



# Super Connected Cities Plan for Urban Broadband Fund Round 2

September 2012





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If the bid is a joint proposal, please enter the names of all participating

bodies and specify the co-ordinating authority: Not applicable

Proposed start date of project: Upon notification of success

Proposed end date of project: 31/3/2014

#### Glossary

3G Third-generation mobile4G Fourth-generation mobileBDUK Broadband Delivery UK

**BIS** Department for Business, Innovation and Skills

**CCC** Coventry City Council

**CSW** Coventry, Solihull and Warwickshire

**CWLEP** Coventry and Warwickshire Local Enterprise Partnership

**DCMS** Department for Culture, Media and Sport

**EC** European Commission

**ERDF** European Regional Development Fund

EO Exchange Only
EU European Union
FTTC Fibre To The Cabinet
FTTP Fibre To The Premises
Gbit/s Gigabits per second
GVA Gross Value Added

ICT Information and Communication Technology

**JV** Joint Venture

**LBP** Local Broadband Plan

**LEP** Local Enterprise Partnership

Mbit/s Megabits per second
NGA Next-Generation Access

**NPS** National Procurement Strategy

**NQS** No Qualifying Score

**NVQ2** National Vocational Qualification Level 2

ONS Office for National Statistics
PID Project Initiation Document
PPP Public-Private Partnership

**PRINCE2** Projects IN Controlled Environments

**PTP** Point-To-Point

**R&D** Research and Development **SCCP** Super-Connected City Plan

SMBC Solihull Metropolitan Borough Council

**SME** Small and Medium Enterprise

SOC Strategic Outline Case
UBF Urban Broadband Fund
VAT Value Added Tax

WCC Warwickshire County Council

# **Executive Summary**

Coventry is the 11th largest city in the UK. Its central location and excellent transport links make it ideal for inward investment, while its world-renowned academic institutions – Coventry University and the University of Warwick – provide a great source of new talent and leading research and development (R&D), thus fostering the growth of technology (tech) start-ups and spin-off companies. As a result, Coventry is now home to around 1000 R&D companies and is positioning itself a leading hub for tech and R&D investment.

Coventry has invested in transport infrastructure and business parks to nurture this growth in tech and R&D; however, many of these businesses have large data transfer requirements and require a 'step change' in the provision of ultrafast broadband connectivity, with the expectation that this will be future proof and capable of providing Gigabit speeds in future as their wide area data transfer requirements increase.

Coventry's Super-Connected City Plan (SCCP) aims to meet this need for a step change in broadband provision, recognising the importance of the tech and R&D sector to the City's economic growth. The SCCP also considers consumers, particularly those in areas where digital inclusion is considered a priority (e.g. North East Coventry). Ubiquitous wireless broadband coverage in Coventry's tourist spots and leisure developments will boost Coventry's tourism sector, while the provision of 'infill' Superfast broadband across Coventry will ensure that consumers and businesses have ubiquitous access to broadband with speed of up to 40Mbit/s. The objectives of Coventry's SCCP can therefore be summarised as follows:

- Pillar 1 Gigabit fibre provision to tech SMEs, spin-offs and research institutes
- Pillar 2 City centre wireless provision to tourist hot spots and leisure developments
- Pillar 3 Superfast infill to provide ubiquitous availability of Superfast broadband
- Pillar 4 Digital inclusion: Affordable broadband to social housing

The total capital expenditure for this programme is estimated to be £10 million. We anticipate leveraging a £4 million (40%) capital contribution from the private sector, £1 million from the Council and the remainder (£5 million) from the Ultrafast Broadband Fund (UBF). In addition to using internal resources to deliver this programme the Council will contribute another £1 million to cover revenue costs. Where possible, the Council will also make available to potential bidders its extensive duct and fibre network, and where possible its street furniture, which spans the City.

We expect investment in the above pillars to generate an incremental benefit of £126 million (discounted) over a 15-year period, and to result in the creation of 6284 jobs. Coventry can deliver the above objectives by March 2014 by commencing immediately (upon being awarded the UBF) with State aid, market testing and pre-procurement activities. In addition, the announcement made by the Secretary of State for Culture, Media and Sport regarding planning law changes aids us in meeting our target on time.

# 1 A – Strategic Outline Case – vision and objectives

# A1 – Strategic Outline Case

Coventry is positioning itself as a centre for 'high-tech' industries

The City of Coventry is the 11th largest city in the UK. It has a population of over 318 000 which occupies a well-defined area of 38 square miles in the middle of England. Its central location (within the Coventry and Warwickshire sub-region) and excellent transport links mean that Coventry is ideally placed for inward investment. The University of Warwick and Coventry University provide a great source of new talent, leading research and spin-off tech ventures.

Coventry has gained an enviable reputation for digital technologies and is highly regarded for design, manufacturing and advanced engineering, particularly in the motor transport sector; Rolls Royce and Jaguar Land Rover are among the City's top-ten employers and are responsible for 11% of jobs in the City<sup>i</sup>. It is important to attract inward investment into the City, particularly at a time when the latest economic figures<sup>ii</sup> suggest that, since 2004, Coventry's growth rate in Gross value added (GVA) has been below the national average and GVA began to fall from 2007. Despite this, recently, just under a third of industry sectors have reported increases in employment; for example, the private sector has been creating jobs, with over 900 business start-ups each year and there are indications that the number of City residents with high-level qualifications is increasing. In total the City's economy is valued at £5.6 billion per annum.

In addition the City's population is growing and it is estimated that the number of residents will increase by about 5000 a year over the next ten years<sup>ii</sup>. Coventry is leading investment in R&D, enabling businesses to connect into the universities. The City aims to position itself a leading centre for 'tech' industries and is home to around 1000 R&D companies. The City's growth will provide opportunities for Coventry's economy; however, ultrafast broadband infrastructure will be required to underpin and safeguard this population and business-led growth.

Coventry's has established key priorities and investment plans for business, tourism and equality

The target sectors for growth which underpin Coventry's SCCP are:

- transport technologies
- innovative technologies
- advanced manufacturing
- digital technologies.

Business and leisure tourism are also an important sector for the City, currently accounting for over 8500 jobs. A key priority of the City is to encourage growth and deliver a programme of activities to increase the profile of the City. The Council's Equality Strategy aims to make better use of technology and developing alternative methods though which Coventry's citizens can

contact the Council this addressing social inclusion among excluded communities and social groups.

Economic growth is a major priority in Coventry, through job creation, higher skills and improved wellbeing. The Council's 'Jobs Strategy'ii is aligned to the Council Plan<sup>iii</sup> which sets out its approach to job creation and renewing the prosperity of the City. The Council will continue to invest in new 'knowledge' industries and jobs for its people, such as in R&D and business services.

To this end, Coventry is leveraging its fine heritage of engineering and manufacturing skills; Coventry University and the University of Warwick are playing a leading role in developing innovative ideas, particularly in medical technologies and environmental engineering. For example, Coventry University Technology Park hosts 70 tech companies, ranging in size from 2 to 500 employees.

The City's achievements in terms of innovation can be attributed to its various science, technology and business parks, which provide the perfect environment for new and existing businesses to cluster and thrive. These parks are successfully retaining graduates, promoting new ideas and incubating business. In addition to Coventry University Technology Park, these include Binley Business Park, Coventry Business Park, Westwood Business Park and the renowned University of Warwick Science Park. By assisting growth in technologies the City will create the profile and reputation needed to establish a virtuous circle of investors attracted by success.

Future economic development activity will be based on the concept of a Future City – the umbrella that describes Coventry's determination to be a competitive, innovative, integrated and resource-efficient, low-carbon city that meets the needs and aspirations of its people. The aim is to focus on people and technologies to ensure that the City is connected, engaged, robust, smart and resilient; and advantageously placed to deal with population growth and resource scarcity.

Knowledge and understanding of where growth – and therefore long-term prosperity – for the City will come from has been further refined and developed during the first year of the Jobs Strategy.

Coventry's SCCP builds upon the City's key priority growth sectors

Coventry's SCCP builds on the City's priorities, which include: protecting existing jobs, boosting new job growth in the four target sectors, safeguarding the City's tourism industry, and encouraging socio-economic convergence among the most socially and economically disadvantaged residents. To help the City realise its priorities, the SCCP focuses on four key pillars:

- Pillar 1 Gigabit fibre provision
- Pillar 2 City centre wireless provision
- Pillar 3 Superfast infill
- Pillar 4 Digital inclusion.

# ► Pillar 1 – Gigabit fibre provision

This pillar will provide a step change in fibre-based broadband provision, offering connectivity at speeds of up to 1Gbit/s to key sites and businesses in and around the City centre. This pillar is expected to provide ultrafast fibre broadband services through wholesale provision of duct and fibre connectivity services (fibre to the premises, FTTP) to approximately 2835 business premises. This broadband provision will support Coventry's economic growth in the knowledge economy, by encouraging new tech business clusters to form, retaining graduates and helping to incubate new business start-ups across Coventry's target growth sectors. In particular, the aim is to cover Coventry University, the science and technology start-ups and SMEs at the university's technology park, the FARGO hub of creative companies on Far Gosford Street, and the proposed development to deliver 15 000 jobs at Friargate. These are key sites where the council expects to attract high levels of inward investment by 'tech start-ups' and established enterprises, as outlined in its Jobs Strategy.

