- Lead on community relations together with the preferred suppliers to pre-notify and manage any deployment issues and complaints and help to manage any issues that arise.
  - E2. Indicate how engagement with large private owners of properties and land will be used to facilitate access for the deployment of infrastructure.

GM is fully engaged with the key large private owners. This includes through the Piccadilly Partnership which is a strategic and pioneering alliance of public and private sectors, uniting key landowners including Bruntwood (the largest landlord in Manchester), Manchester City Council, Cityco (Manchester's City Centre Management Company), other public sector services and local occupiers. This project also has the backing of the Greater Manchester Chamber and the Local Enterprise

Partnership. All of these networks will be utilised to ensure that infrastructure deployment runs as smoothly as possible

The deployment of fibre infrastructure in multi-dwelling residential and multi-occupancy business relies on the permission of the landlord, and these blocks are typically served by exchange-only lines by the incumbent operator, and therefore are not suitable for upgrading to fibre to the cabinet. The identification of the landlord and subsequent acquisition of the relevant permissions can be a long and protracted process. The Council will work closely with landlords of multi-dwelling residential and multi-occupancy business units to facilitate access, thereby strengthening the case for commercial investment in fibre to the premises connectivity in many instances.

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

The Greater Manchester planning authorities have already worked in a coordinated manner across the whole of Greater Manchester to reduce processing time and facilitate the rollout by BT of its superfast broadband programme. The same principles will be applied to the preferred suppliers to this project, which can take advantage of the mechanisms already in place.

The Council aims to incorporate digital infrastructure planning into the planning process, to ensure that private and public sector regeneration and infrastructure growth is supported by digital infrastructure and services, including connections and access as well as digital furniture, way-finding and signage. This would be considered at the same time as physical infrastructure and should fundamentally be led by the needs of the digital resident. The Council will ensure the vital provision of a joined-up voice to drive coordinated development.

# **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.

The State aid implications for each of the proposed investments are considered below.

#### Fixed Infrastructure in "White NGA" Areas

This investment involves the use of UBF resources to meet the investment gap required by the private sector to secure delivery of fibre infrastructure into parts of Manchester that are classified as white for the purposes of the Commission's guidance entitled Community Guidelines for the application of State aid rules in relation to rapid deployment of broadband networks (2009/C 235/04) (the Guidelines).

The project aims to secure fibre to cabinets and/or premises (including multiple occupancy residential and business premises not suitable for FTTC services) in areas classified as "white NGA" in accordance with the Guidelines on the grounds that NGA networks do not exist in the areas and are not likely to be built within the next three years. White NGA areas in Manchester will be identified using detailed mapping, drawing from BDUK data and information provided by the incumbent operators down to premise and street level, to identify where there are gaps in investment and no plans for commercial rollout over the next three years. Preliminary analysis has been conducted for this proposal, as summarised in the map in Appendix A, and will be refined during the development of the detailed business case and procurement process.

It is proposed to deliver the investment through a framework of private sector operators procured through a competitive tender process to identify the most economic offer. The infrastructure installed will provide open access to the assets. The proposed approach may involve the use of the BDUK Broadband Delivery Framework established for the BDUK scheme or, if the Manchester project

is outside the scope of that framework, similar methodologies may be employed to support the investment, including the cost models to calculate the investment gap.

The structure of this investment is considered to be compatible with the aims of the common market in accordance with Article 107(3)(c) of the EU Treaty. The investment is located in NGA white areas and the delivery arrangements meet the requirements for compatibility set out in the Guidelines. Manchester would therefore propose to refer the scheme to the Commission and secure the necessary notification to enable the investment to proceed. This could be done either as a separate notification or as part of an umbrella notification for the Super-Connected Cities Project

#### **Support for Final Connections to SMEs and other Businesses**

This investment will be made across Manchester to ensure businesses of all sizes and types are able to benefit from the most advanced methods of data communication available, in particular SMEs. This will be targeted at areas with the potential to deliver significant economic growth, which will include NGA white, grey and black areas. The investment will be contributed by way of a grant to the business and will typically be in the region of £2,000. The recipient of the investment will be required to use the grant to fund the installation of high-capacity NGA services and will be able to choose the supplier of the services. An example of this type of intervention is the Westminster Bursary Scheme, which uses public funds to enable City of Westminster tenants involved in the TV & Film industry to pay for connectivity installation costs.

