BDUK Broadband Delivery Project

Cheshire Warrington and Halton

Local Broadband Plan

APPLICANT INFORMATION

Project Name:

Cheshire and Warrington Superfast Broadband Programme

Lead organisation - *include address with and postcode and type of organisation (eg Local Authority, LEP)***:**

Cheshire East Council
Emperor Court
Electra Way
Crewe
Cheshire
CW84DN

Local Authority

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

Mr Julian Cobley
Head of Technical Strategy and Planning

Contact telephone number: 01270 68170 / 07770678944

Email address: Julian.Cobley@cheshireeast.gov.uk

Postal address:
Cheshire East Council
Emperor Court
ElectrTha Way
Crewe
Cheshire
CW84DN

If the bid is a joint proposal, please enter the names of all participating bodies and specify the co-ordinating authority
Cheshire and Warrington Local Enterprise Partnership
Cheshire East Council
Cheshire West and Chester Council
Warrington Borough Council

Cheshire East Council is acting as the co-ordinating authority.

Start Date of Project: April 2012

End Date of Project: *31 December 2015*

SECTION A – PROJECT OVERVIEW

A1.   Vision and strategic context

The strategic need for broadband infrastructure improvement should be set out and should look at: transformation of public services, economic development, links to corporate plans, social inclusion and existing broadband initiatives. This should include a brief description of the economic and social issues in the geographical area and the role of broadband in addressing those issues.

Please describe the outcomes you want to achieve from your local broadband plan between now and 2015 and the rationale for your approach.

In addition, please outline any further aspirations you may have for the period beyond 2015 to 2020. Please note: all local bodies should aim to achieve 100% broadband coverage in their area by 2017 at the latest, using a mix of technologies.

STRATEGIC CONTEXT SUMMARY

CONNECTING CHESHIRE - PROJECT VISION 2015

Superfast broadband is accepted as the fourth utility for Cheshire and Warrington (C&W) and its businesses and residents have access to a wide range of both content and service choice that is delivered over reliable high capacity superfast broadband at market competitive prices. Timely investments made in superfast broadband infrastructure has unleashed the potential for the region to compete in emergent knowledge economy and become favoured position to attract inward investment.

Superfast Broadband is the enabling technology which connects the community and has supported sustainable and equitable economic growth. It has unlocked new ways of working, doing business and accessing citizen centric services which has created jobs and provided GVA growth. Public sector costs and the environmental impact is lower. Educational opportunities have increased and attainment improved with a shift from traditional classroom based to rich content delivered online.

The most vulnerable in our society have seen significant improvements in their well-being by becoming less socially isolated and the quality of their care improved through the ability to deliver services away from residential care and hospitals into their own homes using advanced technologies.

Programme Vision

To ensure Cheshire and Warrington has 100% coverage of superfast broadband services by 2015, connecting the community and developing the digital economy.

Project Objective

To deliver 90% superfast broadband coverage by 2015, with an enhanced target to achieve 100% provision by 2015, subject to ERDF grant funding award.

Project Scope:

- To secure public sector funding from multiple funding sources including BDUK and the Local Authorities which will be matched by private sector investment.
- To select a strategic investment partner/consortium through the BDUK framework who will contribute matched investment to enable the rollout superfast broadband in the areas of market failure at market competitive rates in Cheshire and Warrington services for residents and businesses.

- To secure European Union State Aid approval to allow investment of public money in superfast broadband infrastructure in areas of market failure within Cheshire and Warrington (State Aid White Areas).
- To engage with businesses and residents, and the public sector to exploit superfast broadband technologies.
- To stimulate the market and capture residential and business demand.
- To meet and exceed levels of service uptake in line with funding criteria.
- To promote the use of superfast broadband as an enabler of public sector transformation and greater social inclusion
- To secure additional sector funding from multiple funding sources including, ERDF and RDPE to target the achievement of 100% SFB coverage.

STRATEGIC NEED

A1.1   All Local authorities across Cheshire and Warrington have made superfast broadband one of their top priorities, as demonstrated by the significant financial commitment they are making to this plan. It is embedded in economic development plans, local development frameworks and relevant corporate strategies.

A1.2   The Plan is supported by the MPs and MEPs from the area, the Cheshire and Warrington Local Enterprise Partnership (CWLEP), Chambers of Commerce, the Federation of Small Businesses and Sustainable Community Partnerships. All regard Investment into superfast broadband as the single greatest action which will drive economic growth and improve the quality of life for all Cheshire and Warrington residents and businesses in this decade. It will underpin future business investment and growth, educational attainment, the transformation of public service delivery and a range of everyday activities carried out by individuals, households and community organisations.

A1.3   Superfast broadband will be delivered by the Cheshire and Warrington LEP Superfast Broadband Connecting Cheshire Partnership. The partnership represents a tri-unitary authority commitment to secure SFB to the area by Cheshire East Council, Cheshire West and Chester Council and Warrington Borough Council. The partnership reports direct to the Sub Regional Leadership Board and Cheshire and Warrington LEP Board.

A1.4   It is noted that the BDUK indicative allocation included Halton, and detailed negations are nearing their conclusion towards including Halton Borough Council as a fourth partner to the programme. The plan will be amended at that point to include Halton related outputs. In order to allow for consistency with the BDUK allocation process, costings have been included to reflect the case for Halton joining the partnership.

A1.5   It is further noted that Cheshire West and Chester Council are considering an extension for the funding package to allow for increased SFB coverage to provide for 100% superfast broadband coverage by 2015. The plan will be subject to amendment for outputs on the determination of the additional funding decision. This aspect will be a clear addition to the 90% objective, therefore the base BDUK funding position will not be impacted upon.
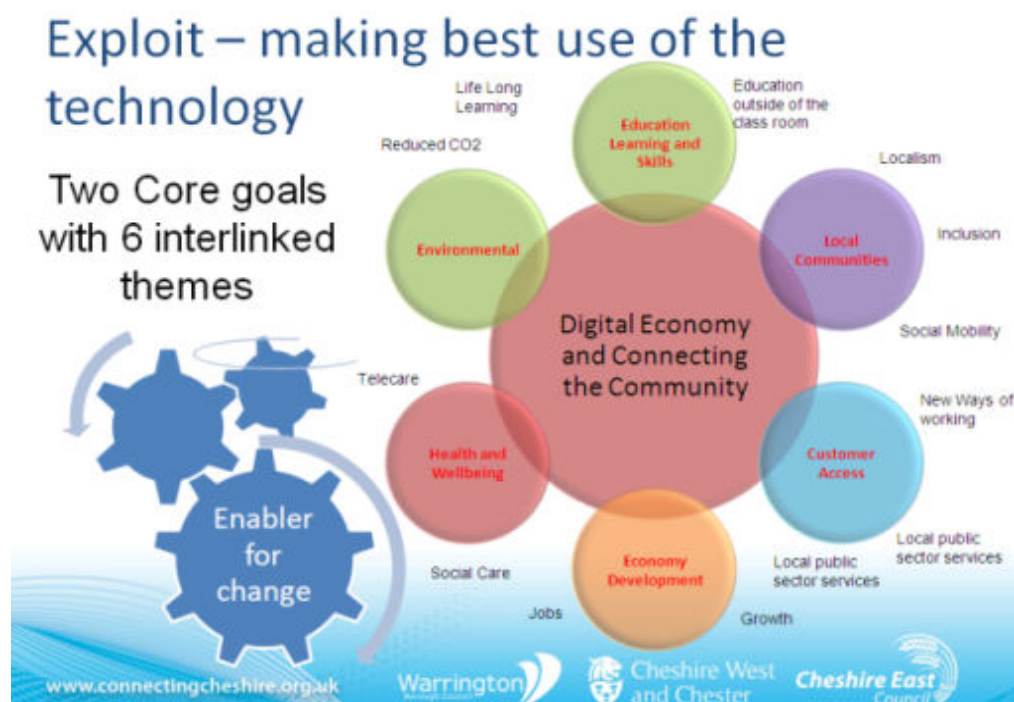
A1.6   Superfast Broadband is an underpinning element of infrastructure which is essential for Cheshire and Warrington to realise its core spatial objectives, in particular:

- **Warrington** – Warrington has the capacity for significant expansion as a business and commercial centre through regeneration of its central area, phased urban extensions at Omega, and growth in other important sites. Its central location in the emerging Atlantic Gateway and its key positioning on both the strategic road and rail

networks provides the basis for it to form an important a regional driver of economic growth.

- **Crewe -** Following the development of a comprehensive strategic visioning for Crewe, there is agreement that the town needs to significantly increase its economic productivity, and is well positioned to do so in terms of unique strategic connections and major development sites. To facilitate this, there is a clear emerging ambition to have super-charged growth in Crewe – in the order of 25% growth in jobs and population – to fulfil its wider potential, which the Basford strategic employment site will play a key role in delivering.
- **Chester and the Deeside Hub** - reinvigorating the dynamic contribution of Chester to the cultural, heritage and visitor economy of the region, as well as extending its offer as a high quality office location, and an important retail destination, is of significant importance to growth and development. The impact of the Deeside Hub extends beyond the sub-regional boundary to the Mersey Dee Alliance Area, with Chester as its centre.
- **Ellesmere Port** - The Atlantic Gateway programme raises the potential opportunity of Ellesmere Port as a residential and employment Growth Point effectively serving as Chester's development zone involving the re-use of the significant stock of brownfield land released as a result of the decline of previous industrial uses, in accordance with the emerging Vision and Economic Development Framework.
- **North East Cheshire** – Macclesfield and North East Cheshire are the focus of the region's most productive businesses and entrepreneurial people, built on a dynamic symbiotic relationship with the economy of Greater Manchester. To maintain its competitiveness, targeted growth and collaboration with key employers, while maintaining its key heritage and landscape assets, will enable it to maintain its contribution to competitiveness and its role as an important economic driver. Macclesfield is a key employment location for the future of the sub-region, providing the home base for thousands of highly skilled workers that commute to Manchester, and the base also for key micro businesses in our regional capital's supply chain, particularly the media sector. Similar demands exist from its own globally significant employers – including Astra Zeneca, McCann-Erickson and Barclays.
- **Employment sites:** There a wide range of other potential employment sites as well as existing business parks that would benefit significantly from the availability of SFB to the premises.
- **Sustainable market towns** – our market towns and larger villages are an important component of economic growth in C&W – functioning as the 'home office' for many of our skilled residents whose office base is in nearby Manchester and Liverpool, and also as service centres for the rural and agricultural communities.
- **Rural** – the rural area represents approximately 80% of the total land area of the sub-region, where 40% of the population lives and hosts over a third of all jobs. Support will be directed to provide sustainable economic development across the rural area, in improving the competitiveness of local businesses and providing the conditions where enterprise can flourish.

A1.7   Our overarching ambition is to achieve universal superfast broadband coverage in Cheshire and Warrington, but this is only part of the superfast broadband programme. Its true value will only be realised when the technology is put to best use. The diagram over indicates the 6 interlinked themes which will develop the digital economy and connect the community through the exploitation of the superfast broadband technology.

Exploit – making best use of the technology

Two Core goals with 6 interlinked themes

Enabler for change

www.connectingcheshire.org.uk

Transformation of Public Services

A1.8   All local authorities recognise access to high speed broadband is a primary technology enabler to transform the organisation centred on 6 core themes – Customer Access, Local Communities, Education Learning and Skills, Economic Regeneration, Health and Wellbeing, and the Environment. Furthermore, Broadband coverage has been selected as one of 15 key corporate indicators on which the authority will judge its performance.

A1.9   The local authorities of Cheshire and Warrington recognise the best way to truly transform the services they provide to their citizens is to put them in control of how they interact and engage with the public sector. A commitment has been made to transform the customer access channels to 'digital by default'. 100% SFB infrastructure is an important factor for the provision of high quality services and certainty of access for Cheshire and Warrington's businesses and residents.

A1.10   Under the direction of Members, the corporate management teams are communicating with their directorates and requesting senior managers to consider how a fast reliable internet connection in every home / business will influence their business plans over the next 5 years. Superfast broadband is expected to completely change the way public services collaborative with one another and the citizens they serve.

- It is recognised that Telecare and Telemedicine are becoming increasingly vital in supporting people in their homes. This is particularly pertinent in Cheshire and Warrington as in the next twenty years people over the age of 65 will increase by over 35% and the number of people over 80 will double.
- The Councils and other partners including NHS, PCT and Local Housing Associations are already investigating opportunities to pilot how ICT services delivered over high speed broadband can be used to support people to stay in their homes for longer using assistive technologies.
- A pilot project is underway in Cheshire East between the local authority and local residential landlords investing how the use of telecare services will have a transformational impact on caring for the elderly at home. Initial findings indicate

£2.5m can be saved annually in preventative costs. Furthermore assistive technologies are playing a large part in the development of care for people with dementia. An awarding website has recently been launched in Cheshire East to promote this agenda (http://www.demenshare.com/).

- Public sector flexible working: All Local Authorities are developing flexible working policy, to promote effective home working to improve productivity and reducing commuter trips.
- Increasing efficiency across emergency services: Action is well underway as a Cheshire and Warrington public sector collective, including the three local authorities, police, fire and PCT to consider how SFB technology can act as the catalyst to create a public sector network (PSN). This will reduce public sector costs associated with the ICT infrastructure and offer new ways of delivering services to the citizen.
- Of significant note, Cheshire West and Chester Council are one of 4 Local Authorities across the country piloting Community Budgets to drive responsive local services, social action and the highest quality of life. The provision of SFB infrastructure will bean important aspect for the delivery of responsive and interactive services

Economic Development

A1.11   The Cheshire and Warrington Local Enterprise Partnership (LEP) has indentified superfast broadband as a key priority to develop and enhance the local economy. A principal challenge for Cheshire and Warrington is the fact that SFB provision in metropolitan centres is emerging at an accelerated rate, yet governmental data confirms that two-thirds of Cheshire and Warrington (by area) is outside the scope for private sector provision of superfast broadband. This represents a direct disadvantage to c107, 000 Cheshire and Warrington homes and businesses and c355,000 people.

A1.12   As outlined in the recent Local Economic Assessment (July 2011), Cheshire and Warrington has a strong economic base with significant potential to grow and help support national economic recovery. However, the provision of SFB, especially in rural areas, has been identified as a constraint to unlocking the full potential of the sub-regional economy.