All existing SMEs and business parks will be provisioned with full fibre connectivity; that is, FTTP that can provide up to 1Gbit/s broadband connectivity in the short term and multi-Gigabit broadband connectivity in the medium to long term. In addition, the Coventry and Warwickshire Gateway ('the Gateway') has been identified as a high potential growth area, and there are plans to build at least 33 new buildings in the short term. Because it is universally acknowledged that high-speed broadband connectivity is an enabler for businesses to realise their full growth potential, it is planned to provision ducts to these 33 buildings so that Gigabit broadband connectivity will be available to new businesses from day one. The total cost of Pillar 1, to provide FTTP to all businesses and install ducts in the Gateway area is estimated to be £5.12 million.

#### ► Pillar 2 – City centre wireless

This pillar will benefit Coventry's key tourist sites, providing contiguous internet access to business and leisure tourists, mobile workers and students in an area from the 'War Memorial Park' in the south to the 'Arena Park' in the north of the City. Wireless provision will also include City-centre leisure and business complexes currently under development and Coventry University. In combination with Pillar 1, this will help to establish a contiguous 'connected' broadband zone across central Coventry.

Service providers do not provide contiguous wireless services from the centre to the War Memorial Park and to the Arena Park; this pillar seeks to redress this aspect. The total cost of providing wireless connectivity for the areas identified here is estimated to be £1.50 million, based on the installation of 300 new hotspots.

#### ► Pillar 3 – Superfast infill

This pillar will provide Superfast broadband 'infill' where commercial service providers do not have plans to offer this coverage, thus ensuring the ubiquitous availability of Superfast broadband

It is expected that infill coverage will mainly be based on FTTP, because the majority of premises have exchange-only lines and so can only be upgraded to FTTP. The total cost of providing Superfast infill to all business and residential sites in Pillar 3 is estimated to be £2.05 million.

### ► Pillar 4 – Digital inclusion

This pillar will connect the most deprived and socially and digitally excluded communities in Coventry to a range of online services and opportunities. The aim is to help give people access to jobs, advice and support in the community, and to transform the delivery of public services.

The geographical scope of this pillar is aligned with Pillar 1, to make it attractive for wholesale service providers by maximising the available economies of scale. This pillar will provide ultrafast fibre broadband services through the wholesale provision of duct and fibre connectivity services (FTTP) to approximately 542 social housing premises in the North East of Coventry. The total cost of providing ultrafast fibre broadband to the social housing premises in Pillar 4 is estimated to be £1.41 million.

The case for a 'step change' in broadband provision

Coventry's future prosperity and economic success depends on the City's ability to protect existing jobs and to boost new job growth across its target 'priority sectors'. If the City is to continue to attract investment from large corporates and start-ups, it needs a sustainable, future-proof and competitive business environment. As well as a first-class transport network and skilled labour force, this means the City must also provide an excellent broadband network that offers high speeds and is reliable and affordable (the latter being a particularly important consideration for start-ups).

The results of a broadband satisfaction survey (shown in Figure 1.1 and Figure 1.2) demonstrate that only a small proportion of the City's businesses and residents consider the speed, reliability or cost of broadband to be 'excellent'. Coventry University has stated that there is latent demand among businesses for ultrafast services, but they are reluctant to take up services due to the costs.

_	Poor	Average	Excellent	N/A
Speed	43%	53%	4%	0%
Reliability	12%	65%	23%	0%
Cost	18%	70%	4%	8%

Figure 1.1: Results of survey among Coventry businesses with download speeds of up to 15Mbit/s, and one with 60Mbit/s [Source: Coventry City Council]

	Poor	Average	Excellent	N/A
Speed	70%	26%	4%	0%
Reliability	35%	54%	10%	1%
Cost	29%	64%	6%	1%

Figure 1.2: Results of survey among Coventry residents with download speeds of up to 10Mbit/s. [Source: Coventry City Council]

An FTTP-based broadband network can address many of the issues highlighted by the survey: a full fibre network can be more reliable than services based on wireless and fibre to the cabinet (FTTC), and will also require minimal upgrades and investment in the future; furthermore, a full fibre network can provide the 'step change' in speeds that is required to enable Coventry to compete on an even footing with its competitors in the UK (such as Northampton, Milton Keynes and Leicester), Europe and further afield. Fibre networks can achieve download speeds ranging from hundreds of Mbit/s to multiple Gbit/s, and also enable synchronous upload and download speeds to be achieved.

Premises that are connected with long copper lines are restricted to low speeds and may experience unreliable connectivity because the signal quality declines rapidly as the length of copper lines increases. In contrast, optical fibre can provide high-speed broadband connectivity over long distances (up to 80km) without any noticeable reduction in performance or quality. A full fibre solution will therefore address the speed and reliability issues that have been raised by current users.

Although commercial providers do currently provide fibre-based services to businesses in Coventry, these are usually based on leased-line services which, due to their high cost, are targeted at corporate organisations and so are not accessible to SMEs or tech start-ups.

The results of an initial market consultation and forecasting analysis carried out by Analysys Mason (see Annex B) show that there are no plans by any commercial service providers to provide more than 100Mbit/s services in Coventry, but Analysys Mason expects that demand to outstrip the current provision of Superfast broadband services (80 to 100Mbit/s). BT has deployed FTTC across large parts of the intervention area, potentially providing broadband speeds of up to 80Mbit/s. Therefore, an important aim of the Coventry SCCP is to create an alternative and lower-cost full-fibre network at a wholesale level, to stimulate competition, and potentially reduce broadband prices.

# A2 – Connectivity tables

	Approximate no. of premises connected:	2012– 2013	2013–2014	Future (up to 2015–16)			
	EXISTING FIBRE-ENABLED CABINETS AND CABLE NETWORK AREAS <sup>1</sup> Existing and planned roll-out by commercial providers						
	Fixed broadband – total no. of dwellings passed:	106,814	131,208	131,208			
	Fixed broadband – dwellings passed as % of total in City:	80.0%	98.3%	98.3%			
ND FTTC	Fixed broadband – total no. of businesses passed:	3,911	4,768	4,768			
CABLE BROADBAND AND FTTC	Fixed broadband – businesses passed as % of total in City:	80.0%	97.5%	97.5%			
ROADE	Additional connectivity t	to be achie	ved with UBF ir	nvestment			
ABLE B	Fixed broadband – total no. of dwellings passed:	0	2,025				
ENT - C	Fixed broadband – dwellings passed as % of total in City:	0%	1.5%				
ABLEME	Fixed broadband – total no. of businesses passed:	0	29				
ROADBAND ENABLEMENT -	Fixed broadband – businesses passed as % of total in City:	0%	0.6%				
BROADBA	Cumulative additional conne and the	ctivity to be e commerci		JBF investment			
NGA	Fixed broadband – total no. of dwellings passed:	106,814	131,208	131,208			
	Fixed broadband – dwellings passed as % of total in City:	80.0%	99.8%	99.8%			
	Fixed broadband – total no. of businesses passed:	3,911	4,797	4,797			
	Fixed broadband – businesses passed as % of total in City:	80.0%	98.1%	98.1%			

An open market review exercise has not been carried out yet and the number of premises passed is based on public announcements, coupled with Analysys Mason's forecast of the BT roll-out plan. The exact number of premises with FTTC will be confirmed after the open market review exercise.

Tile Hill exchange is expected to be upgraded to FTTC/P in December 2012 but the percentage of FTTP and premises that are likely to get FTTP are unknown at this stage. We expect the percentage of FTTP to be minimal compared to the percentage of FTTC. For this reason, we have assumed that no premises will get FTTP at this stage and the exact number of premises with FTTP will be confirmed after the open market review exercise.

### A3 – Business outputs

Analysys Mason has made a 'bottom-up' economic assessment, based on the direct and indirect impact of supplying high-speed broadband infrastructure. This analysis, which has drawn on the most recent literature on this topic, estimates that the incremental benefit over a 15-year period will total £126 million (discounted), most of which comes from the positive impact that broadband will have on businesses. In addition, there are some supplementary benefits associated with the network build and environmental impacts. We estimate that around 40 jobs will be directly created through the implementation and operation of the new ultrafast broadband network and that a further 6244 jobs will be created over a 15-year period as a result of new businesses investing in the proposed intervention area and the safeguarding of jobs; see Figure A.3.

Figure A.3: Business growth to be achieved with UBF investment [Source: Analysys Mason, 2012]

Business growth to be achieved with UBF investment							
2013–2014 Future Totals							
Business start-ups resulting from UBF funding	22	676	698				
Jobs created as a result of UBF funding	200	6,084	6,284				
Anticipated extra Gross Value Added (GVA) due to UBF, in £ million	0	126	126				

Annual rail passenger footfall usage: based on sales of tickets in 2010/11 which ended or originated at Coventry Rail Station (the most popular tourist destination covered by the proposed Wi-Fi roll-out).

From initial discussion with mobile network operators, it appears that Coventry has ubiquitous 3G mobile coverage. This aspect of coverage is not of vital importance for the Council, as it has no plans to subsidise this market.

# 2 B – Project management structure and governance

### B1 – Project governance structures and terms of reference

Coventry City Council uses PRINCE2 project methodology and risk management techniques to provide control of progress, expenditure and risk, as well as agreed governance and management reporting mechanisms. This will be the methodology that is used to pro-actively manage the project and the associated risks. The baseline for the project will be a project initiation document (PID) which will be developed following award of the funding and prior to commencing procurement activities.