The level of financial support to the recipient is within the de-minimis limit of EUR200,000 and as such does not constitute State aid within the meaning of Article 107(1) of the Treaty. It is anticipated that grant recipients will have a choice of several providers to install the services and as such there is minimal risk of the investment giving rise indirectly to aid to a single NGA service provider. If, as the project develops, this is identified as a risk mitigation measures may be considered to ensure the arrangement does not exclude any potential operators.

As this investment does not constitute State aid it can commence immediately and does not require prior notification to the Commission.

#### **High-Speed Wireless Connectivity**

It is expected that publicly accessible wireless connectivity will be provided in high footfall areas in Manchester utilising publicly owned assets, including street lighting and other street furniture. The UBF monies will be used to contribute towards the capital cost of the installation of the network. The service provider will be procured through a competitive tender process by Manchester City Council and the terms of the contract will require the provision of the public access network in agreed areas of the city. The network will be provided by a service provider under a concession agreement. The proposal is in line with the scheme approved by the Commission in the Prague Municipal Wireless Case (NN 24/007) and is considered to be a "no aid" investment. The public funding is used to meet the cost of installing the public infrastructure.

#### **Installation of Ducting**

This element of the proposal involves using UBF funding to meet the cost of installing in publicly owned assets additional ducting to enhance the capacity within Manchester to meet future backhaul and connectivity requirements of NGA operators. The works will be Direct Development and as such will not constitute aid. Any future access to ducting will be by way of agreement with the relevant public authority, which may include Manchester City Council and Transport for Greater Manchester, and will be granted at market value.

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

We are in regular dialogue with the Commission – both DG-COMP and DG-INFOSOC – regarding State aid compliance for broadband and currently have a non-paper with BIS on the Corridor Digitisation project for discussion with the Commission. These discussions have highlighted the issues in public investments in urban areas under the current guidelines, and have very much shaped the approach above, which is designed to work with the grain of current market structures and the broadband guidelines to ensure that a positive ruling is deliverable and without significant risk of challenge.

In addition to the advice provided by our own lawyers, we will also take QC's opinion on the proposals during the development of the full business case to clarify any issues regarding compliance.

Finally, we are also happy to work with the UK Government in developing an umbrella notification to the Commission for all UBF schemes if this is the most appropriate route.

# **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.

Total capital funding required (GBP)	2012- 2013	2013- 2014	2014- 2015	Notes
£	millions	millions	millions	
Private sector investment	3	6	4	
UBF funding	2	6	4	
Other funding (Local Authority &c.)	s43	s43	s43	The Council will arrange for access to TfGM's duct capacity along Metrolink lines in the city, and other assets, such as bus stops, plus access to the Council's 50,000 lamp columns to host high speed wireless equipment – this figure is an initial conservative estimate of the financial contribution these assets constitute from the public sector – full valuation will be subject to commercial negotiations with interested parties. In addition, the Council will provide all the project management resource required to implement the programme.
Other funding (European/ ERDF)	0.5	1	0.5	For business support and demand stimulation – in addition, up to £11M further ERDF funding will be leveraged to support ultrafast broadband in the rest of Greater Manchester.
Totals	6.5	14	9.5	
Approximate number of premises, residential / non-residential, covered by the funding	24,000*	30,000	13,000	*Includes 7,000 business premises covered by high-speed wireless in the city centre - further net additional wireless coverage to be determined during the full business planning.

#### **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.)

The funding estimate has been derived from data provided by BDUK and through modelling undertaken under NDAs with existing operators. This work has involved mapping out existing provision and planned roll out to assess what further provision is required to meet the targets set out in our proposals. The estimates of the capital costs of the further provision required have been provided by the operators. The estimates of matched funding are based on discussions with the operators.

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 final structure of the investment will depend upon the proposals submitted through the procurement process. However at this stage we anticipate that the addition infrastructure will be owned by the operators and the UBF funding will act as gap funding to facilitate the provision of ultra-fast broadband to homes and businesses where it would not otherwise be commercially viable to do so.

The exception to this will be where the rollout of infrastructure involves the exploitation of public assets, such as lighting columns, bus and tram stops, public ducting, etc., which will remain in public ownership (or under any PFI arrangements that are in place) and usage of which will be permitted through a concession.

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.