A1.13   SFB is required to unleash the next step growth potential of Cheshire and Warrington with 37% of the Information and communication sector citing broadband coverage as a barrier to growth in the Cheshire and Warrington Business Needs survey (April 2011). Cheshire and Warrington has particular potential to maximise the proximity impact of MediaCityUK as a quality of life, lifestyle and business location of regional significance.

A1.14   Economic growth will be built on existing strengths in science and the knowledge economy, with a focus on research and development and key sectors such as pharmaceuticals, chemicals, advanced manufacturing, financial and business services, digital and creative, ICT, environmental, energy and nuclear industries. Other sectors such as the visitor economy, health and related activities will be important, especially in relation to employment generation.

A1.15   Cheshire and Warrington has an existing strength for digital and creative industries employment with the highest proportion in the region and amongst the largest creative industries workforce in the UK. SFB will provide the connectivity for the sector to maximise the business generator capacity of MediaCityUK.

A1.16   Face-to-face connectivity will remain important for business growth and development particularly for rapidly changing and not easily codified business dynamics. SFB will provide an electronic business infrastructure to complement the existing excellent road, rail and air network in place to provide the ideal base for accelerated business growth.

A1.17   To build and strengthen working relationships between education and business growth, the project team is working closely with the education community of Keele University, Manchester Metropolitan University, Chester University and Reaseheath College to understand how better broadband services can transform the way we live and work. The project team intend to use its links with these academic institutes to contribute to the Research Councils' UK Digital Economy programme.

A1.18   The recently completed study: 'The Value and Impact of Superfast Broadband for Cheshire, Warrington and Halton'(2012)' reports that full coverage of superfast broadband would, on a central estimate, generate a gross impact of **£1.3 billion** in GVA over 15 years and create **11,500** jobs. It would also generate an additional £330m of economic benefits to households.

Social Inclusion

A1.19   SFB will offer the means to transform the relationship between the local authorities and Cheshire and Warrington residents. Universal access to a Cheshire and Warrington superfast broadband infrastructure network is a fundamental requirement to enable online access to become the default channel for delivering public services. The new broadband strategy is a vital part of our commitment to improving the lives of people living in rural communities.

A1.20   Although Cheshire and Warrington is perceived to be a wealthy area it has areas of significant deprivation. For example Crewe and Macclesfield have some of the worst areas of deprivation in the country. In areas such as this citizens typically can't afford internet connectivity. Cheshire East Council is working with the local residential social landlord (RSL) *Wyvern Housing* and telecommunications companies on a project for the provision of high capacity broadband services to its customers at reduced rates. If successful the project could be expanded to other RSLs and incorporated into the superfast broadband project.

A1.21   Poor broadband connectivity means that ability to access even basic internet services such as booking a flight ticket is unachievable. Public sector service provision is also markedly more expensive as citizens cannot take advantage of the wide spectrum of online public services offered such as the renewal/reservation of library books, payment of bills, return of annual tax/VAT returns, to more recently, the ability to complete the 2011 census online.

A1.22   The Cheshire and Warrington Connecting Cheshire Partnership is committed to develop SFB capabilities in the following indicative areas:

- Access to the workplace for those groups which may be less mobile (e.g. disabled and people with child-care responsibilities who wish to work part-time).
- Learning and skills, in terms of extending the teaching environment outside traditional class room and via delivery platforms for teaching/learning modules.
- Social connection, especially for the older generation.
- Carbon reduction through teleworking, video links and information access.
- Telehealth and extended home care.

<u>Existing Broadband Initiatives</u>

A1.23   Cheshire East Council and Cheshire West and Chester Council have a shared corporate network which connects over 700 offices and schools throughout Cheshire.

A1.24   Cheshire ICT Shared Service, Cheshire East Council and Cheshire West and Chester Council are working collaboratively to progress opportunities to integrate ICT networks and services with other public sector organisations in the local area. For example the ICT shared service is providing data centre hosting services to Warrington Borough Council. Also Cheshire Shared Services is providing Internet connectivity to Cheshire Fire and Rescue services through the local authority network.

A1.25   There is only one community broadband network in operation in the Cheshire and Warrington area which provides wireless connectivity in a rural community. The founders of this community broadband network have expressed the service is difficult and time consuming to manage and would prefer to replace it with a broadband service from a national carrier provider as part of the strategic broadband project.

OUTCOMES

A.1.26   The Cheshire and Warrington superfast broadband project will deliver a number of outcomes which realise a range of socio-economic benefits. Strategic outcomes include;

- Increasing coverage of superfast broadband from 67% to 90% by 2015 will play a significant part in the Coalition Government achieving its ambition to deliver the best broadband network in Europe by 2015
- To achieve an overall Ofcom broadband score rating of 1 based on the following factors
  - >80% broadband Take up
  - >90% Superfast Broadband Availability
  - >16% Average Modem Sync Speed
  - <5% Receiving less than 2 Mbits/Second
- >£40M infrastructure investment in the Cheshire and Warrington area.
- Provide a powerful national demonstration of our Local Enterprise Partnerships in action and working collaboratively on a shared agenda – responding to one of our business community's highest barriers to growth.
- Enable around 700,000 more people and over 10,000 more businesses to access superfast broadband.
- Contribute to national economic recovery through increasing our GVA by £86 million per annum by 2020.
- An exemplar public/private partnership test bedding new innovative ways of working driven by technology
- Adoption of broadband infrastructure standard for new builds
- Enablement of the five economic 'place' priorities for Cheshire and Warrington.
- Joint demand stimulation and marketing team promoting superfast broadband between public sector and strategic investment partner.
- Integration with the Cheshire and Warrington Infrastructure plan to best apply the provision of superfast broadband with other infrastructure initiatives.
- To provide Fibre Hubs in villages/hamlets where they are requested.
- Take-up of superfast broadband services by businesses and residents will be greater than 40%.

RATIONALE

A1.27   The rationale for SFB investment is fully embedded in the following interconnected suite of corporate policy documents:

- **Sustainable Community Strategy: Ambition for All (2010)** has set as a priority action to: "Provide a leading broadband infrastructure", working to a target to develop SFB to the point where "We will have a leading, reliable, high-speed broadband infrastructure serving businesses and residents in all parts of Cheshire East."
- The Cheshire and Warrington LEP Economic Strategy "Unleashing the Potential" (2010) commits to SFB as crucial to the sustainable economic development of Cheshire & Warrington.
- **Economic Development Strategy (2011)** is working to:"actively seek and promote opportunities to implement next generation broadband speeds across Cheshire East:"
- **Crewe Vision: All change for Crewe (2011)** has identified the need to "create a state-of-the-art broadband internet network" as one of five key actions to unlock the huge potential of the town and surrounding area to become an economic powerhouse by 2031.
- The **Rural Regeneration Strategy & Action Plan (2011**) has set a key ambition to: "address market failure where it affects quality of life and economic success through the provision of public transport services and high speed broadband."
- **Cheshire and Warrington Business Needs Survey (April 2011**) recognises business value broadband connectivity for their needs and require access to high speed reliable services at market competitive prices.

ASPIRATIONS 2015 - 2020

A1.28   The Connected Cheshire Partnership has aspirations to provide for SFB beyond the BDUK sponsored 90% target. Our enhanced target to achieve universal provision by 2015 will be delivered through promotion of the investment case to telecom providers, supported by additional funding from ERDF sources.

Addressing the final 10%

A1.29   The government supported funding model provides for 90% SFB coverage, which will leave c47,000 residents and businesses at a 'digital divide' disadvantage. The financing of the final 10% presents challenges across three key aspects:

- Weak business case for commercial market intervention
- High infrastructure costs to connect dispersed localities
- No Government funding support

A1.30   The total cost to achieve the final 10% coverage has been estimated at c£20.6M. Funding is being sought from the European Regional Development Fund to address the public sector match to deliver Superfast Broadband to the final 10% of the population. Outline approval has been obtained for a submission of £13,586,169 which also includes scope to provide business support to promote SFB uptake for all Cheshire and Warrington's SMEs. If successful, this funding could ensure we reach our 100% superfast broadband coverage target by 2015

A2. Background

Please describe the current broadband position including covering, speeds, usage, residential/business split and roll out to date.

A2.1 BT is the main service provider of ADSL broadband in Cheshire and Warrington. A small proportion of the area (<5%) in the towns Macclesfield, Warrington and Ellesmere Port have cable service provided from Virgin Media.

A2.2 There are 106 telephone exchanges in Cheshire and Warrington. Only a 1/4rd of these exchanges have been unbundled therefore the majority of the exchanges are limited to services provided by BT Wholesale. Over 50% of the telephone exchanges are Ofcom Market type one.

A2.3 Broadband speed published by Ofcom in July 2011 rates Cheshire and Warrington as level '4' (very poor) in terms of slow internet connections. The three local authorities of Cheshire East, Cheshire West and Chester, and Warrington Council have a lower average modem sync speed than the national average (6.9 compared with 7.5 for the UK), a higher than average number of people have an internet connection less than 2 Mb/second (17% compared with 14% for UK) and a higher than average take up of services than the national average (70% compared with 68% for the UK).

A2.4 Currently 70,126 premises fail to meet Universal Service Commitment of >2Mbps broadband connectivity, which is impacting over 156,000 people. This is primarily caused by the challenging geographical dispersion of telephone exchanges to the premises served (i.e. line distance/quality vs bandwidth degradation), long lines to the premises from the telephone exchange, and the proliferated use of aluminium rather than copper telephone lines which has poor signal attenuation. These issues result in not/poor spots as can be seen as red markers in figure 1.

Figure 1: Broadband Speed Analysis of Cheshire & Warrington area
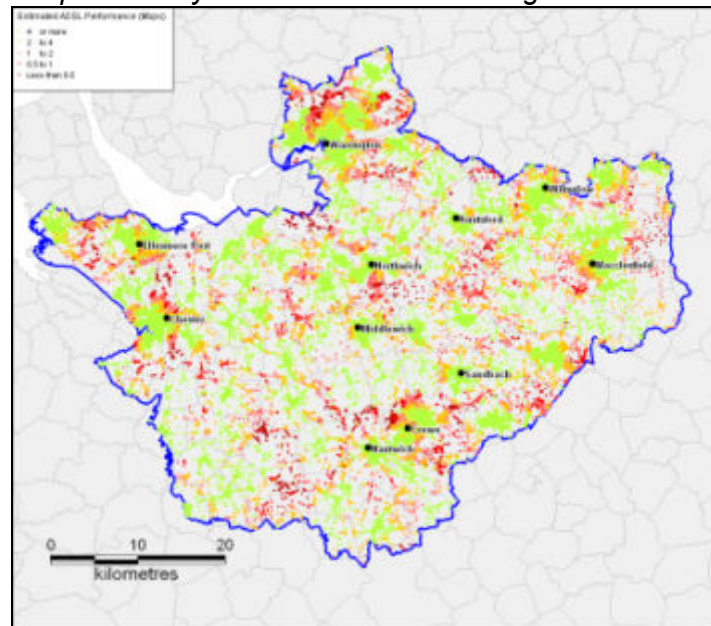
A2.5 This digital divide in the inequitable provision of premises located in our sub-region is demonstrated below. The average number of properties receiving <2Mbps based on individual telephone exchange areas is currently 26% of total, with line test evidence suggesting that some areas are served at a significantly lower level. See fig 2 over.

Figure 2: Percentage of Premises by Telephone Exchange Area not meeting 2Mbps USC
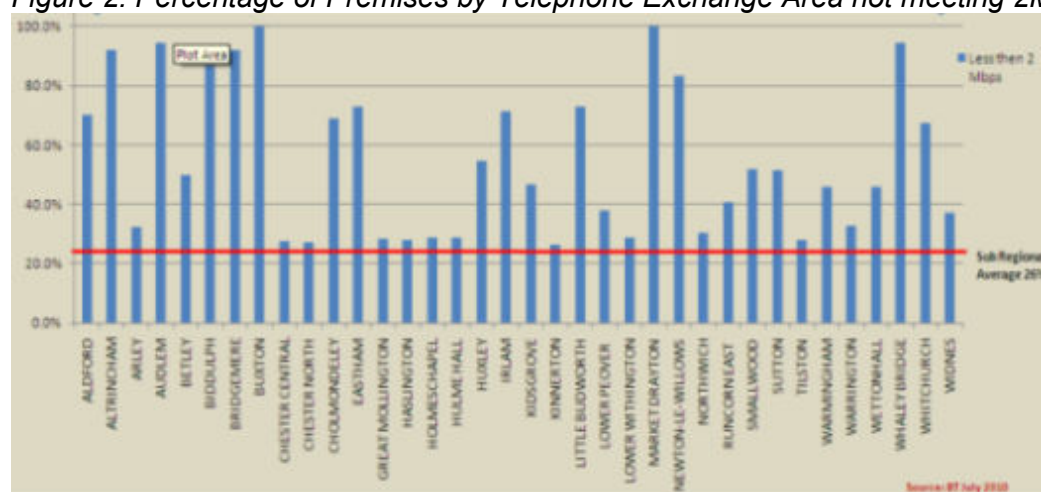
A2.6 BT Openreach has committed to rollout superfast broadband services to 24 of the 106 telephone exchanges and seven telephone exchanges have superfast broadband services available to purchase. All as detailed on Map 3.3

A2.7 It is known and noted that for those areas where SFB rollouts have been announced a significant proportion (typically 10-20%) of that area will not have SFB access due to the financial or technical issues impacting the street and exchange footprint.

A2.8 In total this means c107,000 dwellings are considered to be disadvantaged by not receiving SFB services and are classified as being in areas which are State Aid White. See *Map A2-8*

	Numbers
• Residential	65,195
• Business	12,256
• Within SFB enabled exchange area (but without SFB connection ~10% premises)	29,761
TOTAL	**107,212**

A3. Local Broadband Context Evidence of Need/ Gap Analysis

The need for broadband investment should be set out supported by evidence. In order to support the evidence the following information would be beneficial:

- area map showing topography, rurality- **using baseline coverage and infrastructure data provided by BDUK**;

- population density information;

- current telecoms infrastructure including community networks;

- Regional assets (motorways, canals etc);

- Public sector assets – Public sector networks and contractual status.

Please note local bodies should identify where it may be possible to re-use existing public sector networks as part of the solution including identifying existing assets and contracts that are suitable for re-use.