A project board will be established upon award of the UBF to provide project governance and assurance and to ensure the project delivers the required outputs of the appropriate quality, on time and within budget. The project will be managed in line with best-practice methodologies and will report to the project board. The terms of reference and roles and responsibilities for the Project Board are set out in Annex C..

### **B2** – Project management team

Management of this project will require resources with the following skills and experience:

- Technical knowledge of ultrafast broadband networks
- Market analysis, to ensure that intervention is applied only in areas that are not expected to be served by the market
- Cost modelling to assess the cost of the intervention in areas not served by the market
- Knowledge of State aid and its application to broadband networks
- Procurement and negotiation capability
- Understanding of the potential risks and issues involved in a complex infrastructure project
- An understanding of Coventry's economic strategy and its key investment priorities.

The roles and responsibilities for the Project Team are set out in Annex C.

### Risk management process

The Council has incorporated a risk management strategy<sup>iv</sup> in its governance procedures. The Council will follow this strategy in order to identify and manage the risks associated with this project. A project risk register will be maintained for the duration of the project.

# Key risks for Coventry's SCCP

Figure 2.1 highlights a number of risks that the Council believes to be of relevance at this stage of the SCCP.

Figure 2.1: Key risks and mitigations for Coventry's SCCP project [Source: CCC, 2012]

Risk	Risk level (1= low; 5 = high)	Description of risk	Risk mitigation
State aid	1	Operators may be opposed to the State aid case (i.e. provision of a 'step change')	<ul> <li>We have tested our proposal with operators to ensure this risk is mitigated.</li> <li>Maintain collaboration with key stakeholders (BIS, DCMS, EC and other cities)</li> </ul>
Data availability	2	Difficulty in obtaining required data from operators	<ul> <li>We have already undertaken initial market consultation with service providers (Annex F) and will undertake a detailed market consultation post award and prior to commencing procurement to obtain this data.</li> </ul>
Planning	1	Barriers/delays may arise with regard to the location of street cabinets, use of street furniture where possible, and digging of streets and pavements to lay new fibre	<ul> <li>Council's planning team will work with operator planning teams to discourage use of retrospective planning and encourage early applications</li> <li>Rt Hon. Maria Miller has announced plans to speed up planning process</li> </ul>
Private- sector funding	2	Total private-sector contribution is expected to be 40% and is likely to require the participation of established operators, who may be reluctant to invest in this	<ul> <li>Private sector contribution reflects that seen in rural intervention projects. Urban projects are likely to be more attractive and stimulate greater private sector investment.</li> <li>Design project so that established operators are not alienated (e.g. ensure an open procurement process)</li> <li>Maximise economies of scale across four</li> </ul>
Procurement	2	Failure to identify suitable suppliers	<ul> <li>Conduct pre-procurement exercises and informational activities to ensure that the market is aware of supplier requirements</li> </ul>

			Ensure that incentives exist for established suppliers to participate
Cost	2	Over-run: project goes over the budget	<ul> <li>A cost contingency of 10% has been included in the cost model</li> <li>Ensure applicants provide a completed cost model during the procurement award process</li> <li>Use fixed price contracts, whereby contractors assume the risk for design and infrastructure delivery based on the</li> </ul>
			Council's requirements
Timeline	2	Project goes over the planned timeframe	<ul> <li>Ensure early engagement of expert advisors</li> <li>Follow best-practice guidelines for procurement</li> </ul>
			Keep bidders informed at all stages
			<ul> <li>Include a contingency in the project planning for extra procurement time</li> </ul>
Delivery	2	Delays and challenges from suppliers	<ul> <li>Ensure the provision of a supply-side risk register as part of the procurement award process. This will ensure that risks on the delivery side are managed</li> </ul>

In addition to the above mitigations, a separate risk management document will be created as part of the Council's risk management cycle. This register will be maintained by the Council's Project Manager.

### **B4** – Monitoring and evaluation

This SCCP is expected to deliver a number of strategic outcomes and a variety of direct and indirect benefits to Coventry. In order to ensure that the project is successful, and that the outcomes and benefits are achieved and sustained, several performance monitoring and evaluation indicators will be measured prior to, during and following project delivery. The Council's Corporate Research Team currently collects and maintains some of these data indicators<sup>v</sup>; and others may be added. To understand their relevance to the SCCP strategy, the proposed indicators are identified in Figure 2.2 against the respective pillar and strategic outcome.

Figure 2.2: Performance indicators for Coventry's SCCP [Source: CCC, 2012]

Pillar	Strategic outcome	Performance indicator
1. Step change in fibre provision	<ul> <li>Growth in motor technology and science-based research</li> <li>Jobs</li> </ul>	<ul> <li>New business formation per sector</li> <li>Number of businesses</li> <li>Employment and unemployment rates</li> <li>New jobs</li> <li>Gross value added*</li> <li>National competitiveness</li> </ul>
2. City- centre wireless	<ul> <li>Growth of Coventry's top tourist spots (via splash pages)</li> </ul>	<ul><li> Tourist footfalls</li><li> Registered users</li></ul>

provision	<ul> <li>Provision of internet access for mobile workers, leading to increased productivity</li> </ul>	
3. Superfast infill	<ul> <li>Ubiquitous coverage of Superfast broadband across Coventry</li> </ul>	<ul><li>Broadband coverage/availability</li><li>Broadband adoption rates</li><li>Customer satisfaction</li></ul>
4. Digital inclusion	<ul> <li>Greater digital inclusion, employment and thriving economy</li> </ul>	<ul> <li>Growth in ICT skills</li> <li>Deprivation Index</li> <li>Broadband adoption rate</li> <li>Ability to access employment opportunities</li> </ul>

# 3 C – Funding and resources

#### C1 – Financial resources

### Capital expenditure

It is estimated that the SCCP will involve total capital expenditure of £10.08 million. We anticipate leveraging a £4.03 million (representing 40% of total capital expenditure) capital contribution from the private sector, £1.00 million from the Council and the remainder (£5.05 million) from the Ultrafast Broadband Fund (UBF).

#### Revenue expenditure

The Council has made a commitment to cover the significant revenue costs of this project. The Council will maximise its use of internal resources to deliver this programme, in order to reduce overall programme revenue costs. However, it realises that it will also need external support in areas where the council does not have all skillsets required to deliver this project (such as technical, legal, demand stimulation and procurement support). The external and internal support revenue cost has been initially estimated at around £1 million.

#### Non-monetary resources

As mentioned above, the council will contribute by making internal resources available to help the deliver the programme. In particular, the council owns extensive ducts and fibre across the City. The council network comprises 107km of 100mm ducts across the City, broadly running from the City centre along four main radial arteries. The four radial arteries comprise twin 100mm ducting, with one of the ducts being empty in each case. The council currently has up to three cables installed in one duct, which means that a maximum of 60% of capacity is available per duct. There are approximately 300 chambers at access points around the network. A map showing the council's ducts is provided in Figure B.1 (see Annex B). The council will make its ducts available to bidders in an attempt to reduce the costs of deploying fibre connectivity to businesses, infill premises and most social housing. The council ducts could also be attractive for provision of wireless broadband connectivity, as they can be used for backhaul purposes. In addition, the council will make its street furniture available (where possible) to bidders for wireless broadband connectivity provision.

At this stage, the Council has not gauged the level of market interest in using the council's network infrastructure and street furniture, and it has not been possible to make an evaluation of the assets, but this will be done during the procurement exercises. Accordingly, at this stage we have considered these assets as a non-monetary contribution to the programme.

Cost modelling has been carried out by the Council's external broadband advisor, Analysys Mason, which has extensive experience of broadband cost modelling. Key assumptions for each pillar of the SCCP are outlined in the table below.

Figure 3.1: Key assumptions for cost modelling [Source: Analysys Mason, 2012]

Pillar	Work package	Key assumptions
1: Gigabit fibre provision	WP1.1 – Fibre broadband connectivity provision to businesses	<ul> <li>Providing full fibre solution to businesses will require installing new duct and fibre from their corresponding cabinets to the premises</li> <li>On average, installing ducts and fibre costs £50 per metre and the average distance between cabinet and premise is 40 metres</li> <li>A 25% duct re-use has been assumed in the cost modelling to estimate deployment cost</li> <li>The in-building wiring cost per commercial unit / office is £100</li> <li>Using dataset from BDUK, it is estimated that there are 2835 business premises (buildings) within the proposed geographical scope</li> <li>Using the council dataset, it is estimated that there are 4824 commercial units within the proposed geographical scope</li> <li>Private sector and DCMS will contribute 40% and 50% of capital respectively</li> </ul>
	WP1.2 – Duct provision to Coventry and Warwickshire Gateway	<ul> <li>To ensure that the Gateway area is served with Gigabit broadband connectivity, it is assumed that new and ducts and fibre will need to be installed around the Gateway area</li> <li>The core duct route length is estimated to be 6km and the average distance between the nearest distribution point and a business premises is assumed to be 50m</li> <li>On average, installing ducts and fibre costs £50 per metre and no duct re-use is assumed since the buildings will be built in the future</li> <li>The expected number of new buildings in the Gateway is 33</li> <li>Private sector and DCMS will contribute 40% and 50% of capital respectively</li> </ul>
2: City- centre wireless provision	WP2.1 – Wi-Fi broadband connectivity provision to business tourism area	<ul> <li>A grant-funded Wi-Fi investment model has been assumed. We understand this concession model has been successful in Westminster but Coventry is less densely populated and a concession model may not work in Coventry</li> <li>Wi-Fi broadband connectivity provision will only be provided to areas where there are no existing commercial Wi-Fi networks and none planned within the next three years</li> <li>Analysys Mason has estimated the number of Wi-Fi access points to be 300 in the proposed geographical scope</li> <li>It costs £5000 per access point to provide a Wi-Fi solution and services</li> <li>Private sector and DCMS will contribute 40% and 50% of capital respectively</li> </ul>

Note: The calculated deployment costs are undiscounted values and are exclusive of VAT.

capital respectively

### C3 – Funding spend profile

The capital and revenue funding spend is attached as a spreadsheet in Annex E.