The final structure of the investment will depend upon the proposals submitted through the procurement process, but as set out above it is expected that public monies will gap fund infrastructure that will be owned by the private sector contractor – though operated on an open access basis in accordance with Ofcom guidelines. The reasons for this choice are that it is an established model being recommended within the BDUK framework, and therefore well understood within the industry. It also allows leverage of existing investment, incentivising increased private sector investment and addressing areas of market failure which would not otherwise attract private sector funded ultrafast broadband provision. Gap funding also enables the public sector to retain an agreed level of control and strategic direction through the grant funding terms, but frees it from the considerable risks associated with owning and operating a telecommunications network. As all demand risk will be with the operators it also ensures that the incentive to maximise the take-up of services also lies with the private sector, which has understanding and resource to best deliver this. The public sector funding of demand stimulation will focus on SMEs and on homes in the deprived areas of the city where current uptake of broadband is at its lowest. The open access stipulation will ensure that other operators are also able to access the market, facilitating competition and innovation.

All delivery risk in respect of the infrastructure will lie with the operators.

#### SECTION H - DELIVERY

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

The infrastructure investment from the public sector will be provided as gap funding to a preferred supplier or suppliers chosen through OJEU restricted procedures in line with a defined procurement strategy (see section H2). Preparatory work for the procurement phase will be conducted during the

business case development process, to enable immediate initiation of the procurements once the full business plan submitted on 1 July has been agreed with DCMS and funding approved, assumed to be 1 August 2012.

Under the restricted procedure, the minimum timescales to contract award – assuming publication of an OJEU notice on 1 August 2012 – would see the pre-qualification stage ending in mid-September, with tenders from the shortlisted providers being submitted in mid-October 2012, and a decision on the successful supplier being made in December 2012. More detailed project planning will be conducted during the business planning phase to 1 July 2012.

The contract will include for a phased delivery programme running up to March 2015.

The tender process will allow sufficient time at all the relevant stages for all suppliers and, in particular, SMEs to develop their bids in line with the specified requirements.

Robust project governance through the Greater Manchester Investment Team and Project Board, coupled with programme management provided by the Council and its partners, will ensure delivery no later than March 2015.

The demand stimulation and information provision activities relating to ultra-fast broadband will commence as soon as funding for the infrastructure programme is awarded.

A draft high-level project plan is provided in Appendix B.

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

We believe the OJEU restricted procedure is the most appropriate and cost-effective for this project. The minimum timetable based on this procedure, assuming an OJEU notice issued on 1 August 2012, would see a contract let in December 2012, as discussed in section H1.

The Council operates a centralised procurement function ensuring the consistent application of best practice procurement processes and procedures.

The procurement approach will be designed to maximise competitive tension in order to optimise value for money, while ensuring the viability and timeliness of the sourcing exercise, as well as compliance with state aid considerations (see Section F). The appropriate procurement strategy to achieve these aims is under development. The procurement programme will be coupled with proactive market engagement to help maximise market interest and competition.

There are at least two procurement bundles, defined by the fixed and wireless elements of the project. Each bundle contains a number of components (including cost components, as well as income components in the case of wireless).

The procurement strategy will reflect the differences in the nature of the different bundles. For wireless, we will be seeking a preferred infrastructure providers, supported by gap funding where necessary, to enable pervasive wireless services to be provided by multiple service providers. For fixed, we currently see advantages in letting a framework contract to multiple providers, in order to maximise competition. We will explore the potential to utilise the BDUK Broadband Delivery Framework for NGA white area provision or to establish a framework contract along similar lines if this is not applicable.

For the SME infrastructure support element, SMEs will receive grant funding directly. The simplest model would be to allow such SMEs to approach the market directly, with advice being provided as part of the demand stimulation activity to encourage maximum competition. The final model will be selected on the basis of optimising value for money.

The procurement process and contracts will be constructed with the potential for future extension across the whole of Greater Manchester.

Based on the considerations above, we currently anticipate the need to run at least two restricted procedures, subject to finalisation of the sourcing strategy. These would run concurrently.

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

Consortium bids combining the expertise of one or more SMEs will be permissible within the criteria for selection, with the pre-qualification not being structured in such a way that will unfairly disadvantage small or new businesses in comparison to large, established businesses. Larger bidders will be asked to demonstrate their engagement of SMEs as subcontractors.

Recent independent research shows that Manchester City Council spends 24% of its spend directly with SMEs.

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

Name of proposal: Manchester Digital City

I verify that this proposal to the Ultrafast Broadband Fund fits with corporate policy

Signed:



Name: Sir Howard Bernstein

Job Title Chief Executive, Manchester City Council

Date: 10 February 2012

# i Black, Grey, White NGA State Aid Areas