Baseline Coverage and Infrastructure Data

A3.1 Over 60% of Cheshire and Warrington is deemed to be rural. This characteristic coupled to the dispersed settlements and businesses characteristics of the area are major

factors which explain why Cheshire and Warrington does not yet have full coverage of first generation broadband (up to 2 Mbps).

A3.2   GIS analysis of the distribution and reach of BT exchanges shows that a significant proportion of the rural area remains underserved in respect of broadband, resulting in a poor level of connectivity for communities in this area. A study carried out by Analysys Mason found that the area does not provide broadband suppliers with sufficient economies of scale to deliver ubiquitous next generation broadband access.

A3.3   Over half of the 106 telephone exchange covering the sub region are currently classified as Ofcom Market type 1, indicating consumers residing in these areas have no other choice but to go with BT Wholesale as the sole service provider of broadband services.

A3.4   Current marketplace forecasting offered by Analysys Mason through BDUK clearly indicates BT is the incumbent broadband provider. *Map A3-1* demonstrates that future coverage by geographic area is only expected to reach a third of the sub-region.

A3.5   Virgin Media has a small presence of its cable infrastructure in Cheshire and Warrington, although it is no more than 5% by area and has no future plans to increase its broadband footprint for our region. There only exist a few isolated pockets, around 1% by area, where both providers have a presence thereby enabling consumers to have a real choice in selection of a SFB provider.

A3.6   Current and future planned rollout of SFB by private sector telecom providers up to 2013 is shown in *map A3-3.*

A3.7   Where SFB service rollouts have been announced for a telephone exchange, many consumers will still be left disappointed as 10-20% of premises will not benefit from the upgrade due to technical or financial reasons. A subsequent infilling exercise will need to be undertaken within these areas to ensure there is universal provision of SFB. *Map A3-2* helps to highlight this further.

Population & Dwelling Demographics

A3.8   The average population density for the sub region is 589 people per sq/mile which gives an average density ranking of 50% when compared with other local authority areas in the UK. This average figure is made up as 312 per sq/mile in Cheshire East, 357 per sq/mile in Cheshire West and Chester and 1099 per sq/mile in Warrington. In conclusion the area is sparsely populated apart from its key service towns.

A3.9   60% of the sub region is designated as rural. This is clearly demonstrated by both population density map *A3-4* and dwelling density (from BDUK data set) map *A3-5*. This sparse distribution of the population and settlement clusters form a key barrier in limiting further private investment from that which has already been committed for the expansion of SFB in the region. The timeframe for the return on investment required by telecoms suppliers' commercial models cannot be met with investments from the private sector alone.

Telecoms infrastructure

A3.10   By definition of the limits of the private sector investment, it follows that no business case exists for private sector investment into the rural areas of Cheshire and Warrington. This means that there is a real danger that a rural 'digital divide' will result in those living in remote and rural communities being unable to access the new economy and the new society made possible by digital communication

A3.11   The poor provision of last mile high capacity broadband is an unrealised opportunity when contrasted with the substantial presence of backhaul infrastructure in Cheshire and Warrington; as identified in map *A3-6*. The project team would work to apply this backhaul infrastructure to be employed to achieve its broadband coverage ambitions. New ways of working would be promoted to introduce breakout points from this infrastructure which will reduce the deployment costs

Regional Infrastructure Assets

A3.12   Alongside this rich carrier backhaul infrastructure, many options are open to investors for consideration that may increase the viability of universal provision of SFB, lower their deployment costs and reduce the time to market. We believe exploitation of these assets could significantly reduce this cost and lower social/environmental disruption. These assets would include:

- Co-share council owned urban traffic control & street lighting ducts.
- British Waterways - 'Cheshire ring' canal side towpaths - talks already underway to establish low cost fibre backbone transit routes without the need for costly and intrusive road closures. See map *A3-7*
- Brine Pipelines to establish low cost fibre backbone transit routes without the need for costly and intrusive road closures. See map *A3-8*
- Power line and Gas line infrastructure.
- Sewer infrastructure - pilot mapping already been undertaken.
- Farm and Community based Self Dig Schemes *A3-9*
- Road and rail infrastructure *A3-10*

We are committed to work alongside potential partners to highlight these commercial opportunities.

Public Sector Assets

A3.13   eCheshire Public has been established since 2009 and is a Public Sector ICT alliance group led by Cheshire East Council with membership comprising of Cheshire West & Chester Council, Warrington Borough Council, Cheshire Police, Cheshire Fire & Rescue and the PCT/NHS. This group is currently evaluating joint public sector infrastructure harmonisation, with a vision to create a ubiquitous Public Sector Network (PSN). It has already completed

- Full mapping of public network infrastructure and buildings
- Baselined the total cost of network ownership
- Completed a register of contracts terms and conditions**.**

A3.14   The group are keen to work with suppliers to understand the benefits and opportunities that the SFB programme would bring to them either as partial or full 'anchor tenants'. In addition there is a strong desire to explore how surplus network capacity, land ownership and property assets could assist in improving digital connectivity for wider community good. Maps *A3-12* and *A3-13* demonstrate the work already undertaken to register the geographical distribution of its 1,200 networked public sector buildings.

A4. **Scope of Project (describe your project).**

Please outline the scope of your project. This is to include:

- the objectives of the project and any constraints;

- the geographical area(s) it will cover and number of properties/postcodes;

- the number of partners single Tier 1 authority, LEP, several authorities;

- phasing of the project/roll out;

- prioritisation of areas and match to anticipated service level (including any trade-offs you expect to make between speed and coverage);

- identified need for community broadband hubs, and potential public-sector locations.

Programme Vision

A4.1   To ensure Cheshire and Warrington has 100% coverage of superfast broadband services by 2015, connecting the community and developing the digital economy.

Programme objective

A4.2   To deliver 90% superfast broadband coverage by 2015, with an enhanced target to achieve 100% provision by 2015, subject to grant funding award.

Programme Scope

- To secure £20m public sector funding from multiple funding sources including BDUK, ERDF and RDPE which will be used to gap fund private sector investment.
- To select a strategic investment partner/consortium through the BDUK framework who will contribute match investment and rollout superfast broadband in the areas of market failure in Cheshire and Warrington and deliver services to residents and businesses.
- To secure European Union State Aid Approval to invest public money in superfast broadband infrastructure in areas of market failure within Cheshire and Warrington (State Aid White Areas).
- To engage both externally with businesses and residents, and internally within the public sector to make best use of superfast broadband technologies.
- To stimulate the market and capture residential and business demand.
- To meet and exceed levels of service uptake in line with funding criteria.
- To promote the use of superfast broadband as an enabler of public sector transformation and social inclusion

Constraints

A4.3   Although the local broadband plan is designed for the whole of Cheshire and Warrington, public funding for investment into SFB infrastructure is restricted to areas of market failure.

A4.4   The following factors are recognised and understood

- grant monies secured from BDUK will be for use exclusively for broadband infrastructure investment and not for other activities i.e. demand stimulation, project management.

- grant monies secured from ERDF and RDPE funding programmes have specific criteria associated with how the money is spent and what outputs are delivered. For example both are restricted to SME business connectivity.
- capacity of the telecommunications industry to deliver superfast broadband projects could be strained.
- BDUK have limited resources and can only play a facilitation role in the delivery of the Cheshire and Warrington project
- A contractual agreement and robust governance framework will be in place between the local authorities in Cheshire and Warrington to deliver the project.
- There will be a financial envelope (limit) to the project and technical solution or scale of the rollout of superfast broadband this may be restricted depending on responses from the market.

Geographical area

A4.5   The Cheshire and Warrington Broadband Project will cover all areas of market failure (state aid white) within Cheshire and Warrington area. This area includes three unitary authorities and covers 2,263 square miles where 892K people live and is expected to include greater than >65% of the area by geography, which includes 60 telephone exchanges. In terms of postcodes it is expected to impact 18,441 of 27,114 postcodes in the local area.

The cost of deploying a broadband network in our area is high. An analysis of the 'geotypes' in our area shows that the proportion of premises in the last six geotypes (those with the highest cost of deployment) is 45%, compared to 35% nationally. The geotype definition is the one conducted for the BSG fibre cost modelling study, which considers factors including population density, the number of lines connected to an exchange and the distance of premises to an exchange. The analysis is taken at a postcode level. It demonstrates that our area has significantly greater topology and network architecture challenges than the UK average.

Partners

A4.6   The Cheshire and Warrington SFB project is being taken forwards as a collaborative project between three unitary authorities and the Cheshire and Warrington LEP. The partnership team reports directly to the strategic sub-regional leadership team, which include the LEP Board. Partnership members include;

- Cheshire East Council
- Warrington Borough Council
- Cheshire West and Chester Council
- Cheshire and Warrington Local Economic Partnership

A4.7   Being a single unitary Council partnership will provide for efficient working at a strategic level across the whole of the area. Within the context of this bid, it affords a number of strengths:
- More efficient and democratic decision making for the identification of areas for investment.
- A wider pool of project support, expertise and capacity to deliver large scale projects.
- More uniform and consistent methods for engagement with businesses and citizens.
- Coordination of street works to coordinate joint projects reducing disruption and to work more efficiently.
- Communications are managed centrally and can reach all of Cheshire and Warrington, quickly and consistently.

A4.8   A network of secondary partners is also in place for the dissemination of information, steering consultation, and community/business engagement. These partners include:

- Reaseheath Health College
- Keele University
- North West Business Leaders
- Cheshire Association of Local Councils (Chalc)

- Manchester Metropolitan University
- Chester University
- Cheshire Community Action (ARCE)

Phasing

A4.9   The project will be delivered as a single phase project within two years of the contract commencing. Sub-tranches of delivery will be determined by agreement between the local authorities and the strategic delivery partner(s), although underpinning principles will be applied based round spatial priorities, local need and value for money.

A4.10   Clear demarcation between tranches will be planned to act as control mechanisms and impact measurement for the rollout project.

Prioritisation

A4.11   Priority will be given based on two criteria – businesses and deep rural areas. This will complement the economic strategic priorities of Cheshire and Warrington and address the areas of severe market failure in the rural areas.

A4.12   Businesses: Priority will be given to support business growth in and around the five sub regional economic place projects centred on Chester, Warrington. Crewe, Ellesmere Port and Macclesfield. Priority will be given to areas of business concentration.

A4.13   Deep Rural Areas; Priory will be given to those areas on the limit of the 90% coverage . Such an approach will better allow for possible extension of announced SFB provision with no contribution from the public sector.

Trade-offs between speed and coverage

A4.14   Prioritisation will also need to consider the dependencies of grant funding award criteria, and what is achievable with the financial envelope of the project. This means there may be trade-offs between the speed of connection and coverage.

A4.15   It is the desire of the project to extend the reach of fibre as far as possible across Cheshire and Warrington. Priority of service will be geared towards businesses who would ideally receive a symmetrical dedicated fibre connection, while acknowledging the appropriateness of FTTC or wireless for the residential market.

Community Hubs and Public Sector Locations

A4.16   Although there are active community groups passionate about better broadband throughout Cheshire and Warrington, the realisation of community broadband projects is limited. An EoI submission has been made to the Rural Community Broadband Fund and the project has been designed to complement the broader Local Broadband Plan objectives.

A4.17   The project team is aware of a number of community groups which are activity considering an interim broadband solution ahead of the strategic solution and the project team have committed to support the community aspirations.

A4.18   The project team is working with local community groups and town/parish councils to understand their requirements. Where a community fibre distribution hub is requested this will be provided.

SECTION B – CUSTOMER AND COMMUNITY ENGAGEMENT

B1.   Demand stimulation

This section should describe the proposed approach to demand stimulation and any funding allocated to undertake this activity.

The potential customer base, the actual/potential take up of broadband and the annual spend per household are the important components in understanding demand stimulation. Outline your proposals to stimulate broadband demand for: businesses, users of public services and citizens (public*).

B1.1   Revenue funding for programme support has been approved by the partner authorities to promote the uptake of SFB services. We will contract with the selected broadband partner to supplement these resources from their own marketing activities. No funding from BDUK is being sought to fund our demand stimulation plans.

B1.2   Stimulating demand for broadband is a vital first phase in raising awareness of the benefits of SFB, with the provision of impartial advice and information on how to access it. We recognise the need to stimulate the community and business demand for broadband coupled with recording this demand in a manner that can be used to help us to understand local circumstances and priorities. The team has made live a website portal whose key objectives are to provide information that raises awareness of SFB; provides citizens and businesses with a better appreciation of what broadband can offer; a registration demand form that enables to begin evidencing demand. This site can be found at:

http://www.connectingcheshire.org.uk

B1.3   The website will be updated to reflect how the programme develops to ensure relevant and local information is available, such as case studies to help site visitors relate to the programme. The website is developing to capture the underlying Cheshire and Warrington SFB attributes below;

- 420,000 dwellings (based on BDUK data)
- 360,000 premises with telephone lines (telephone analysis data)
- 50,000 businesses (>80% SMEs)
- One of the largest digital and creative workforce in the country
- 882,000 residents
- 70,000 dwellings that don't have access to broadband services, <2Mbps
- 107,000 dwellings including 20% of businesses which will not benefit from superfast broadband services.
- 13,300 businesses which will not benefit from superfast broadband services.

B1.4   The demand stimulation programme is focused on six core themes which will unite the public sector in Cheshire and Warrington and put the use of services delivered over superfast broadband at the centre of its corporate priorities. These areas are:

- Economic Development
- Customer Access
- Education Learning and Skills
- Health and Wellbeing
- Local Communities
- The Environment

Connecting Cheshire and Warrington Launch: 24 July 2011.

Connecting Cheshire and Warrington was successfully launched at an event held at Cranage Hall on the 24 June 2011.

The event was attended by 100 delegates, which included MPs, Councillors, Town and Parish councils, members of the community, Internet Service Providers and local businesses. The delegates heard a range of presentations during the day from speakers such as BDUK, Analysys Mason, The Cheshire and Warrington LEP, Julian Cobley. The local community and business through Wychwood Park and the Bolesworth Estate also had an opportunity to highlight to problems they face with accessing faster broadband and delegates have the opportunity to voice their opinions during the Q&A session and the workshops.
Feedback from the day was extremely positive with all attendees supporting the ambition vision.

B1.5   These six themes are being driven forwards focusing on four user communities; businesses, local communities, public sector and education, and the telecommunications market.