### C4 – Commercial model

We plan to use a grant-funded model, which will contribute to the costs of the initial deployment of the physical infrastructure. The need and levels of intervention have been based upon application of the balancing test (as used by the European Commission to assess broadband intervention measures, in both the current and proposed revised State aid broadband guidelines).

The private sector partner(s) will design, build, own and operate the networks. We are therefore transferring risk to the private sector partner(s) while also requiring them to invest themselves, hence ensuring good leverage of public sector funds.

We have considered joint ventures and other public—private partnership models for Pillars 1, 3 and 4 but in our view they significantly increase the complexity and potentially make it problematic for some suppliers to participate, particularly the more established operators. We believe that the selection of a grant-funded commercial model maximises the amount of private sector capital that this programme can generate, and is therefore preferable to the alternatives.

For Pillar 2, Coventry recognises the advantages of procuring wireless services using a concession approach, as in some particular circumstances this might negate the need for formal State aid notification. However, Coventry's wireless proposition targets areas of low footfall and so a concession approach may be unsuitable. The default plan is to award grant funding to the successful wireless bidder, although there is potential for fall-back to a concession approach if market feedback indicates that a concession can work in low footfall areas.

### C5 – Infrastructure ownership

The council does not have any strategic intentions to own or operate telecoms assets itself, nor does it wish to create any new telecoms operator for the purpose of this programme. Our approach is to transfer as much risk as possible to private sector partners. We have therefore designed the pillars in a way that the council (as the contracting authority) will not own any of the new infrastructure that is deployed (fibre and wireless). Instead, the selected private sector(s) will own and operate the infrastructure.

We believe that this approach, which allows the private sector partners to maintain ownership, and to exploit their own assets as far as possible, will ensure a more competitive procurement, deliver a higher private sector funding contribution and, ultimately, lead to a more sustainable delivery model compared to one where assets are owned by the Council in full or in part (e.g. as part of a joint venture). Coventry City Council will retain ownership of existing assets such as ducts, fibre and street furniture.

### C6 – Benefits realisation and value for money

### Benefits realisation strategy

This programme will deliver a number of strategic outcomes. The project manager will introduce performance monitoring and evaluation schemes to work with the broadband providers, residents and businesses, to ensure that performance of the broadband network is maintained and sustained. These expected outcomes align with our vision for the broadband infrastructure and the strategic context. The expected outcomes are set out in the following table.

Outcome	Description	Measurement method(s)
Prime locations	The four pillars will create highly attractive, well-connected prime locations for businesses to thrive, and more families will choose these areas as a place to live and work	The Council will monitor the general level of satisfaction of residents and businesses through online surveys
New jobs	The four pillars will indirectly secure new jobs	The Council will monitor: the performance of the local labour market; residents' ability to access employment; the employment rate; economic activity; and levels of youth unemployment
Skilled people	The number of skilled people will increase, particularly in the deprived North East region of Coventry	The Council will monitor the growth in skills, and the local opportunities for residents to develop their skills, such as the percentage of social housing residents who have received online training
High value-added companies	The number of technology-based, knowledge-based and high-growth innovative companies will increase	The Council will monitor annual GVA, the GVA growth rate and GVA per head to ensure that GVAs target set out earlier in this SCCP are met
Low- carbon economy	There will be reduced reliance on transport by residents and businesses, and the development of a low-carbon economy	The Council will monitor levels of home or flexible working where this is available through national data sets
Provision and take- up of ultrafast broadband	The provision and take-up of ultrafast broadband services will be increased. These indicators underpin the basis for business investment which creates jobs and generates GVA	The Council will monitor level of take-up through continuous engagement with local residents and businesses, and through ongoing consultation with broadband providers. Provision and take-up of ultrafast broadband services to all regions encompassed by the four pillars by 2015 will be measured by the Council

### Value for money

In our experience, value for money is best established through best-practice planning for procurement. Furthermore, given the nature and complexity of the SCCP, we anticipate that a Competitive Dialogue procedure will allow us to work closely with the private sector to ensure that the specifications develop in a way that the market is able to respond to. In addition, we will ask our broadband advisor to develop cost models to facilitate a value-for-money assessment of the bids received from suppliers.

# C7 – Funding table

Total capital		2013–201	4 (£ 000s)		2	2014–201	5 (£ 000s	)	Totals
funding required	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	1,000 4,032 0
City Authority funding	0	250	500	250	0	0	0	0	1,000
Private-sector investment	0	986	1,673	1,373	0	0	0	0	4,032
Other UK public- sector funding	0	0	0	0	0	0	0	0	0
Other funding (EU / ERDF)	0	0	0	0	0	0	0	0	0
UBF funding requested	0	1,230	2,009	1,809		Not av	ailable		5,048
Total	0	2,466	4,182	3,432	0	0	0	0	10,080

# 4 D – Delivery and procurement plans

### D1 -Project scope

The project scope for delivering open-access wholesale broadband services has been designed in consultation with the market to ensure that it does not alienate bidders from the outset. This approach is necessary in order to attract the widest range of wholesale service providers, and ensure that the bidding process is competitive.

We envisage that the selected partner(s) will be awarded grant funding as a contribution to the costs of designing, building and operating the ultrafast broadband networks in Pillars 1, 3 and 4. This will enable their provision of:

- passive duct network
- core backbone network (where applicable)
- middle-mile (distribution) network (where applicable)
- access network to customer premises (in all cases)
- upgrades to exchanges and street cabinets (where applicable)
- the necessary systems to ensure that wholesale services can be provided to the market.

For *Pillar 3* the selected partner(s) will be required to upgrade exchanges and 'tail' connections serving business and residential premises in order to enable speeds up to 80–100Mbits/s. For *Pillars 1* and 4, the partner will be required to enable up to 1Gbit/s connectivity to key sites and businesses in and around the City centre, including: Coventry University; the science and technology start-ups and SMEs at the university technology park; the FARGO hub on Far Gosford Street; and the proposed development at Friargate. In addition to the Coventry University Technology Park, Gigabit speeds will also be provisioned to other business parks (such as the University of Warwick Science Park, and the Coventry Gateway project and airport site). Partners will be required to provide ducts to business parks to allow future expansion of the sites.

For *Pillar 2*, the selected partner will be required to design, build and operate the wireless network across Coventry. As discussed earlier (see page 16) a concession approach may not be suitable here due to the low footfall. The default plan is therefore to award grant funding to the successful wireless bidder, with possible fall-back to a concession approach.

The selected wireless partner will require to provide:

- passive infrastructure for mounting of wireless hardware (where none is currently available)
- wireless equipment and associated ancillaries
- backhaul infrastructure (where applicable)
- the necessary systems and process to enable wholesale services to be provided to the market.

### Pre-procurement activities

Prior to commencing the procurement, a detailed market consultation will be undertaken with service providers to inform the development of the procurement specifications. The specifications will be tested with wholesale and retail service providers during the procurement exercise to ensure they are in line with the providers' expectations. The procurement evaluation process will also assess bidders' experience of operating wholesale open-access networks and of working with retail service providers.

The cost models of wholesale service providers will be benchmarked to ensure their bids are a true representation of their proposed solutions. Proposed wholesale prices will also be verified to ensure that wholesale services would be offered at reasonable prices.

The procurement evaluation will ensure that the proposed wholesale network adheres to the industry standards (for billing systems and provisioning processes, for example). This will reduce the need for retail service providers to procure or develop new systems, which would incur additional costs. The technical specifications will also ensure that wholesale service providers comply with industry-standard service-level agreements (SLAs), so that standard processes can be adhered to.

### Procurement approach

We propose to use a competitive dialogue process for the procurement, given that procurement of the services in question can be considered complex, due to the range of potential solutions, financial models, State aid issues and uncertainty about wholesale fibre provision at a street level across Coventry. A competitive dialogue process will enable the establishment of key facts that can be used to refine the solution and achieve value for money for Coventry. This approach will also ensure that the final bids provide Coventry with competitive wholesale prices. In turn, it is expected that retail service providers will benefit from these competitive wholesale prices.

It is envisaged that two sets of procurement documents will be issued, i.e. one for wireless services (Pillar 2) and one for fixed services (Pillars 1, 3 and 4, to be procured as a single lot). This approach will allow the maximum number of responses to be received from fixed and wireless operators, as not all operators have the capability to provide fixed and wireless services. However, it is possible that the larger service providers will respond to both fixed and wireless procurements, in which case a single technology partner may ultimately be appointed.