Focus: Businesses

B1.6   Cheshire and Warrington has a rich environment of micro and SME businesses and a high volume of business start ups, which collectively contribute a significant proportion to the regional economy. The large volume of businesses in the digital and creative sector (notoriously heavy users of broadband capacity), coupled with the supply chain opportunities to MediaCityUK mean access to high capacity broadband is a paramount requirement to business and economic growth. See Map E4-1.

B1.7   The team have been working with a number of businesses including Pochin Construction, Albs, and Peter Wilson as case study examples to model the wants and needs of local businesses. An indicative list of the businesses and the business support

companies we have been working with is noted below. All are fully aware and supportive of the broadband programme.

Business Community
- Pochin Construction (land/property development case study)
- Albs (rural creative/digital case study)
- Peter Wilson (Nantwich based creative/digital case study)
- NLP (existing assets – case study (Brine pipe lines)
- British Waterways (existing assets – case study (Canal Infrastructure)
- Peel Holdings (existing assets – case study (Manchester ship canal)
- Barrowmore Estate
- Grosvenor Estate
- Bolesworth Estate

Business Support
- Reaseheath College
- Reaseheath Rural Enterprise Hub
- South Cheshire Chamber of Commerce
- Cheshire and Warrington Local Enterprise Partnership
- New Economies Manchester
- North West Business Link

B1.8   A Cheshire and Warrington business survey of over 1,500 businesses has recently been completed which included a question regarding broadband services and satisfaction. The result of this survey will inform business demand registration schemes going forwards.

B1.9   A 'thrive and survive' local business event for SME business was held in June 2011 which was attended by over 80 delegates. The event was a great opportunity to directly engage with local businesses to communicate the benefits of superfast broadband. The Connecting Cheshire Partnership continues to maintain engagement with the business sector.

Focus: Local Communities

B1.10   A comprehensive demand stimulation programme is underway with the local communities. As part of work to develop a rural partnership framework and a sustainable market towns network, the team have participated in road shows and workshop events discussing the impact of broadband in the local community. These events have proven very popular and have helped form a network of community champions who are driving the awareness of superfast broadband. A list of the community groups engaged can be seen below:

- Over Peover Action Group
- Over Peover Parish Council
- Rainow SFB Action Group
- Nantwich Business Group
- Gawsworth Local Community
- Wychwood Park Broadband Action Group
- Lymm Action Group
- Norbury Action Group
- Cheshire East Market Towns networks
- All Change for Crewe

- Winsford Community Forum
- Huntington Parish Council
- Utkinton Parish Council
- Cheshire Association of Local Councils (Chalc)
- Cheshire Community Action
- Digital Champion Group (in excess of 50 town/parish councils and community groups)

B1.11   Cheshire East Council has pledged a commitment to Raceonline2012 to support community engagement and to get citizens online. Over 12,000 people have been trained through the local libraries where people volunteer the time to train people on basic computer skills.

B1.12   A workshop was held at the Cheshire West and Chester Rural Conference on 23rd June 2011. This workshop was used as an engagement process, where members of the community who had attended the event could ask questions, input any foreseeable implications in their areas, and put forward their comments on the programme as a whole. The workshop went well and the questions and comments were recorded as part of the ongoing engagement log that has been set up within the project team.

SFB Workshop at Rural Conference 23/06/11

B1.13   The team is acting as an aggregation point to understand the wants and needs of its businesses and residents. We have listened to our digital champions following the first event and have designed and developed a new version of the toolkit which has been sent out to the 60 digital champions who attended our introduction event on 25/10/11.

Digital Champion Event 25/10/11

B1.14   This event was done in partnership with Cheshire Community Action and Cheshire Association of Local Councils (ChALC). We recognise that community groups are important to the development of the toolkit and will regularly review the documents to ensure they are still relevant. The toolkit promotes digital champions in local area and will help communities raise awareness of the technology.

B1.15   Since the various community engagements have taken place we have developed a digital champion engagement programme that aims to target areas that were not represented in the initial events and bring those who were together to discuss their progress. This engagement programme will see workshop events happening to develop community understanding of the need for broadband and how to develop demand in local communities.

Focus: Public Sector

B1.16   Superfast Broadband has been made a key indicator on which Cheshire East Council will judge its performance and is central to public sector decentralisation and localism agendas.

B1.17   As well as looking externally from the council, the project team has been looking internally at how superfast broadband could be a key technology enabler which will drive transformational change. The transformational nature of a fast broadband connection to every home and business has resulted in access to superfast broadband being recognised as a corporate priority and a leading delivery objective of the Cheshire and Warrington Local Enterprise Partnership. It will transform customer access channels and will present new ways of working which to date has not been possible, revolutionising healthcare provision and lowering the cost of public sector engagement.

B1.18   A public sector steering group is in place and a number of focus groups are scheduled to run in the coming months which will stimulate cross-department and cross-public sector working. Engagement is well established with the following public sector organisations;

- Cheshire East Council
- Cheshire West Council
- Warrington Borough Council
- Cheshire PCT and NHS
- Cheshire Fire and Rescue Services
- Cheshire Police
- Cheshire East MPs
- BDUK and BIS
- Cheshire East Local Strategic Partnership
- Raceoneline2012
- Cheshire and Warrington LEP
- Broadband Stakeholders Group

Focus: Telecommunications Market

B1.19   The importance of stimulating and understanding the telecommunications market can not be underestimated. To this end the project team have been working very closely with telecommunications suppliers to encourage their investment into Cheshire and Warrington.

B1.20   Dialogue, awareness building and engagement channels are open with the suppliers noted below. All suppliers are fully aware of the Cheshire and Warrington

broadband programme and were invited to the supplier day in May 2011, standing alongside local telecommunications companies. Vitesse Networks, Geo, BT, Fujitsu and Updata have all already indicated strong interest in the Cheshire and Warrington programme. The informal dialogue with all the suppliers listed over the last 18 months, and their excitement about being part of the project indicates a healthy competitive market for selecting an investment partner.

Suppliers
- Updata
- BT Openreach
- BT Global Services
- Geo Networks
- Fibre Speed
- Boundless Communications
- Networks by Wireless
- Gridline Communications

- Cable and Wireless
- Virgin Media
- Networks by Wireless
- Vitesse Networks
- Logicalis
- Fujitsu
- MLL Telecom
- Network Extender

- Cisco
- Compendium
- Gridline and Exstream
- Kcom
- Global Crossing
- Rutland Telecomm
- Acatel Lucent
- Arelink

B1.21   To ensure the project has a balanced view of the telecommunications market, and to keep pace of the fast changing world of broadband provision, the project team has engaged informally with a number of telecommunications consultants and advisors including;

- ADIT North East
- INCA
- Regeneris
- Analysys Mason
- Grey Sky

- ADROIT economics
- Action with Communities in Rural England (ACRE)
- Broadband Stakeholder Group
- Community Broadband Network (CBN)
- Independent Networks Cooperative Association (INCA)

B2.   Demand registration
Do you have evidence of demand from the following groups?
- consumers;
- small to medium enterprises (SMEs);
- communities;
- public sector organisations.

Demand registration

B2.1   Maximisation of demand registration of businesses and residents is central to the Cheshire and Warrington SFB programme and the project team has developed a demand registration site on the Connecting Cheshire website.

B2.2   Activities undertaken by local community groups is being captured. For example the Wychwood action group found 75% of residents on the estate would pay for a better service after a self conducted survey of over 390 residents. A further example is the Bolesworth Estate who, as major rural landowners and commercial property owners are looking into ways to bring SFB and new businesses into the rural areas. These types of examples and case studies will be applied to demonstrate the demand and help stimulate the demand further.

Case Study: *Wychwood Action Group*

Wychwood Park consists of 390 houses on a 1000 acre, gated community. Members of this community wished to investigate an independent community led demand registration scheme. They developed; hand delivered and collated survey results which showed these houses have, at the highest, speeds of 2.98Mbps and the lowest 0.2Mpbs. The maximum upload speed is 0.5Mbps and the cost for these speeds per month ranged from £10 to £35. When the community members found that 75% of the residents would change their internet provider for a better service it led them to the position they are in now. Wychwood Park members are currently liaising with Cheshire East council, Internet Service Providers and other nearby communities with an aim to bring superfast broadband to their community. This is a real example of community led demand registration.

Case Study: *The Bolesworth Estate*

The Bolesworth Estate is a 6,000 acre estate centred on the villages of Tattenhall, Burwardsley and Harthill. The Estate has pioneered the provision of rural employment space and now has over 125 businesses located within its buildings. This arrangement was working well until a large business wanted to move to one of the offices on the site and needed a broadband speed of at least 40Mbps. The Bolesworth Estate quickly began exploring the options available and discovered that with being the land owner, they could connect businesses on their estate with fibre optic cables in a self dig set up. This could provide numerous benefits; offices that are paying large costs to get broadband could see their outgoing costs reduced if the estate begin to manage the broadband connection, and endless opportunities could arise if the faster speeds are offered in a rural location.

Business demand Survey

B2.3   A series of SFB related questions were included in the area wide business survey recently undertaken for the Cheshire and Warrington Economic Development Strategy. The results have identified a high demand for high speed broadband in order to address a barrier to their growth, with 37% of the information and communication sector citing broadband coverage as a barrier to growth in the Cheshire and Warrington Business Needs survey (April 2011)

SFB demand by Sector

	Agriculture, quarrying, utilities etc	Manufacturing	Construction	Wholesale and retail trade	Transportation and storage	Accommodation and food service activities	Information and communication	Finance and Insurance & Property	Professional, Bus Admin, Education etc
IT infrastructure	7%	3%	4%	8%	14%	2%	**19%**	10%	9%
Adequate broadband coverage	16%	12%	9%	17%	23%	15%	**37%**	19%	13%

Cheshire and Warrington Business Needs survey (April 2011)

Case Study: *Peter Wilson Antiques – Nantwich*

Peter Wilson is an Auction house situated in Nantwich. This is a SME business that has been trying to compete with other auction houses and expand the selling potential of auction lots by using a real time auction website, meaning people on a global scale can bid for items. They have been severely struggling with their internet connection which is intermittent and slow. Their connection impacts then in terms of the time it takes to uploading images of lots, having that crucial reliable and resilient connection whilst the bid is in process and being online to carry through the transaction process once the hammer has fallen.

Rural Demand Workshops

B2.4   To address the needs of rural communities, a focused rural consultation process has been undertaken. Five workshops were held, each lasting for approximately two hours on the following dates and venues:

- Frodsham, Castle Park 26th October 2010
- Tarporley, Community Centre 28th October 2010
- Malpas, Jubilee Hall 2nd November 2010
- Neston, Town Hall 3rd November 2010
- Byley, Village Hall 3rd November 2010

B2.5   The workshops were attended by representatives from Town and Parish Councils, Local Area Partnerships of the Local Strategic Partnership and a wide range of local service partners such as the Police, Primary Care Trusts, Education bodies and voluntary sector. The consensus view of the workshops, as outlined in the priority ranking exercise, was that internet speeds are currently too slow and represent a real barrier to social and economic inclusion for rural areas. The impact of poor connectivity was recognised in terms of:
- Constraining businesses' activity, particularly those in knowledge based sectors, and undermining the competitiveness of areas remote from the urban fringe;
- Limiting access to information and services provided by the local authority;

- Limiting the capability of students living in rural areas to access educational resources;
- Undermining rural sustainability, as local communities are forced to travel to access employment and services;
- Reducing the attractiveness of rural areas for younger groups;
- Putting remote communities at risk of becoming even more peripheral.

B2.6   Group discussions emphasised the opportunities associated with the provision of high speed internet access, with real growth potential as a consequence of having highly qualified resident population and a significant number of small businesses. It was also highlighted that higher speeds and improved reliability could promote home working, with clear sustainability benefits in terms of reducing out-commuting, retaining a higher day time population and, potentially, securing a higher level of spend within local services.

B2.7   A priority ranking exercise was undertaken to provide an indication of the relative importance attached to a range of issues. Participants were given the opportunity to rate a range of issues from 1 (not at all important) to 10 (very important). Some 104 survey responses were collected from across the five workshops. The need for universal access to broadband was registered in the top quartile.

B3.   Stakeholders

Please note, the broadband investment must deliver services to those users who currently do not have access to broadband. The wider public sector (hospitals, schools) and the needs of the business community and individual communities need to be considered. Please outline your approach to date and future plans for stakeholder consultation, communication and engagement. This section should include a list of partners who support the bid including, tier 2 authorities, businesses and community organisations.

Please state the steps you plan to take with the successful bidder to work with stakeholders in identifying opportunities to reduce any streetworks related disruption, e.g. through co-coordinating rollout with other planned works.

Please also describe what steps have been taken to inform elected Members of the proposal, including any corporate impact it may have, and the level of commitment to this bid and the project gained to date.

B3.1   A wide range of stakeholders are actively involved with the Cheshire and Warrington project. The submission is with full support from the following bodies.

- Cheshire and Warrington LEP
- Cheshire East Council
- Cheshire West and Chester Council
- Warrington Borough Council
- Cheshire and Warrington Rural Partnership
- Cheshire Community Action
- Cheshire Association of Local Councils
- Bolesworth Estate
- Grosvenor Estate
- Lower Peover action group
- Rainow SFB action group
- The bid is further supported by all the bodies registered under B2

Stakeholder input into Local Broadband Plan

B3.2   A comprehensive engagement programme has been established for the stakeholders who have an interest or play a part in the broadband programme. The project team is using this programme to manage stakeholders appropriately and is fully connected

to the Sustainable Towns programme and Local Area Partnerships under the Sustainable Communities umbrella.

B3.3   The engagement programme has been highly successful both with citizens and businesses external to the local authority(s) and internal to the various business services, ensuring that broadband is recognised as a corporate priority which everyone can benefit from.

<u>Successful bidder relationship with stakeholders</u>

B3.4   The Cheshire and Warrington Connecting Cheshire Partnership will provide the framework to ensure that SFB provision is for the people and businesses of Cheshire and Warrington; not to them. This will put local communities and SMEs at the centre of the deployment programme by:

- Inclusive representation for the local community and business community in the project board
- Registering local community and business demand/requirements
- Tailoring local deployment plans to accommodate local wants and needs
- Encourage 'self help' connectivity models to a digital 'village pump'
- Encourage the local communities and businesses to participate in action learning sets to resolve localised deployment/take up issues
- Implement a public/private partnership superfast broadband stimulation and take up programme for businesses and residents.
- Ensure the benefits of broadband are central to the transformation agenda of the public sector by providing a series of action plans demonstrating how the technology will support new ways of working, such as customer access and Telehealth.