### D2 - Project plan

A detailed project plan is contained in Annex D.

### D3 – Expedited planning, wayleaves, streetworks and other permission

We expect that the vast majority of street works installations would be carried out as 'permitted development' under Part 24 of Schedule 2 of the Town and Country Planning (General Permitted

Development) Order 1995 (as amended) and so would not require either a planning application or a prior notification application. However, if a proposed site does not have 'permitted development rights' and so an application or prior notification is required, the applicant will meet planning officers informally before submission of any application to discuss options regarding siting and materials etc. The Council also has an adopted Supplementary Planning Guidance Note regarding telecommunications installation, which provides operators with general design and siting advice. Any application or prior notification submitted would be likely to be determined within five to six weeks of validation, under delegated powers.

Openreach has made the following statement to Analysys Mason in relation to planning issues on previous broadband interventions: "[We] will engage with all Local Authorities as required and follow all required planning legislation when delivering an NGA network. Openreach's network of local planners is likely to have worked with planners in the Local Authority historically and may have built up informal relationships. Where NGA deployment is part of a bid, the Programme Team would be expected to engage with the Local Authority to keep them informed of the likely submission of planning applications."

In addition the Council welcomes the announcement made by Maria Miller, the Secretary of State for Culture, Media and Sport, on Friday 8 September 2012, outlining details for planning law changes which are likely to simplify the deployment of next-generation broadband infrastructure<sup>vi</sup>.

### D4 – Engagement with landowners

Coventry City Council and the Warwickshire authorities have a proactive regeneration and inward investment agenda that involves various forms of engagement with land and property owners across Coventry and Warwickshire.

The Council has an impressive number of developments scheduled over the next few years in the City Centre and City wide, which reinforces the Inward Investment Team's ability to work with a range of landowners and business to ensure that exciting developments are realised across the City centre<sup>vii</sup>. A recent example illustrates this<sup>viii</sup>: In June 2012, Coventry's planning committee approved an outline planning application for a £300 million City-wide redevelopment submitted by Coventry City Council and Aviva Investors (a major landowner). The outline plan, which ran to over 1000 pages, was approved less than eight weeks after it was submitted. A considerable amount of work was undertaken before the plan was submitted, including a wide consultation with local people and organisations like English Heritage.

### D5 – Using SMEs in delivery

The Council is committed to delivering locally the National Procurement Strategy (NPS) for Local Government, and as such the Council has adopted an SME concordat, which sets out the actions the Council will take to make its contracts more accessible to SMEs and third-sector organisations.

The NPS asks local authorities to adopt an SME-friendly procurement concordat and to encourage a mixed range of suppliers in order to help develop and stimulate a varied and competitive

marketplace. Coventry's SME concordat sets out what SMEs who are existing suppliers to the Council (or who want to do business with the council) can expect, and what the Council expects from its suppliers. It commits the Council to good practice in procurement and contract management in order to deliver high-quality public services.

We recognise the important contribution that SMEs, social enterprises, voluntary and community sector organisations can make to the delivery of public services and the vital role that these organisations play in the national and local economy. We are committed to making the most of the benefits they offer.

The concordat is not an exclusive contractual relationship with any particular organisation, but is intended to set a framework for a more strategic, inclusive and consistent relationship between the Council and its suppliers. The concordat will be used in the delivery of the SCCP to:

- actively encourage early engagement and discussion between the Council and suppliers
- promote enhanced communications and encourage openness and transparency between the parties.

# 5 E – Digital-led economic growth and innovation

#### E1 – Job creation initiatives

There is a clear role for Coventry City Council to create the conditions needed for the private sector to flourish and to remove unnecessary barriers that can stifle growth. The Council's Jobs Strategy describes a number of mechanisms that will be used to stimulate the demand side of the economy:

- 1. Working proactively with businesses already in the City as well as potential investors to influence and support investment decisions and growth opportunities
- Working with potential new international investors to the City through direct foreign
  investments, the relocation of UK businesses into the area and the acquisition of new premises
  for existing UK and area-based businesses, to create jobs and growth. Key partners in this area
  are Warwickshire County Council, CWLEP, The Chamber, Warwick University and Coventry
  University
- 3. Working with a range of public and private sector organisations to develop projects that enhance the profile of the City and attract investment, thereby securing job opportunities through investment
- 4. Working with existing businesses in the City to support their longer-term investment plans, thereby creating and safeguarding jobs and wealth in the City
- 5. Encouraging businesses to trade internationally and make use of opportunities offered by incoming and outgoing civic visits to boost trade
- 6. Encouraging growth of business and leisure tourism through an effective public/private sector partnership to deliver a programme of activities that increase the profile of the City.

It is important that the Jobs Strategy is used to integrate employment issues into the wider investment and job creation initiatives to ensure that local unemployed people benefit from successful efforts to secure investment and jobs for the City.

### E2 – Business capability

Coventry's SCCP will provide fibre connectivity enabling up to 1Gbit/s speeds to be provided to 'tech SMEs and start-ups' in science and technology business parks and academic and research institutes around the City.

Many SMEs, particularly those focused on the tech sector, have large data transfer requirements and require ultrafast broadband connectivity, with the expectation that this will be future proof and capable of providing Gigabit speeds in the future as their wide area data transfer requirements increase.

Coventry plans to undertake a detailed demand registration activity after award of the UBF, in order to pinpoint specific pockets of demand for ultrafast connectivity; however, preliminary

analysis of businesses in the University of Warwick Science Park<sup>ix,x</sup> (comprising the Blythe Valley Innovation Centre, Business Innovation Centre and the Warwick Innovation Centre) demonstrates a high occupancy of tech companies which require a significant amount of connectivity to support their R&D activities and wide area data transfer requirements.

This growth in demand for ultrafast connectivity is being driven by the data transfer needs associated with developments in the following areas:

- high-performance (super) computing
- CADCAM transfer
- 3D printing

The science companies based on the science park therefore require ultrafast, reliable and affordable broadband services that are scalable in bandwidth and future proof.

#### E3 – Online innovation

Coventry City Council has undertaken a number of activities to innovate and deliver public services online, in order to generate economic benefits through improved efficiency, increased productivity and reduced costs.

Currently the Council provides the following online services:

- **Payments** for Council tax, penalty charge notices, NNDR (business rates), sundry income, business improvement district scheme, housing benefits overpayments
- **E-Books** a wide range of books that can be downloaded to multimedia devices
- **E-Tendering** early notifications of tenders, tender notifications, tender submission portal and contract awards notifications
- **E-Petitions** the facility to seek support for suggested improvements to council services
- Leisure and travel the ability to download online walking and cycling maps
- **Housing** for applications for social housing.
- **Jobs, training and employment** council and teaching job vacancy search, applications for apprenticeships and Council-run training schemes
- **Planning and regeneration** the facility to search for planning applications, make online applications and download planning guidelines
- **Property** online search facility for commercial premises available in Coventry
- Events information about upcoming events in Coventry
- **Self Service** the ability for citizens to complete forms online (e.g. to report pot holes).

Other initiatives that the Council is promoting and which will make use of and encourage the use of fixed and wireless broadband include:

• **Mobile working** – Streetpride and Highways inspectors use handheld devices connected through GPRS, which would be better served using a Wi-Fi network. The Council is looking to expand this facility to neighbourhood wardens and park rangers

- **Social media presence** Twitter and Facebook are used widely by the Council communications team to push 'eCommunications' to the general public
- Web casting Council cabinet meetings are broadcast online for people to watch
- **e-Democracy** the Council has implemented a facility that allows citizens to search for minutes and agendas from cabinet meetings.

In addition, the Council has delivered an e-procurement programme focusing on organisational change<sup>xi</sup> in order to transform the way the authority procures goods, works and services. Some of the benefits derived from use of the e-procurement approach have been:

- Reduced bureaucracy, streamlining of financial and administration processes and lower costs
- Reduced costs and improved quality and delivery of projects
- Savings achieved through more efficient procurement of goods and services
- Accurate, up-to-date and timely management information to support business decision-making
- Prompt processing of fees and charges
- Reduced transaction costs for low-value, high-volume transactions.

### E4 – Additional private sector investment

Private-sector investment is expected to be around 40% of the total funding requirement for the SCCP. This can be justified on the basis that private sector investment in rural Superfast broadband projects has been at around the 40% level and it seems reasonable to assume that the private sector will contribute a similar level of capital funding for Coventry's SCCP

Coventry is the UK's 11th largest city, which has a growing population and has been attracting investment from major blue-chip manufacturing organisations. It is therefore reasonable to assume that Coventry will be more attractive than the other 'smaller cities' due to its larger size and the greater scope that this presents. The inclusion of residential premises across all pillars should further increase the attractiveness of the proposition to the private sector. Coventry's strong rail links and its close proximity to major key routes up and down the country support inward investment into the City. Ultrafast broadband will assist in attracting businesses from other cities to invest in Coventry, thus creating jobs and generating economic growth.

### E5 – Knowledge-based skills

Coventry City Council is uniquely placed to drive its strategic skills agenda for Coventry. It will work with key local businesses and learning and training partners in both the public and private sector to identify skills issues that are preventing growth of the local economy, and facilitate solutions to these.

The City Council's approach to tackling the skills issues is two-fold:

 At a strategic level, leading and influencing partners such as the CWLEP, universities, colleges, National Careers Service, education colleagues and private sector training providers to identify skills priorities. • At a **delivery level**, where appropriate, the Council is delivering solutions to address skill development.

In promoting knowledge-based skills the Council focuses on critical skills areas:

- *Higher-level technical skills* (craft and technical skills) to ensure we have a skilled working-age population that supports the growth of local businesses
- Lower-level skills (pre-entry level literacy, numeracy and ICT qualifications) to ensure that local people benefit from growth and have fair access to opportunities by addressing basic and employability skills and increasing the proportion of the population with NVQ2;
- Workplace skills through placements and/or work experience (at both above skill levels) providing route ways for ongoing skills development, such as apprenticeships and placements with training.

# 6 F – Strategy for achieving State aid compliance

# F1 – Fit with State aid guidelines

There are two aspects of Coventry's SCCP, i.e. fixed and wireless networks, for which we demonstrate their compliance with State aid rules.

Superfast infill (Pillar 3)

This pillar will provide Superfast broadband 'infill' (based on FTTC or equivalent) where commercial service providers do not have plans to provide superfast (80 to 100Mbit/s) broadband, thus ensuring a ubiquitous availability of Superfast broadband across Coventry.

This approach is entirely consistent with the requirements in the EC's current Broadband Guidelines ('the Guidelines') in terms of 'white areas' with no provision of superfast broadband coverage or planned coverage over the next three years.

Gigabit fibre and digital inclusion (Pillars 1 and 4)

Coventry's proposal to deliver a 'step change' in fibre-based broadband provision offering Gigabit connectivity speeds to science and technology start-ups, SME clusters, business parks and academic and research institutes is necessary to sustain the City's economic progress. In delivering a step change in broadband provision to this intervention area, we have considered:

- both the EC current Guidelines, and
- its new draft new guidelines that are currently open for consultation

We demonstrate below how Coventry's proposal complies with the current and draft Guidelines.

#### ► Compliance with current EC guidelines

Based on Analysy Mason's initial mapping exercise much of the target areas proposed by Pilalr 1 and 4 would be classed as 'grey areas', based on FTTC or equivalent superfast broadband, as shown in Annex B. The Guidelines state that a more detailed assessment of the rationale behind the provision of broadband in a grey area is required; We believe that intervention to this area can be supported on the basis that the overall market conditions are not adequate, e.g.

- the current provision of ultrafast broadband is limited to one supplier;
- the current provision of broadband is limited to FTTC based Ultrafast broadband (80 to 100Mbit/s);
- there is very limited fibre provision (FTTP) in the intervention area as proposed by Pillars 1 and 4; and

 alternative fibre provision relies on 'corporate' solutions which SMEs and tech start-ups are unable to afford.

Therefore in the case of Pillars 1 and 4 we believe that the combination of limited alternative fibre availability, and its pricing, means that an intervention in Pillars 1 and 4 could be justified under and is consistent with the Guidelines for grey areas.

We also intend to carry out a formal Open Market Review exercise in line with State aid guidelines before the procurement exercise, to produce a more accurate State aid map and scope for the intervention. This is due to the reluctance of suppliers in providing sensitive network data outwith a formal procurement process.

### ► Compliance with new draft guidelines

We have considered very carefully the EC's new draft guidelines, and the recent State aid approval it granted for the Birmingham Digital District project. These clearly indicate that the EC is minded to support projects that deliver a 'step change' in connectivity, which would, in the EC's definitions, justify an upgrade from FTTC to fibre connectivity (FTTP), as we have proposed for Pillars 1 and 4.

Whilst we accept that the EC is still consulting on its new draft guidelines, we believe the Birmingham decision suggests the likely direction of travel for future State aid decisions. We have therefore given some weight to this in our own State aid assessment and to the basis on which the EC's draft proposed Guidelines indicate that public support relating to ultrafast networks can be considered compatible with State aid rules.

The intervention proposed by Pillars 1 and 4 is therefore consistent with the requirements being proposed by the draft Guidelines for an intervention providing a step change in connectivity.

### City Centre wireless (Pillar 2)

The grounds for the wireless intervention are based on the desire to establish a contiguous 'connected' broadband zone across Central Coventry to attract business and leisure tourism, a significant component of Coventry's plans for economic recovery.

Coventry recognises the advantages of procuring wireless services using a concession approach as it may, in limited circumstances, have the potential to negate the need for formal state-aid notification. However, Coventry's wireless proposition targets low footfall areas and therefore a concession approach may be unsuitable.

Therefore, Coventry's proposal is to submit a state-aid notification for wireless provision and it intends to test the potential approach through detailed market and stakeholder consultation with the notification being based on the measures in question being fully compliant with the compatibility requirements set out in the Guidelines.

The Council may switch to a concession approach if feedback indicates that a concession can work in low footfall areas, recognising always that this may still require formal EC approval and thus the submission of a State aid notification.

Previous market consultations undertaken by Analysys Mason indicate that a concession approach, of the kind implemented in Westminster and Kensington and Chelsea, favours Wi-Fi deployment in areas of high footfall; our initial view is that a similar approach is unlikely to be successful in establishing a contiguous 'connected' broadband zone across Central Coventry (although this remains to be tested). More recent discussions with the market (see Annex F) suggest that mobile operators are giving greater priority to extending and deepening their existing cellular coverage. We will continually engage with the market following UBF award to establish the most appropriate way to provide wireless connectivity across Coventry.

### F2 - Experience of similar models

Coventry City Council has bid for and managed a number of significant projects in which state aid has been a significant factor. In each case it has been able to establish a methodology that meets the project guidelines and state regulations. Where necessary advice has been sort from the Government Office West Midlands, the Regional Development Agency and more laterally BIS West Midlands. The current Coventry & Warwickshire Economic Development programme is an example of such a project.

Coventry's SCCP respects the key principles of both the current and the new draft Guidelines. Any intervention will operate in a manner whereby it can be clearly demonstrated (on the basis of application of the balancing test) that the overall effect of such interventions will be positive in terms of being shown to be:

- Aimed at a well-defined objective of common interest and as such address identified areas of
  market failure (e.g. lack of digital inclusion and affordability of access to services to business,
  in particular SMEs).
- Well designed to deliver the identified objectives of common interest, in that they will operate
  as a clear incentive (in allowing activities that would not take place in the absence of such
  measures) and will operate in a proportionate manner (with any measures being designed to
  ensure that they are the most appropriate and cost effective via the relevant procurements –
  mechanisms to meet the identified market failures).

In addition, interventions proposed will in all cases fulfil the following prerequisites:

- a step change in connectivity in areas identified (via detailed mapping and analysis of coverage) as experiencing market failure
- public consultation in terms of identifying demand
- competitive tender processes, with the most economically advantageous offer being chosen
- technology neutrality
- use of existing infrastructure wherever practically possible

effective third-party wholesale access and pricing.

### Birmingham decision

Whilst we see some commonality with the Birmingham project (high value-add SMEs key to economic growth in the area), we have no desire to create a new telecoms operator: our approach is to work with private-sector partners to design, build and operate solutions under the four pillars, and it is our strongly held belief that we should be seeking to encourage suppliers of all kinds, large and small, to participate in the procurement. This will have numerous benefits, including:

- leveraging as much private-sector capital as possible and thus limiting the amount of public funding required
- ensuring a competitive procurement that will drive innovation solutions and value-for-money for the public sector
- most importantly, maximising the likelihood of a long-term sustainable and pro-competitive solution for Coventry.

We will enable this through careful design of the procurements, and in particular, not putting in place barriers that could restrict participation in the procurements, whilst also respecting the EC's key requirements, e.g. wholesale access obligations on the private-sector partners, and running open tender processes. We believe that this intervention will operate to encourage greater market participation and thus competition, and hence mitigate the State aid risks and limit the level of public intervention required.

Following submission of this SCCP, Coventry will liaise with the Department for Business, Innovation and Skills (BIS) and DCMS to develop the State aid case as and when information arrives from suppliers concerning their current and future investment plans, in order to ensure that the requirements of both the current Guidelines and the new draft guidelines are met.

# 7 G – Education, profile-raising and demand stimulation

#### G1 - Consumers

Coventry's SCCP will provide ultrafast fibre broadband connectivity to digitally excluded residents in social housing (addressed by Pillar 4) and residents addressed by Pillars 1, 2 and 3 who may be recipients of either superfast, ultrafast fibre or wireless broadband services. The following sections explain how these groups of users will be encouraged to take up these broadband services.

### Promoting awareness

In conjunction with the selected partner, the Council will undertake the following activities to educate and promote the benefits of broadband:

- Leaflet drop to premises and display posters on Council notice boards in areas of high footfall (such as libraries, community centres, leisure centres and religious establishments)
- Advertising on buses, bus stops, train stations, supermarkets, and in local print media
- Online promotion through the Council website and the Council's social media channels, reusing existing channels such as http://www.cswbroadband.org.uk to reach residents
- Developing web and mobile device applications to encourage use of the internet, following the example of the Coventry 2012 Olympics application.

### Skills development

Coventry City Council will undertake the following activities to provide additional training to consumers requiring assistance to use the internet:

- Engage with local colleges to provide ICT support, resources and training materials that can be used to deliver ICT training
- Offer ICT training suites to engage social housing tenants in learning activities, focusing on ICT and digital literacy.