Case Study – *Independent living using ICT technologies*
DemenShare.com is an online peer support network for people who are living with dementia in central and east Cheshire. It will answer questions and put people in touch with others to get the local support and advice they need, when they need it. DemenShare.com aims to encourage independent living through friendship and mutual support.

It has been developed in partnership by Cheshire East Council, Central and Eastern Cheshire PCT, Age UK Cheshire and Opportunity Links. DemenShare.com is supported by Efficiency and Transformation Capital funding from Local Government Improvement and Development.

A Telecare pilot is running where some of the most vulnerable members of the community have been able to remain in the security of their own homes, with access to a support worker through the internet.

<u>Supporting delivery</u>

B3.5   The project is engaged with the planning process and is also engaging with the Countryside Alliance and major land holders to both support future wayleave and access requirements for the delivery of broadband services. For example Boleworth Estate, Grosvenor Estate and NLP. The Project Team includes a suitably qualified project officer to

lead on the delivery of this element of our Plan and liaise with planning teams, as part of a wider engagement role.

B3.6   The project team has active dialogue with British Waterways regarding the use of its canal corridors as a distribution network for new broadband infrastructure. Cheshire has a fantastic network of waterways which offer soft dig opportunities.

Street works and future-proof development

B3.7   The three constituent partners to the Cheshire and Warrington SFB programme are unitary authorities with attendant responsibility and control for street work licences. All future streetworks will be proofed for SFB requirements in accordance with the overall Cheshire and Warrington SFB programme.

B3.8   The core strategies and Local plans for the three authorities will be developed under guidance and direction provided by the Cheshire and Warrington SFB project team to meet, at a minimum the requirements of : 'Data Ducting Infrastructure for New Homes: Guidance Note (DCLG March 2008)' and 'PAS 2016:2010 – Next generation access for new build homes guide (BIS & BSI Dec 2010)' These coordinated actions will minimise disruption of street works and maximise planning gain.

Elected Member Engagement

B3.9   Elected Members and local MPs in Cheshire and Warrington have been engaged in the development of the Cheshire and Warrington SFB programme. Regular updates have been made to respective councils, MPs and Local Strategic Partnerships, and Local Enterprise Partnership. All parties are fully committed to the broadband programme and it has their full endorsement. This is demonstrated by;

- Regular dialogue with David Rutley MP, Graham Evans MP, Edward Timpson MP, David Mowat MP, Derek Twigg MP, Fiona Bruce MP and George Osborne MP
- Regular briefings to the councils of Cheshire East Council, Cheshire West & Chester Council and Warrington Borough Council.
- Endorsement and Support from the Cheshire East Local Strategic Partnership demonstrated by the sustainable community strategy.
- Cheshire East Council has adopted broadband coverage as one of its core indictors on which the council will judge its performance.
- The Cheshire and Warrington LEP have made broadband a priority.
- Recognition by local authority transformational teams that broadband is a central enabler to their business transformation agenda, supporting public sector reform.
- Rural Broadband is being championed by local MPs and Councillors at a national level with Fiona Bruce MP leading a Westminster Hall Rural Broadband debate on 19th October 2011

SECTION C – FINANCIAL INFORMATION

C1.   Funding Requirements

Please provide an indication of the total funding required to deliver the Local Broadband Plan (LBP) and a breakdown of how you expect this funding will be phased from 2011-2012 to 2014-2015 (in the funding table below) and any anticipated funding in 2015-2016 and 2016-2017. Where a Plan is being delivered through a phased project, or one or more projects, then Local Bodies should separately state the firm amount funding that is being requested for the initial phase and the indicative funding required for future phases. The degree of interdependency of the phases should be described.

Please describe this in relation to the total funding set out in the funding table below. Local Bodies should allow sufficient time to develop projects and award contracts to suppliers before draw down of funds related to

implementation. BDUK will want to understand what match funding (ERDF/Private Sector/Local Authorities) has been identified and the status of the funding.

BDUK acknowledges the challenges that local bodies have in developing a robust funding profile at this stage. Please outline any areas of uncertainty around funding and key factors which may influence both the level and timing of funding required.

Please also note that BDUK expect that capital contributions from Local Bodies will be reflected in corporate capital programme planning processes.

Finance Plan

C1.1   The commercial model for the Cheshire and Warrington broadband programme is based on blended public sector finances including grant award, matched with an equal or greater commitment from a private sector investment partner(s).

C1.2   Our plan includes three inter-related elements: delivering a broadband network (capital), managing procurement and delivery (revenue), and a demand stimulation programme (revenue). To deliver our Plan to 2015 a BDUK contribution to the capital costs is required. The revenue elements of our programme are fully funded by approved local authority contributions to 2015. Our programme works to deliver on two twin-track objectives:
- deliver 90% superfast broadband coverage by 2015.
- maintaining a parallel focus on providing for the enhanced target to achieve 100% provision by 2015

Project Objective: 90% coverage

C1.3   The 2012-2015 business plans for the four partner authorities have allocated an investment of £3.94 million for capital expenditure and c£1 million for revenue for project costs.

C1.4   Modelling based on BDUK data projects that the cost to achieve 90% coverage will be £12.96 million. This will provide for the connection of over 90,000 premises and will increase coverage of superfast broadband from 67% of premises to 90% across the programme area.

C1.5   The total capital investment fund of £12.96 million has been identified to implement BDUK 90% SFB coverage.
- £6.48 million of match funding from the successful bidder(s) (subject to contract)
- £3.24 million from BDUK
- £3.24 million of match from Local Authorities

C1.6   The Local Authorities have allowed for an additional £1.4 million to address the projected 20% infill within current SFB areas; to be 50% matched by private sector telecom.

C1.7   The capital contributions from the local authorities are reflected in their corporate business plans and are duly authorised.

C1.8   Further capitalised revenue expenditure of £1.6 million from the local authorities to cover project management, demand stimulation and business support has been confirmed in the 2012-15 corporate business Plans

Programme Vision: 100% coverage

C1.9   Additional funding to the BDUK and private sector investment is being sought from the ERDF programme where an active call is in progress, with a projected award date being autumn 2012. Dialogue with the DCLG North west ERDF programme team has

resulted in an investment to support the roll out of super fast broadband and adoption of ICT by businesses.

C1.10   The ERDF programme has the potential to provide further capital and revenue funding from ERDF to provide for extended infrastructure deployment and an enhanced supporting demand stimulation programme for SME enabled businesses.

C1.11   The capital funding will deliver SFB connectivity to 11,100 SMEs in market failure areas while the revenue will provide an enhanced package of support to businesses to adopt broadband services with free tutorials, business support and training to equip all businesses to ensure the maximum utilisation and realisation of economic benefit from the SFB infrastructure investment.

C1.12   c£410K has been secured from the Rural Development Programme for England (RDPE) for a rural broadband fund which will contribute towards the broadband programme in Cheshire and Warrington. This money will be used to support the take-up of superfast broadband services for businesses in deep rural areas beyond the 90% limit.

C1.13   It is noted that the ERDF funding is predicated on match funding being in place. This will require the funding process for the Local Broadband Plan to progress in parallel to the ERDF process.

Funding Table

Total funding required (GBP) £	2011-2012 millions	2012-2013 millions	2013-2014 millions	2014-2015 millions	2015-2016 millions	2016-2017 millions
Private sector (Telecom Company) 90% investment	0	2.16	4.32			
Private sector (Telecom) Infill investment		0.35	0.35			
Private sector (Telecom) ERDF infrastructure		*2.50*	*4.0*	*5.00*		
Private sector (Telecom) RDPE infrastructure		*0.41*				
Sub Total 90%		**2.51**	**4.67**	**0.00**		
Sub total 100%		5.42	8.67	5.00		
BDUK funding		1.08	2.16			
Other funding (Local Authority 90% (confirmed)		1.08	2.16			
Local authority Infill (confirmed)		0.35	0.35			
Sub total 90%		**2.51**	**4.67**	**0.00**		
Other funding Local Authority project management		0.39	0.21	0.21	0.14	
Local Authority Business support		*0.218*	*0.218*	*0.218*		
ERDF Infrastructure (subject to agreement)		*2.50*	*4.00*	*5.00*		
ERDF Business support (subject to agreement		*0.218*	*0.218*	*0.218*		
RDPE infrastructure (subject to agreement)		*0.41*				
Sub total 90%		0.39	0.21	0.21	0.14	
Sub total 100%		3.736	4.646	5.646	0.14	
TOTAL 90%		**5.41**	**9.55**	**0.21**	**0.14**	
TOTAL 100%		11.666	17.986	10.646	0.14	

Grand total 90% = 15.31
Grand total 100%= 40.438

number of postcodes covered by the funding	9,000 (all white areas)

Number of premises

White Areas 107,212

Residential 89,647
Non Residential 17,565

NB:
1. *Costed to allow for inclusion of Halton within project scope*
2. *Number of postcodes data is based on Ordnance Survey data source*
3. *Number of premises impacted is based on BT line area & Business Link data source*
4. *ERDF grant funding to provide for business stimulation package.*

Detailed Local Authority Spend Profile (90% Coverage)

Estimated Spend Profile (90% Coverage)	2012/13	2013/14	2014/15	2015/16	Total
Cheshire East	£395,610	£631,402	£70,136	£84,735	£1,181,883
Cheshire West and Chester	£809,438	£1,331,668	£101,425	£131,668	£2,374,199
Halton	£312,303	£479,365	£66,556	£79,365	£937,589
Warrington	£349,733	£557,981	£65,633	£77,981	£1,051,329
Total	£1,867,083	£3,000,417	£303,750	£373,750	£5,545,000

C2.   Funding Structure

Please provide any further details regarding the proposed technical solution, why it is expected to be appropriate for meeting the project objectives and any justification for the costs proposed above.
Please describe how the capital funding above is to be spent and who would own the infrastructure. For example, do you propose to lease equipment from the private sector contractor (cabinets) or own the capital investment (laying cable, installing wireless)?

Choice of Technologies

C2.1   It is expected last mile superfast broadband services will be provisioned using technology which is future proof to meet and exceed targets set by the government by 2015 and European Union by 2020.

C2.2   While remaining technically neutral (to conform with state aid legislation) it is preferable the chosen technical solution uses fibre technologies as the primary method of choice for last mile delivery, given its ability to scale in capacity compared with wireless and copper based media. Equally it is recognised it may be cost prohibitive and unnecessary to deploy end-to-end fibre to all premises in Cheshire and Warrington and therefore it is expected the final technical solution will be a mixture of fibre, copper and wireless technologies which will make both the deployment and service provision to the end user cost effective. We recognise that the competitive dialogue within the mini competition will determine the precise mix of technologies deployed

C2.3   Cheshire and Warrington benefits from a large number of carrier providers owning high capacity backhaul infrastructure in the local area. The last mile superfast broadband infrastructure will be designed and contracted to connect to suitable capacity backhaul infrastructure.

Technology Deployment

C2.4   A number of technical deployment scenarios are being considered, including;
  * **Greatest need (most deprived):** deep rural first working backward to the more urban area.
  * **Premise type:** Businesses and residents may have different technical solutions to meet their needs
  * **Return on investment:** Areas of greatest population/business density first.
  * **Complementary Technology:** an adjacency model to existing areas of superfast broadband deployment or existing broadband infrastructure.

- **Hot Spots:** Deployment based on demand from local communities and businesses.
- **Reusing existing assets:** using existing assets such as public sector networks, public sector land and property assets, brine pipelines, canal/waterways network, road and rail infrastructure corridors.
- **Community Broadband:** local community lead deployment projects integrating with strategic provision.

C2.5   The local authority preference is to connect all business and residential premises in the deep rural areas as a priority. The final deployment model will be agreed with the selected implementation partner(s) and could involve one or more of these deployment models. Wherever possible reuse of existing assets will be encouraged as this will lower deployment costs and could reduce the time to market.

Access to Services:

C2.6   It is proposed that broadband services will be open access at a passive and active level to encourage market competition, this will maximise customer choice and ensure a competitively priced market for service provision by internet service providers.

C2.7   Conforming with OFCOM legislation mandated on the telecommunications sector signification market powers, the contract will provide for the physical and passive infrastructure to be open to stimulate market competition.

Justification of Costs Proposed

C2.8   The indicative cost to provision future proof superfast broadband to remote/rural areas is typically £1000/property (*Broadband Stakeholder Group*). Modelling completed by the project team with a leading telecommunications superfast broadband provider (BT) indicates 100% coverage in Cheshire and Warrington could be achieved by as low as £300 per premise, therefore the best case scenario would be that BDUK grant fund contribute between 1/6th of the total value required to fund the project.

How will the Capital investment be spent:

C2.9   The proposed financial model is built on public sector gap funding to stimulate the private sector to invest in the delivery of superfast broadband services to Cheshire and Warrington.

C2.10   The sustainable commercial model to deliver universal superfast broadband is built on private sector provisioning broadband services to citizens and businesses. **The private sector partner(s) will own and manage the infrastructure**. This model supports public sector reform, allowing the public sector to focus on delivering core services to its citizens, while jobs are created in the private sector.

Managing Risk

C2.11   Working to the BDUK framework model will provide suitable due diligence, both in terms of value for money and delivery. Onward management and revenue risks will be met by commercial sector service providers.

C2.12   The project team will have corporate access to all necessary legal and financial support for the management of the project.

C2.13   Compliance with State Aid legislation will be tightly managed with the strategic investment partner.

SECTION D – COMMERCIAL INFORMATION

D1. Commercial Case

Please describe the commercial models which are being considered in order to deliver this project. BDUK anticipates a gap fund model will be preferred by most local bodies, but recognises other models may provide better value for money to achieve a local body's objectives. If other models are under consideration, please explain the rationale for adopting this approach.

The Final 3rd

D1.1   This BDUK submission is a complementary action to SFB provision which has been secured by promoting the commercial market to accelerate its investment in areas where there is a demonstrable financial case to do so. Public funding is being sought to support the deployment of SFB in areas where there is a genuine requirement for government intervention. This "push and pull" approach will maximise the investment opportunities across the public and private sectors and will accelerate the realisation of our superfast broadband delivery objectives.