### Ensuring easy and affordable access

The Council will consider forming partnerships with local businesses to provide low-cost internet devices to low-income households.

### Demand registration

Demand registration is a crucial element of demand stimulation, as it not only monitors the level of awareness among residents but helps to prioritise network roll-out and availability for operators.

Upon award of the UBF, the Council will commence a simple and tested demand registration mechanism that has proven to be both pragmatic and effective.

Business and consumer demand for superfast/ultrafast broadband will be registered via a dedicated website (such as 'ConnectingCoventry.domain'). The primary purpose of the demand registration site will be to gauge the level of demand for ultrafast broadband services across Coventry.

The website will ask businesses and consumers to specify their usage status, e.g. as a business, consumer or home worker, and to provide contact details, including their postcode. Postcode information will be used to illustrate areas of high demand on 'heat maps', which may inform the roll-out of commercial broadband services; conversely, it may also be used to indicate areas where demand is weak and so greater demand stimulation effort is required.

Coventry City Council, in partnership with Solihull and Warwickshire, has previously undertaken a similar task to encourage the take-up of superfast broadband – see http://www.cswbroadband.org.uk/.

The website will be promoted through social media, council and partner websites, local radio, newspapers and community newsletters. Social media will be regularly updated with the status of the roll-out of ultrafast broadband.

#### G2 – Business

The primary focus of Coventry's SCCP will be to provide ultrafast fibre broadband connectivity to tech start-ups and SMEs, and Gigabit connectivity to business parks, R&D and academic institutions. The following explains how businesses will be encouraged to take up ultrafast broadband services.

#### Promoting awareness

The Council will work with Coventry's business community to develop a communications and awareness programme, and where applicable arrange workshops at local business fora to notify businesses of the availability and benefits of ultrafast broadband for their business, reinforcing concepts such as home working, cloud computing and productivity enhancements.

Coventry's business community can be reached through the following agencies:

- The Federation of Small Business (FSB)
- Coventry and Warwickshire Chamber of Commerce
- The Council's Business Sector Growth Team (BSGT)
- Coventry and Warwickshire Local Enterprise Partnership (CWLEP)
- Inward Investment Team
- Coventry First
- Coventry and Warwickshire Champions.

#### Demand-building activities

Coventry will undertake a number of activities to support the growth of its priority sectors, and encourage inward investment and economic growth, including:

- Showcasing Coventry to potential investors through inward investment journals, building on existing activities to position Coventry as a high-tech city, including the Future Cities Demonstrator programme, the development of a 3D virtualisation of Coventry's City centre with the Serious Games Institute
- **Highlighting ultrafast broadband applications and services** in collaboration with retail service providers, encouraging businesses to attend demonstration centres featuring customer testimonials that showcase real-life applications to illustrate the benefits of ultrafast broadband
- **Providing financial support to SMEs wishing to invest in the City** by collaborating with the Business Sector Growth Team, the Coventry and Warwickshire Local Enterprise Partnership and Business Growth package and Regional Growth Fund (3) teams.

#### Registration activities

Demand registration for business users will be achieved in the same way as described for residential consumers above.

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

Name of prop	osa Super Connected Coventry	
I verify that th	nis proposal to the Ultrafast Broadband Fund fits with corporate policy	
Signed:	Hy m	
Name:	DEPUTY LEADER OF Date:	
Job title:	COUNCIL Date: 14/09/2012	
I verify that th	is proposal to the Ultrafast Broadband Fund fits with corporate policy	
Signed:	THE SO	
Name:	MAKTIN REEVES	
Job title:	MAKTIN REEVES : CHIEF ENECUTIVE Date: 14/09/2012	
I verify that this proposal to the Ultrafast Broadband Fund fits with corporate policy		
Signed:	White T. Will	
Name:	C.T. WEST	
Job title:	DIRECTOR OF Date: FINANCE 14/9/11	

# Annex A Geographical coverage of Coventry's SCCP



Figure A.1: Pillar 1 geographical scope [Source: Analysys Mason, 2012]



Figure A.2: Pillar 2 geographical scope [Source: Analysys Mason, 2012]

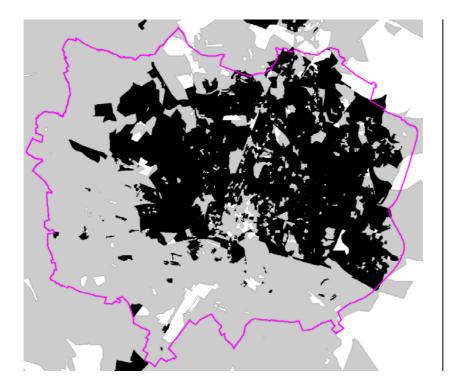


Figure A.3: Pillar 3 geographical scope (white areas within City boundary only) [Source: Analysys Mason, 2012]

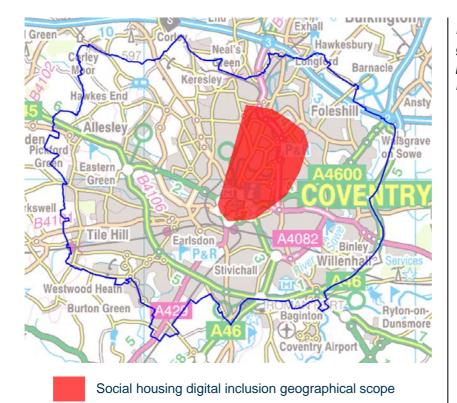


Figure A.4: Pillar 4 geographical scope [Source: Analysys Mason, 2012]

# Annex B Fibre coverage and state aid maps

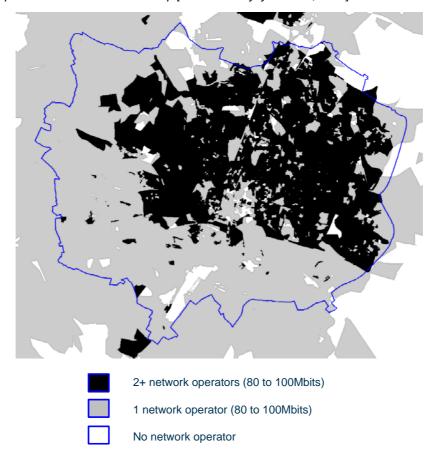


Figure B.1: Superfast / Ultrafast State aid map [Source: Analysys Mason, 2012]

— Council owned duct

Figure B.2: Council-owned ducts onto superfast broadband State aid map [Source: Analysys Mason, 2012]

## Annex C Project management and governance

#### C.1 Project board aims

- Owns, as a delivery agent, the delivery of all workstreams and activities within the project
- Endorses, advises and supports the Project Manager
- Identifies issues to be escalated to wider organisational governance boards if required
- Provides direction to the Project Management team, to enable effective management and control of the Project
- Approves continued progress of the Project against defined strategic objectives
- Acts as an escalation and/or Quality Assurance point for specified workstreams and activities within the Project
- Manages the interfaces and communication with the project stakeholders
- Ensures linkages between the project and the Council's strategic priorities
- Ensures the aims of the project continue to be aligned with evolving business needs
- Approval of technical specifications, ensuring their commonality
- Commissions reviews that formally assess the achievement of the project and benefits realised from the investments
- Holds overall control of the project implementation
- Establishes the project, securing sufficient resources and monitoring progress
- Provides sufficient resources to cover project board, project assurance and project quality control role, and
- Approval of project priorities.

#### C.2 Project board function

- Receive the outcome of senior organisational decisions on the project and ensure alignment to the organisational strategy
- Manage the overall project budget received from the organisation
- Resolve project, commercial or contractual issues which are escalated to the Board and where appropriate, and act as a route for escalation of exception reports to wider organisational governance boards
- Review key decisions on the project and assess the overall delivery status based on best practice high-level information provided by the project management office, give direction to the Project Manager and provide a further level of quality assurance for defined workstreams
- Track and review costs and delivery of project benefits
- Receive and monitor lessons learnt
- Oversee the coherence of the project to deliver the overall objectives
- Manage (inter) dependencies between the constituent workstreams and with other activities/projects across the organisation, and
- Manage project-level risks and issues.

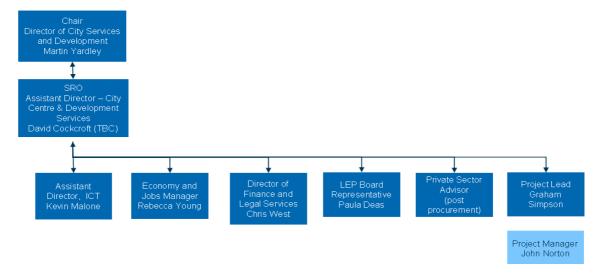
#### C.3 Frequency of project board meetings

The Project Board shall meet monthly.

For the meeting to be quorate there must be a majority of four attendees present. In the event that no such representation is made then a meeting shall be reconvened at the earliest possible opportunity but before the next planned meeting.

All Members shall attend and substitutes shall only be accepted with the express permission of the Chair.

#### C.4 Project board structure



The LEP Board Representative will ensure that the interests of Coventry and Warwickshire LEP specifically and the private sector more generally are considered. A specialist Private Sector Advisor will join the Board following the procurement process.

Should senior officers be unavailable, suitably qualified substitutes will (subject to the express permission of the Chair) be appointed, to ensure continuity.