Effective gap funding

D1.2   A number of commercial models have been considered within the context of the programme, with the council recognising that it does not have the expertise to set-up and fully manage its own telecoms business and that such an approach would be a high risk compared to a gap funded approach. At the present stage within the programme a gap funding model for infrastructure that is built, owned and operated by the contractor is deemed to be the most suitable approach for the council. The gap funded model is dependent upon good levels of market take-up and would be incumbent upon both the Council and the service provider to generate this demand.

D1.3   In recognition of the value of the revenue stream that the asset will generate, the Council expects substantial gap funding from a successful supplier. Informal research indicates this is an achievable expectation and is consequently reflected in our funding model.

Market Engagement

D2.1   The project team has been working very closely with telecommunications suppliers such as BT, Virgin Media and Fibrespeed who have a significant market presence in Cheshire and Warrington area to maximise their investment in the area. BT Global Services have been encouraged to deploy their superfast broadband services to a significant number of Cheshire and Warrington exchanges as part of their primary rollout phases, and we are actively working with Virgin Media and Fibrespeed to increase their market presence in the area.

D2.2   The project team has been in contact with a wide range of both local and national telecommunications providers. Dialogue, awareness building and engagement channels are open with the suppliers shown below.

Suppliers
- Updata
- BT Openreach
- BT Global Services
- Geo Networks
- Fibre Speed
- Boundless Communications
- Acatel Lucent
- broadband anywhere
- Cable and Wireless
- Virgin Media
- Networks by Wireless
- Vtesse Networks
- Logicalis
- Fujitsu
- MLL Telecom
- Arelink
- ITS
- Cisco
- Compendium
- Gridline and Exstream
- Kcom
- Global Crossing
- Rutland Telecomm
- Fibre Solutions
- Intellect

D2.3   All suppliers are fully aware of the Cheshire and Warrington broadband programme and participated in the Cheshire and Warrington local broadband day held on 24th June 2011.

D2.4   In the interests of being fair and equitable all engagements are taking place in a fully transparent and open nature. This will ensure the procurement/state aid process is competently followed.

D2.5   All supplier engagements conducted so far have been held under guidance from internal legal/procurement teams. The project in adherence with Prince2 project methodology adopted ensures all meeting are formally recorded and requests for information\action are registered.

D2.6   Mapping of broadband infrastructure across Cheshire and Warrington has been completed using data provided from the major telecommunications providers and local infrastructure services providers. This mapping shows their planned investment over the next three years. Further details can be seen in Map 3.4

Knowledge Sharing and Research

D2.7   The project team has had regular dialogue with a number of broadband industry experts and consultants to act as a sounding board for the project development. These include Regeneris, Adroit, SQW and Analysis Mason.

D2.8   The project team has developed a knowledge sharing partnership with other localities taking forwards broadband initiatives. Parties involved in this partnership include; New Economy Manchester, Manchester MDDA, INCA, Wirral Council, Suffolk Council, Lancashire Council, Cumbria Council, and Shropshire Council.

D2.9   It is from this knowledge sharing partnership that experiences and expertises are being shared which is reducing the cost, time and complexity of delivering our local broadband project.

D3.   Procurement Strategy

It is expected that the Local Authority will procure a private sector broadband partner. Outline your procurement and delivery options:

-    outline the approach to procuring a broadband partner, how will you go about

     procurement and what methodology will you follow (eg competitive dialogue?)

-    are you procuring more than one delivery partner?

-    will you enter into a contract or some form Public Private Partnership (such as a joint venture company)?

-    how will you ensure delivery at a local level?

-    what would be the procurement evaluation criteria?

-    how will you assess value for money?

Procurement Approach

D3.1   The objective of the procurement process is to maximise the investment of a private sector partner(s) making best value of public sector funding. To this end, the potential partners will be invited to provide costs for their proposal and to indicate the volume of public sector match required, in the form of a mini competition from within the BDUK framework.

D3.2   The delivery will be undertaken by the winning bidder using their internal resources to support the infrastructure and project management for deployment. Local Authority support will be provided to identify and support the phasing and rollout priorities across the county and monitor progress against set targets.

D3.3   Considerable experience exists within council procurement, legal and programme management teams to engage with BDUK with the Framework. These teams are already embedded into the Connecting Cheshire Programme. Evaluation of a technical nature of the tender or mini call-off proposals will be provided from the council's Corporate IT department which has telecoms specialism's and this would be supported by specific consultancy if required.

D3.4   The programme will be staffed and resourced until 2016 and will be funded from the £0.95 million revenue budget of the programme with an opportunity to continue past this

date. Support for this theme of the programme will also be a requirement of the successful bidder, in particular supporting business to adopt technologies that are supported through high speed connectivity.

Delivery at a local level

D3.5   The Cheshire and Warrington Connecting Cheshire Partnership will work with the contracted strategic partner(s) in final solution design to influence the investment priorities to match local economic\broadband requirements through a combination defining local project requirement and call-off negotiation.

Procurement Evaluation Criteria

D3.6   The weighted evaluation criteria for procurement would be based on a combination of the metrics below. These will be further aligned with additional guidance offered through BDUK:

- Coverage & Rollout
    o Percentage of fibre deployment (FTTP)
    o Percentage of copper deployment (FTTC)
    o Percentage of wireless deployment
    o Backhaul Capacity
    o Scalability and future proof items above
    o Reuse of existing infrastructure
      (links to previous programmes of work)
    o Ability to service the PSN agenda
      (Connectivity, Integrity and Security)

- Service offered to the market
    o Number of service providers
    o The cost of end services – businesses / residents
    o The SLAs of the service – businesses / residents

- Coverage
    o Percentage of Cheshire and Warrington covered
        ▪ Businesses
        ▪ Residential

- Project Financing
    o Supplier capital investment
    o Supplier experience
    o Supplier commitment to invest in the infrastructure going forwards

- Connectivity
    o Measurement of capacity
      (Contention ratios – cabinet level, exchange level & Backhaul)
    o Measurement of latency
    o Uplift broadband connectivity

- Deployment
    o Time to Market
    o Rollout schedule
    o Capacity to deliver
    o Experience of State Aid

- o   Strength of Customer References\Site Visits
- o   Experience of collaborative of working with Local Authorities
- o   Creation and use of apprenticeships

- Marketing & Demand Stimulation support
  - o   Marketing Budget
  - o   Marketing Plan
  - o   Marketing Activities for Businesses

Value for Money assessment

D3.7   The project will look to the implementation partner to offer best value. This will be assessed against, but not limited to, the following principles. These will be fully developed and agreed as part of the procurement process.

$$\text{SFB VfM} = \frac{\text{Gap Fund Cost}}{\text{Uplift in SFB Provision + Take-up of SFB services}}$$

(where take up of services reflects measure and monitor items in E3)

SECTION E – DELIVERABILITY

**E1.   Project management, resourcing and funding**

Please describe how this Project will be managed and the budget you will set aside for advisors, project team costs and demand stimulation work in the table below.

Delivering a broadband investment programme is complex and time consuming. You will need to set out:

- your proposed resource(s) and structure(s) to deliver the programme;

- governance arrangements you propose to put in place. This should include project board, project sponsor, steering group, decision making protocol; performance management, quality assurance and monitoring and evaluation approach;

- a project management structure diagram and supporting detail (named full time project manager, internal resources, skills, capacity);

- any external support needed (eg will advisors be engaged?);

- any additional needs identified that the local body is expecting BDUK to provide;

- the project/programme management methodology you propose to use (eg PRINCE2/MSP);

- confirmation that sufficient resources and a quantifiable budget will be in place to procure the proposed broadband investment.

Programme Design

E1.1   The business model works to three key themes, whereby under '**enable'** the case for private sector investment is promoted for areas where there is a demonstrable financial case to do so, and public funding is sought to support the deployment of superfast broadband infrastructure in areas where there is a genuine requirement for government intervention.
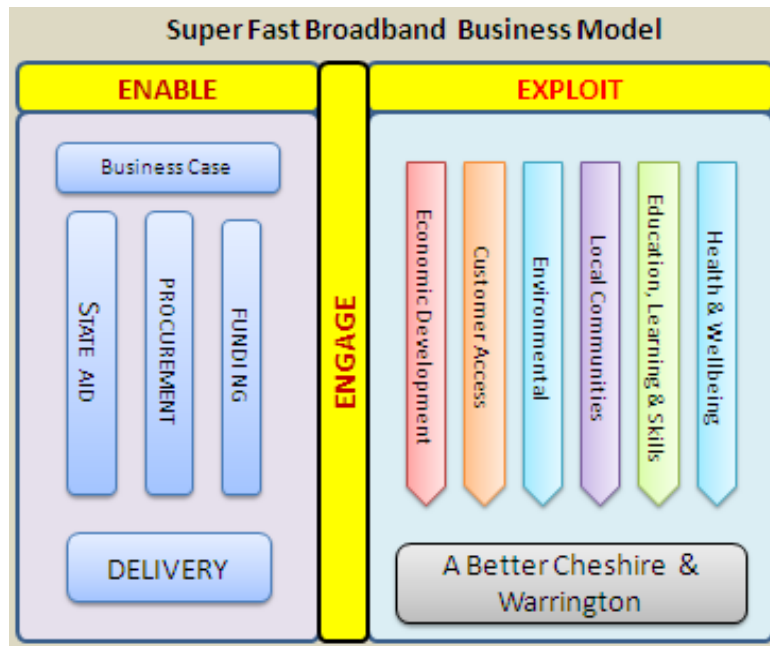
E1.2   The scope of the '**exploit'** and '**engage'** strands on the business model are central to the Local Authority Transformation programmes and will be utilised to deliver on a wide range of service delivery objectives including customer access, health and wellbeing, local communities, and climate change.

Programme Governance

E1.3   The Cheshire and Warrington superfast broadband project is being managed as a collaborative project between the three local authorities of Cheshire East Council, Chester West and Chester Council and Warrington Council. Cheshire East Council is the accountable body for the project and a tri-party contract is in place between the authorities to bind and underpin the partnership.

E1.4   A dedicated board will be responsible for the delivery of the project and it will be chaired by Julian Cobley as the project executive under the Cheshire and Warrington LEP. At its core the board will include the economic directors of the three local authorities, the managing director of the Cheshire and Warrington Economic Commission, and the managing director of Marketing Cheshire, plus a senior sponsor from the Cheshire and Warrington LEP, and senior representation from the local community and business community. Selection of its members has been made on their ability to represent the diverse spectrum of stakeholders likely to benefit from superfast broadband.

E1.5   A network of community broadband champions will support the project team for the dissemination of knowledge. Action plans have been put in place to realise the benefits of superfast broadband.

E1.6   A visual representation of the programme governance structure can be seen over

Superfast Broadband Project Governance Structure
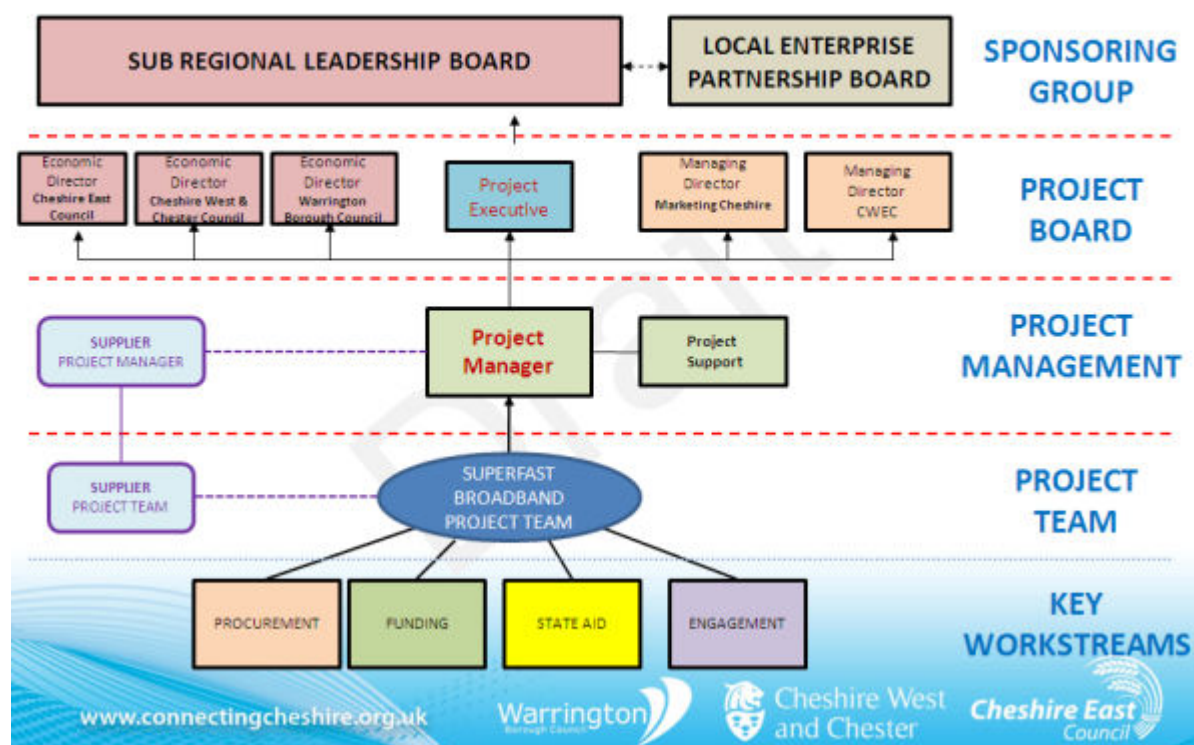
Project Resources

E1.7   The project team is in place, suitably resourced and working to deliver against the business model. The team comprises of high calibre individuals selected from across each of the councils with knowledge and experience in their specific area of expertise, including communications, technical, and administration from the three local authorities. The project is supported by an internal resource pool of specialist knowledge and skills including legal, procurement.

Project Team and programme resource funding table

	2012-2013	2013-2014	2014-2015	2015-2016	total
Project management, incl demand stimulation	200,000	250,000	250,000	250,000	950,000
Business support	125,000	125,000	125,000	125,000	500,000
Totals	325,000	325,000	375,000	375,000	1,400,000

E1.8   The project team comprises of four key workstreams – procurement, funding, state aid and engagement with each having a lead officer. The team work to a matrix management structure to provide capacity to each work stream as required.