### C.5 Roles and responsibilities

#### C.5.1 Senior Responsible Owner (SRO) – David Cockcroft (to be confirmed)

The SRO is ultimately responsible for the project, supported by the Senior User and Senior Supplier. The SRO has to ensure that the project gives value for money, ensures a cost-conscious approach to the project, balancing the demands of the business, user and supplier.

Specific responsibilities:

- Ensure that tolerances are agreed with Project Board, Accounting Officer and Project Manager
- Authorise expenditure and set Stage tolerances

- Approve the End Project Report and Lessons Learned Report
- Brief the Project Director about progress
- Organise and Chair Project Board Meetings
- Recommend future action on the project to the Programme Director if the project tolerance is exceeded, and
- Approve the sending of the Project Closure Notification.

The SRO is responsible at all times for overall business assurance of the project – that is, for ensuring that it remains on target to deliver products that will achieve the expected business benefits, and that the project is completed within its agreed tolerances for budget and schedule.

#### C.5.2 Representative of the user community – to be named

Represents the interests of all those who will benefit from the outcome of the project (within their area of responsibility) or those who will use the outcome to deliver benefits. The representative will monitor progress against requirements, and ensure that the solution will meet the needs of the users they represent within specified constraints in terms of quality, functionality and ease of use.

#### Specific responsibilities:

- promote and maintain focus on the desired project outcome
- ensure that any user resources (that are identified from the user group that they represent) required for the project are made available
- ensure that product descriptions are approved for those products which will be provided for users, or will affect them directly and that the products are signed off once completed
- provide the user view on recommended follow-up actions
- provide feedback to specific units on the progress of the project
- on behalf of the users they represent raise issues at Project Board meeting regarding the Project
- attending Project Board meetings and sign off the Project on behalf of users they represent
- to brief and advise relevant unit managers on all project matters
- assisting the Project Managers with any project-related issues that may arise
- prioritise and contribute user opinions on Project Board decisions on whether to implement recommendations on proposed changes.

#### C.5.3 Representative of the supplier community – to be named

Represents the interests of those designing, developing, facilitating, procuring, implementing, operating and maintaining the project products. The representative is accountable for the quality of the products delivered by the Supplier(s).

#### Specific responsibilities:

Agree objectives for Supplier activities

- Make sure that progress towards the outcome remains consistent from the Supplier perspective
- Promote and maintain focus on the desired project outcomes from the point of view of Supplier management
- Ensure that the Supplier resources required for the project are made available
- Approve product descriptions for Supplier products
- Contribute Supplier opinions on Project Board decisions on whether to implement recommendations on proposed changes
- Resolve Supplier requirements and priority conflicts; Arbitrate on, and ensure resolution of, any Supplier priority or resource conflicts
- Brief non-technical management on Supplier aspects of the project
- The specialist integrity of the project, advising on the selection of development strategy, design and methods
- Ensure that any Supplier and operating standards defined for the project are met and used to good effect
- Monitor potential changes and the impact on the correctness, completeness and integrity of products against their Product description from a Supplier perspective
- Monitor any risks in the production aspects of the project, and
- Ensure that quality control procedures are used correctly, so those products adhere to requirements.

#### C.5.4 Non-Executive external board member – to be named

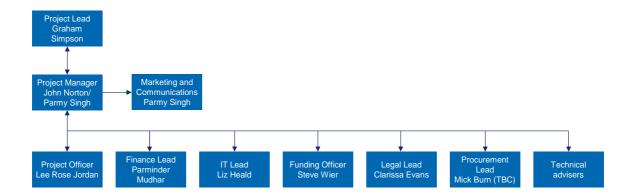
The role will involve scrutinising Project Board decisions, providing advice and challenging key elements of project design and delivery. The non-executive board member will be invited to board meetings on a monthly basis.

#### **C.5.5 Expert Advisers**

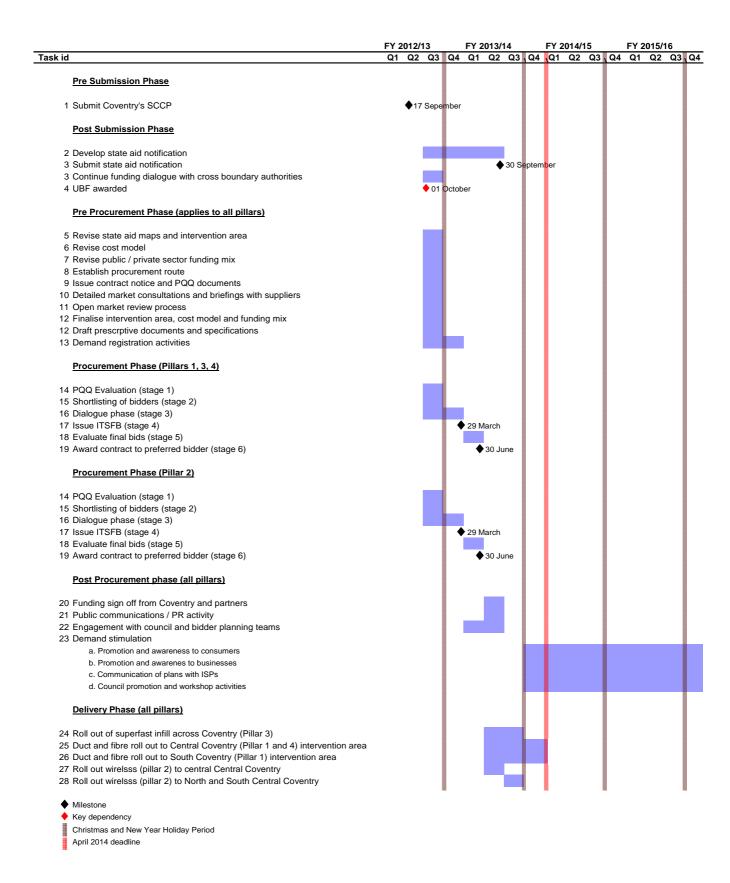
Expert Advisers will also be used as appropriate to provide professional advice on the development, delivery and quality assurance of the products. They have a role in ensuring that the Project Board has maximised the opportunities offered through the project to advance the corporate aims of the organisation. They also have a role in ensuring that products meet best practice and legislative requirements where applicable.

#### **C.6** Project management structure

The team that is expected to manage delivery of the project is outlined below, although this is subject to revision after completion of the procurement.



## Annex D Project delivery plan



# Annex E Cost model

The cost model has been provided as a separate Microsoft Excel file.

## Annex F Summary of initial market consultations

In August 2012 a total of nine national and local service providers were approached, to seek an understanding of their current and future plans for investing in metro wireless or ultrafast broadband infrastructure across Coventry. This annex summarises the pertinent points raised by the three service providers that responded.

#### UK Broadband

UK Broadband (UKB) is a wireless data service provider offering superfast NGA broadband to the home utilising 4G LTE wireless technology.

In their response, UKB stated that they do not currently have plans to deploy next-generation broadband infrastructure in Coventry as a standalone project.

#### BT Wholesale

Our discussions with BT centred on the provision of wireless services to Coventry's City Centre (as proposed by Pillar 2).

According to BT, in their discussions with the UK's Mobile Network Operators (MNO's), the MNOs have expressed a preference to extend the provision of their cellular 3G and 4G services at a street level, using Picocell technology for example, over deploying WiFi services. This does not exclude WiFi from being considered as a potential wireless solution but it does suggest that consideration may need to be given to a hybrid WiFi and 3G/4G deployment in City Centres. It is clear that further market consultation is required regards this aspect.

BT indicated that extending 3G and 4G services would involve the re-use of Council street furniture (where available) and using next generation access for backhaul purposes.

#### Vodafone

According to Vodafone, they currently provide ubiquitous 3G coverage across Coventry City and is on their 'radar' for next-generation wireless connectivity.

In our discussions with Vodafone, they stated that they do not have any commercial Wi-Fi deployment in the UK yet, although they are undertaking trials with some UK City Councils.

They would be interested in both concession and grant-funded models to implement Wi-Fi in areas of high and low footfall and would explore these options in more detail at procurement stage.

### Annex G References

'Coventry information and statistics', Coventry City Council, Inward Investment Team, 2012.

"Council Plan 2011-2-14', Coventry City Council, available at http://www.coventry.gov.uk/info/10020/policies\_and\_plans/405/council\_plan

'Risk Management Strategy', Coventry City Council, March 2012.

- These statistics, related to Coventry and its residents, are collected by the Office for National Statistics (ONS) and governmental departments. The information is publicly available on the Coventry Partnership website (www.facts-about-coventry.com).
- vi See http://www.culture.gov.uk/news/news\_stories/9332.aspx
- 'Inward Investment Prospectus', Coventry City Council, 2012.
- See http://www.coventry.gov.uk/news/article/446/city\_centre\_south\_outline\_plan\_approved
- See http://www2.warwick.ac.uk/services/ventures/spinout-companies/spin-out-companies-a-z
- See http://www.warwicksciencepark.co.uk/information/tenant-directory/
- xi See http://www.idea.gov.uk/idk/aio/70789

<sup>&</sup>quot;A Jobs Strategy for Coventry 2011-2014', Coventry City Council, 2012. Available at http://www.coventry.gov.uk/info/347/business\_support\_and\_economic\_growth/1204/coventry\_jobs strategy