E1.9   The structure chart below is a visual representation of how the project team resource structure and includes names of the individuals in the team. Full details of roles and responsibilities can be provided on request.

Superfast Broadband Project Team
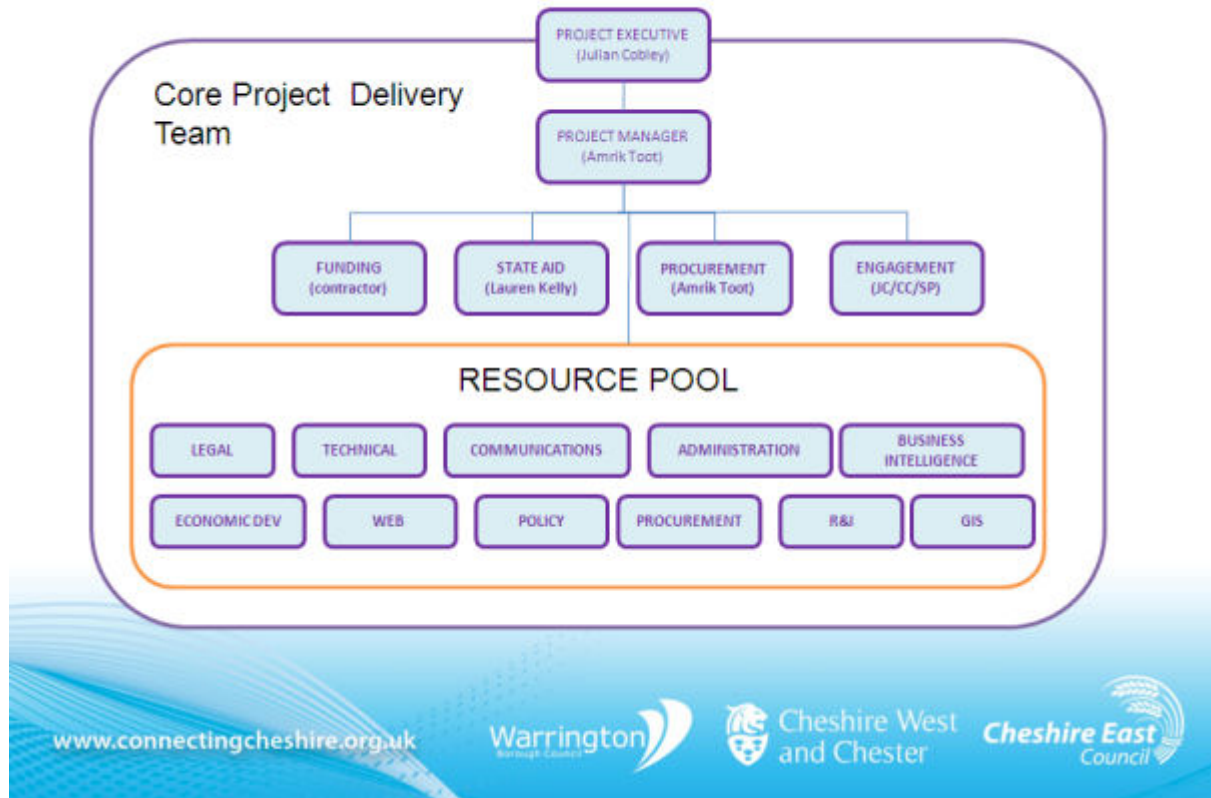
External Support

E1.10   The core team will be complemented by contracted external resources to provide the following discrete activities

- Demand stimulation: Marketing Cheshire, as the lead marketing body for Cheshire and Warrington, have been commissioned to lead on the external promotion of SFB.
- State Aid: The work to align the Cheshire and Warrington project with the BDUK State Aid umbrella notification will be undertaken by contracted consultants
- Business support: The C&W LEP have committed to lead on the development of a comprehensive business support package
- ERDF: The ERDF submission is being progressed as a parallel activity with contracted resources to cover additional project design activities over and above the scope of the Local Broadband Plan

Interface to BDUK

E1.11   The project team has been designed to dovetail with the BDUK delivery programme as a sub-project. Julian Cobley is the primary point of contact to BDUK. The Cheshire and Warrington partnership intend to deliver its project through the BDUK framework and as such it is expected BDUK will assist with the application of State Aid and to act as a centre of excellence using the Huddle site for the sharing of procurement knowledge and standardised documentation.

E1.12   No additional needs of BDUK are required over and above those outlined in paragraph E1.11.

Project Control

E1.13   A monitoring and control strategy will be put in place given that the Cheshire and Warrington project is largely reliant on public sector grant funding which have specific output criteria. The monitoring and control strategy will include a framework to track and record process built on the BDUK programme monitoring framework.

E1.14   A number of control measures are in place to ensure the project is delivered on time, within budget and to mitigate risk including;
:
- Prince2 project Management
- MSP Programme management
- Quality Processes/Procedures (certified to ISO 9001)
- Audit and scrutiny
- Industry best practice in deployment of SFB infrastructure
- Conformance to State Aid regulation
- Internal risk management
- Performance management framework and SLAs
- Internal procurement management procedures
- Establish corporate cross matrix project team with supplier embedded into core PM team.

E1.15   Day to day decision making will take place within the project team lead by the project executive. Key decisions will be taken to the project board.
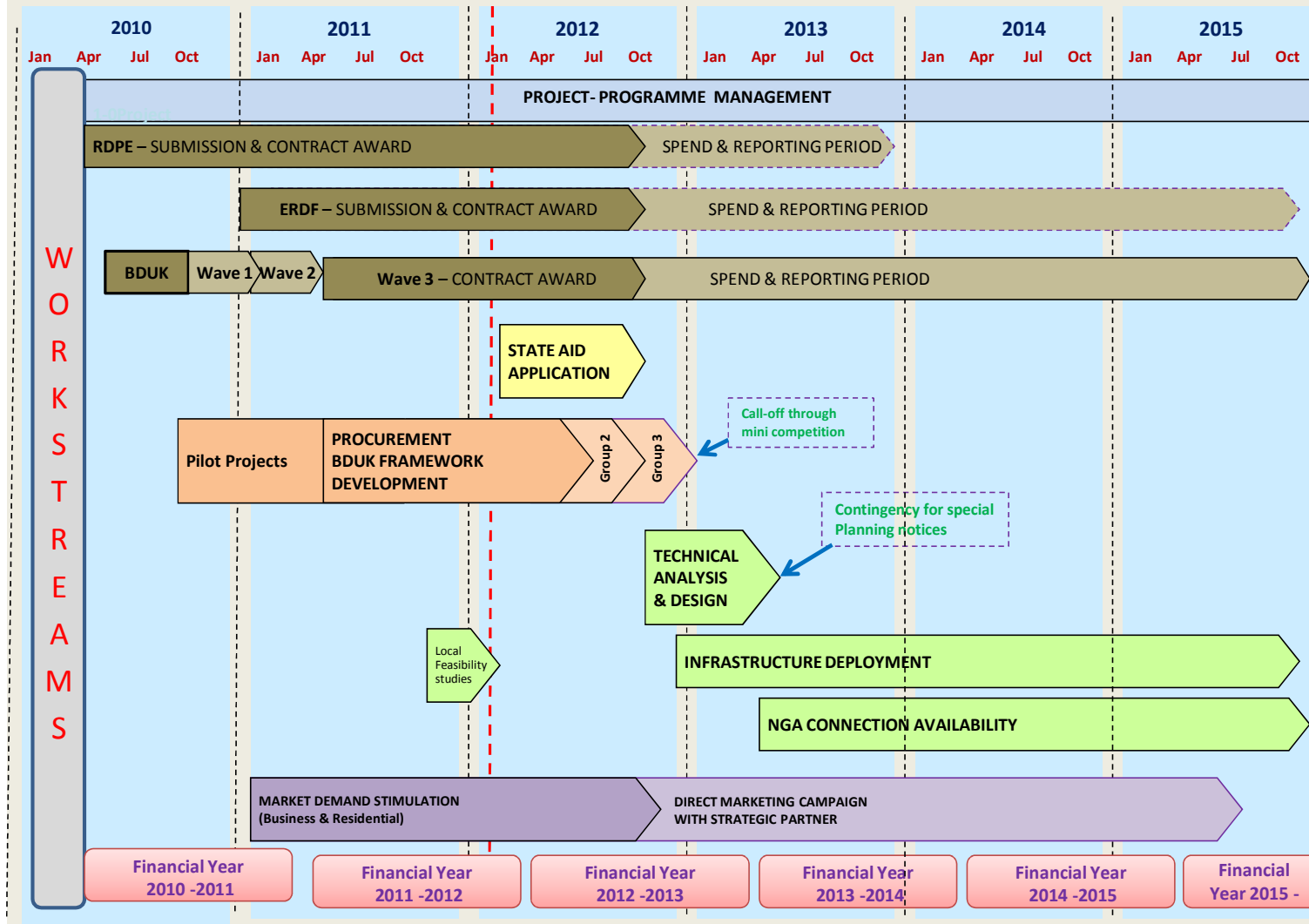
E2. Timetable

The Local Broadband Plan should set out the approach for improving broadband infrastructure within the whole of the local body's area. This is likely to involve a multi-phased project to be implemented between now and 2015. It should include both upgrades to superfast access and ensuring that everyone can get a basic level of service. A timetable (see table below for completion) needs to be outlined for the initial phase of the programme. Please also identify any critical path (dependencies, external factors, EU Funding etc) which might affect the timetable. An indicative plan should be developed for the later phases of the project. It is critical that this planning is aligned with the indication of likely funding requirements.

	Work Stream	Key milestone*	Expected Date	Status
	■	Project Start-Up	Apr 2010	✔
1	Policy	Project approval by tri-council partnership	Nov 2010	✔
2	Marketing	Start of Market Demand Stimulation	Jun 2010	✔
3	Funding	RDPE Expression Of Interest submission	Aug 2010	✔
4	Funding	RDPE Bid Re-Submission - £1.8M	Sep 2011	✔
5	Funding	BDUK Wave 1 submission (Expression Of Interest)	Dec 2010	✔
6	Funding	RDPE Bid Re-Submission – 500 Euro	Dec 2010	✔
7	Funding	Regional Growth Fund Submission	Jan 2011	✔
8	Funding	RDPE Award Notice	Jan 2011	✔
9	Procurement	Issue of Prior Information Notice (PIN)	Apr 2011	✔
10	Funding	BDUK Wave 2 Submission	Apr 2011	✔
11	Policy	Adoption by Cheshire & Warrington LEP of investment broadband as a key priority	Apr 2011	✔
12	State Aid	Community Engagement Day	Jun 2011	✔
13	Funding	ERDF programme rewrite accepted. (£43m ring fenced for broadband investment in North West areas suffering market failure)	Jun 2011	✔
14	State Aid	Official Launch of Community Engagement Programme (& Demand Registration Tool)	Jun 2011	✔
15	Procurement	Industry Broadband Briefing Day – both for suppliers and local business\resident communities	Jun 2011	✔
16	Funding	Commissioning of Value & Impact study for Cheshire & Warrington	Jul 2011	✔
17	Funding	BDUK Wave 3 Submission	Jul 2011	✔
18	Funding	Completion of Economic Value & Impact Study.	Jan 2102	✔
19	Procurement	Governance, contractual terms and conditions sign-off by Cheshire East Council, Cheshire West & Chester Council, Warrington Borough Council and Cheshire & Warrington LEP.	Feb 2012	✔

20	Funding	Resubmission of LBP to BDUK	Feb 2012	✓
21	Funding	ERDF draft Bid Submission	March 2012	
22	Funding	Approval of LBP	April 2012	
23	Procurement	BDUK Framework established	Apr 2012	
24	Funding	RDPE Contract Award issued to Cheshire East Council for the award of £500k RDPE funding	Aril 2012	
25	State Aid	EU approval for BDUK to administer local state aid exemptions for UK based Broadband investment.	May 2012	
26	State Aid	Submission of Cheshire And Warrington localised State Aid application to BDUK	Jun 2012	
27	State Aid	Approval of compliance with state aid umbrella notification obtained by BDUK	Jul 2012	
28	Procurement	Invitation to participate in BDUK framework and call-off development.	Aug 2012	
29	Procurement	Participation in mini call-off competition (Group 1-2)	Aug 2012	
30	Funding	BDUK Award Notice	Sep 2012	
31	Funding	ERDF Bid Submission	Sept 2012	
32	Procurement	Strategic Partner selection	Jul 2012	
33	Procurement	Contractual sign-off of ERDF & BDUK funds.	Aug 2012	
34	Procurement	Final Contract award	Aug 2012	
35	Technical	Begin infrastructure analysis & design. (including special planning notices)	Aug 2012	
36	Funding	ERDF Award Notice	Dec 2012	
37	Marketing	Launch of joint marketing campaign with strategic partner	Aug 2012	
38	Technical	Infrastructure Deployment	Jan 2013	
39	Technical	First SFB connectivity available as a result of BDUK funding	April 2013	
40	Funding	RDPE funding reporting up to programme closure	Aug 2013	
41	Funding	BDUK funding reporting up to programme closure	Mar 2015	
42	Funding	ERDF funding reporting up to programme closure	Mar 2017	
	■	Project closedown	Mar 2017	

Connecting Cheshire - High Level Project Plan 2010 - 2015

	2010	2011	2012	2013	2014	2015
	Jan Apr Jul Oct	Jan Apr Jul Oct	Jan Apr Jul Oct	Jan Apr Jul Oct	Jan Apr Jul Oct	Jan Apr Jul Oct

W O R K S T R E A M S

PROJECT- PROGRAMME MANAGEMENT

RDPE – SUBMISSION & CONTRACT AWARD | SPEND & REPORTING PERIOD

ERDF – SUBMISSION & CONTRACT AWARD | SPEND & REPORTING PERIOD

BDUK | Wave 1 | Wave 2 | Wave 3 – CONTRACT AWARD | SPEND & REPORTING PERIOD

STATE AID APPLICATION

Pilot Projects | PROCUREMENT BDUK FRAMEWORK DEVELOPMENT | Group 2 | Group 3

Call-off through mini competition

Contingency for special Planning notices

TECHNICAL ANALYSIS & DESIGN

Local Feasibility studies

INFRASTRUCTURE DEPLOYMENT

NGA CONNECTION AVAILABILITY

MARKET DEMAND STIMULATION (Business & Residential) | DIRECT MARKETING CAMPAIGN WITH STRATEGIC PARTNER

Financial Year 2010 -2011	Financial Year 2011 -2012	Financial Year 2012 -2013	Financial Year 2013 -2014	Financial Year 2014 -2015	Financial Year 2015 -

E3. Expected Strategic Benefits

Broadband investment will lead to quantifiable and non-quantifiable benefits which should be described. Bidders should outline how they propose to measure and monitor the delivery of those benefits which can be quantified.

Strategic Benefits

E3.1   The vision and key benefits achievable through investments made in improving broadband infrastructure are outlined within section A1. The importance of gaining these benefits are fully recognised by inclusion through organisational policy and full cabinet endorsement of the project gained on 28/02/11

E3.2   The motivations for access to improved broadband capacity by either residents or business will differ, as will the benefits they are looking to secure. The distribution of these benefits whether quantifiable or non-quantifiable in nature can be split across three broad categories Economic, Social or Environmental.

Economic Uplift

E3.3   Cheshire &Warrington has a very strong business base providing some 429,000 employee jobs. It has particular strengths in key sectors including advanced manufacturing (especially engineering, chemicals and automotive), food and drink, energy and nuclear, financial and insurance services, public administration and health, the visitor economy (including business tourism), and creative industries.

E3.4   The recently completed study: 'The Value and Impact of Superfast Broadband for Cheshire, Warrington and Halton (2012)' reports that full coverage of superfast broadband would, on a central estimate, generate a gross impact of **£1.3 billion** in GVA over 15 years and create **11,500** jobs, with a further £330m of economic benefits to households.

E3.5   The report highlights the investment return from investment in the Knowledge economy where Cheshire & Warrington has one of the highest proportions of knowledge economy workers and high technology businesses outside London and the South East. Cheshire and Warrington has an existing strength for digital and creative industries employment with the highest proportion in the region and amongst the largest creative industries workforce in the UK. SFB will provide the connectivity for the sector to maximise the business generator capacity of MediaCityUK.

E3.6   Cheshire and Warrington has key sectoral strengths of the sub region's economy which include ICT, Digital and Creative Industries, Business and Professional Services Advanced Manufacturing, Chemicals, Pharmaceuticals, R&D and Financial Services. The presence of Daresbury Science and Innovation Campus provides the hub to a growing cluster of science based businesses.

E3.7   These are the high value sectors which have thrived in the sub-region and which will play an important role in driving future economic growth. Use of ICT is high in each of these sectors, and access to SFB will help businesses to remain competitive, access new markets and create new employment opportunities. The key points to note are as follows:
- The greatest impact is expected to be in Business and Professional Services where 100% coverage could generate £430m in GVA and create 4,000 jobs over a 15 year period. The roll out of SFB is expected to generate the greatest benefits for those sub-

sectors populated by smaller businesses such as accountants, consultancies and labour recruitment. The financial services sector will also benefit, however this sector in C&W is dominated by a small number of very large financial companies who operate on such a scale that they tend to invest in their own high bandwidth, secure connection, and are therefore unaffected by the wider deployment of fibre.

- The Digital and Creative sector could generate around £110m in GVA, supporting around 800 new jobs. The greatest impact here will be in the ICT sub-sector which has flourished in the sub region, and includes software consultants and software developers. This sub-sector has one of the highest rates of adoption of SFB. Firms in this sector are likely to have the greatest awareness of potential benefits of SFB and are the most likely to cite low bandwidth as a constraint on growth. The roll out of SFB will therefore remove an important barrier to the further growth of this sector in the sub region.

- All sectors will benefit from the roll out of SFB and not just knowledge based industries. SFB will make it easier to start a business in any sector which uses information technology. SFB makes it easier and less costly to start a new business as Cloud computing will allow entrepreneurs to rent computing power and storage from a service provider and pay on demand for the services they use. This shifts capital expenditure in ICT into operating costs, reduces the fixed costs of entry start up, and allows businesses to more easily vary their scale of operations.

Social Uplift

E3.8   The impact of applications that are emerging through the availability of superfast broadband are likely to attenuate the benefits available to residents in the areas of health delivery, delivery of richer content educational resources, enhancing and multiplying social ties and improving quality of life through improvements in the work\life balance.

Environmental Uplift

E3.9   The aggregated benefit on broadband on the climate will be significant. This will be made from dematerialisation from greater online consumption, teleworking – reducing the need for personal travel, lowering the impact of transport infrastructure and the usage of commercial office space

Measure and Monitor

E3.10   A comprehensive set of baseline data set has already been compiled. These data sets will then be tracked against an independent value and impact study already commissioned to measure changes in quantifiable and non-quantifiable

E3.11   The project outcomes on an intermediate and long term basis will be tracked against and recorded through a combination of qualitative and quantitative techniques. i.e. surveys, focus groups, individual interviews against the baseline positions.

E.3.12   The Connected Cheshire project team will work alongside early other implementers of superfast broadband to share knowledge gained directly with BDUK, local authorities and the wider audience to best support an approach to maximise and measure benefits realisation.

E3.13   Guidance will be sought from BDUK to confirm best practice measurement and monitoring to be adopted for the management of the Cheshire and Warrington Local Broadband Plan

Key quantifiable measures that would be used are outlined in the table below.

QUANTIFIABLE MEASURES	
ECONOMIC BENEFITS	
Area	**Indicator**
GVA	▪ Change in GVA
Wage Levels	▪ Changes to median income levels.
Property Values	▪ Comparison in the trends of average house prices between rural and urban areas. ▪ Comparison of trends of 'rental rates' for residential/business accommodation between rural and urban areas.
Employment	▪ Direct Jobs Created ▪ Jobs Safeguarded ▪ New Jobs Created
Council Transformation	▪ The number of Services delivered online ▪ The number of services accessible online only. ▪ Trends in number of online transactions conducted ▪ Trends in total online customer spend. ▪ Customer visits to website ▪ Cost of ownership of public network infrastructure
Business	▪ Business Birth Rate ▪ Business Growth (by industry sector) ▪ Numbers of VAT registered Businesses. (by industry sector) ▪ Numbers of Non VAT registered Businesses (by industry sector)
SOCIAL BENEFITS	
Area	**Indicator**
Education	▪ Educational attainment NVQ level
School Age Registration	▪ Trends in school age registration in rural area
Quality of Life Indicators	▪ Over 55s Usage of Internet
Health	▪ No. of hospital Admissions ▪ No. of 80+ still living at home ▪ Online GP Consultations
ENVIRONMENTAL BENEFITS	
Area	**Indicator**
Car Usage	▪ Impact on transport infrastructure - Journey made by car
C02	▪ Travel to work data ▪ C02 emissions

Key non- quantifiable measures that would be used are outlined in the table below.

NON-QUANTIFIABLE MEASURES	
Business Uplift	**Benefit Description**
E-communication	Reducing the need for business travel
Smart Devices	Digital communications to monitor/control energy consumption e.g.
Home Working	Improve work-life balance.
Social Uplift	**Benefit Description**
Virtual Service Delivery	Telehealth and Telemonitoring
Digital Social Communication	Reducing Social Isolation by improving accessibility to wider world e.g. email, online forum, Online video,
Environmental Uplift	**Benefit Description**
Smart Devices	Digital communications to monitor/control energy consumption
Home Based Business	Ability to create new businesses from home
Online Training	Reduced the need to travel for tuition in classroom based environment.
Online Consumption	Consumption of goods\services online e.g. Movies, Software, Newspaper & Magazines

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E4. **Risk management/log**

A high level risk log limited to 20 risks should be developed and submitted, setting out the key risks to your broadband programme, how you have assessed them and how they will be mitigated. An example is provided below

Cheshire and Warrington Connecting Cheshire Partnership Risk log:

No	Description	Risk Assessment (Low, Medium, High)		Threat to Project / Mitigation (L,M, H)
	Risk	**Likelihood**	**Severity**	
1	Lack of organisational commitment	L	H	**MEDIUM** ▪ Project has received Tri-Council endorsement and LEP approval. ▪ Broad Infrastructure Investment adopted by LEP as key priority ▪ Tri-Council contractual agreement to determine financial undertaking & project governance ▪ Broadband is embedded as strategic measure of council performance.
2	Lack of Organisational Capacity	L	M	**LOW** ▪ A fully resourced and experienced team is in place with individuals that have a proven track record of partnership working in delivery of major ICT/Civil Infrastructure Projects. ▪ Funding for external expertise already secured.
3	Cost Overrun	M	M	**MEDIUM** ▪ A comprehensive financial modelling exercise already undertaken through knowledge transfer between peers and industry. ▪ Further refined through independently commissioned cost modelling to aid best value through procurement process. ▪ Bidders will be made aware that the grant is capped.
4	Failure to achieve outputs	L	M	**LOW** ▪ Key criteria for supplier(s) selection will be how they plan to work in partnership with to support market demand stimulation. ▪ Take up targets agreed within terms of contract
5	Delays & Slippages	M	M	**MEDIUM** ▪ Project Planning has been verified with key telecom infrastructure suppliers to ensure that timescales are reasonable and sufficient capacity is available. ▪ Industry standard contingency already built into project planning ▪ Contractual Obligations placed upon Supplier against delivery timescales through penalty notices.

6	Match Funding does not materialise	L	H	**MEDIUM** ▪ Commitment already received from suppliers in telecoms industry that substantial Private Sector match funding would be available subject to securing to Public Sector match fund. ▪ Successful lobbing resulting in ring fencing of £43M to support broadband investment in North West. ▪ Continue to actively review additional sources of Public Grants ▪ Re-think scope and vision of project
7	External Issues	L	M	**LOW** ▪ Local Authority representation at Director Level from Highways and Planning Departments at Programme board to ensure speedy and efficient processing of planning control
8	Environmental Risks	L	H	**MEDIUM** ▪ Ensure strict adherence to both regularity and best practice in deployment of SFB infrastructure

9	State Aid	L	H	**MEDIUM**
				▪ Engaged with peers that have or are undertaking State Aid Applications for to learn from their experiences and adopt best practice.
				▪ Look to participate in localised BDUK sponsored umbrella notification of EU state aid early engagement with BIS State Aid Unit.
				▪ Appointment of specialist advice to support State Aid, Legal, Procurement work streams
				▪ Ensure that provision for SFB would be exempt from State Aid Regulation by
				    o Subsidy would be required for only White Areas
				    o Adopt open tender process for supplier selection
				    o Open Access to infrastructure
				    o Reverse Payment Mechanism to ensure excess profit re-invested
				▪ Planning and resources already secured to undertake individual state aid exemption should BDUK be unsuccessful in securing umbrella notification

10	Procurement	M	H	**MEDIUM** ▪ Look to participate in supporting development of BDUK framework. ▪ Well established dialogue with organisations on demand and supply side of SFB provision to adapt to best practice. ▪ Planning in place for appointment of external specialist expertise to undertake OJEU compliant procurement process only subject to undue delay/inappropriate BDUK framework.
11	Ongoing Public Investment	L	L	**LOW** ▪ There would be no legacy funding commitment required due to Gap funded business model based on self sustaining private sector intervention only.

12	Loss of key Personnel	L	L	**LOW** ▪ Strong emphasis on knowledge sharing.
13	Failure to achieve Internet Penetration Target	L	M	**LOW** ▪ Contractual obligation placed on supplier(s) for coverage. ▪ Use of innovate fibre deployment methods. Self-Dig, Fibre by Pole, etc ▪ Detailed mapping has already been completed to identify high growth business clusters in rural localities. These have been mapped at sub-regional (see maps *E4-1 to E4-6*) down to individual telephone exchange level (see maps *E4-7 to E4-9*).
14	Un-replicable model for Local Enterprise Partnership Intervention Model For Provision of Universal provision of SFB.	L	M	**LOW** ▪ Ring fence specific resources to ensure knowledge transfer through production of a blueprint design for Local Enterprise Partnership led broadband Intervention model. This model would include: o Communication And Supplier Management to maximise interest and investment o Development\training for 'NGA Champions' to enable rural businesses and resident community's better articulate ambition for SFB. o Toolkits & training for 'Community based provision of broadband o Champions' to enable rural businesses and resident communities better articulate ambition for SFB. o Establish a framework to capture demand to maximise private investment. o Provide best practice on co-ordination activities between Highway Authorities and Telecom Providers for efficient provisioning of NGA networks. o Offer lessons learned from best practice for being a test bed in the deployment of innovate forms of fibre deployment E.g. fibre to farm, fibre over the pole, self dig etc o Fund Case studies to promote innovate service delivery over SFB
15	Official protests for bid process (Alcatel period) and State aid	L	H	**MEDIUM** ▪ Legal review of each stage, Document audit trail, OJEU compliance
16	Bidder withdrawal	L	M	**MEDIUM** ▪ Looking to utilise BDUK framework to maximise participation and minimise risk. ▪ Exit Strategy in place to find replacement supplier ▪ Look to adopt contractual obligation for clawback of gap funding paid ▪ Look to adopt impositions of financial penalties for withdrawal

CEO sign off/Section 151 officer/Executive Member (portfolio holder)

Portfolio Holder:

a) Submission:		
In submitting Local Broadband Plan, I verify that the proposal fits with corporate policy		
Signed:	*[signature]*	
Name:	DAVID THOMAS BROWN	
Job Title Cabinet Member		Date: 14th April 2011

Section 151 Officer:

a) Submission:		
In submitting Local Broadband Plan, I verify that the proposal fits with corporate policy		
Signed:	*[signature]*	
Name:	LISA QUINN	
Job Title BOROUGH TREASURER & HEAD OF ASSETS		Date: 14 /04 /11

Full applications should be sent to BDUK and should consist of a completed Local Broadband Plan, covering all the topics as set out in this template. Proposals should not exceed 30 pages in length. Please do not include supplementary material other than mapping information and a project plan.

Three hard copies of bids and supporting material should be submitted to:

Jill Patrick
Broadband Delivery UK
Department for Culture, Media and Sport (DCMS)
2-4 Cockspur Street
London
SW1Y 5DH

Envelope is marked '**Re-Submission BDUK Cheshire and Warrington Local Broadband Plan**.

An electronic copy has been submitted to kevin.hanlon@bis.gsi.gov.uk