Agenda Item No: 4

ESTABLISHMENT OF A JOINT VENTURE WITH THE UNIVERSITY OF CAMBRIDGE TO DEVELOP AND MARKET FIBRE ASSETS ON A COMMERCIAL BASIS

To:	**Commercial & Investment Committee**
Meeting Date:	**22nd February 2019**
From:	**Chris Malyon, Deputy Chief Executive** **Graham Hughes, Executive Director Place and Economy**
Electoral division(s):	**All**
Forward Plan ref:	**N/a** *Key decision:* **No**
Purpose:	**To seek endorsement from Committee to establish a Joint Venture Company with the University of Cambridge to further develop digital infrastructure across Cambridgeshire.**
Recommendation:	**The Commercial & Investment Committee is recommended to:** **a) Endorse the approach for the commercial development of the Council's assets to facilitate improvements to the digital connectivity infrastructure in Cambridgeshire** **b) Approve in principle the creation of a joint venture company between the Council and the University of Cambridge, subject to the Committee's final approval to proceed following further development of the business plan.**

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1. BACKGROUND

1.1 *"Digital connectivity is now a utility, and modern life is increasingly impossible without it. Connectivity drives productivity and innovation, and is the physical underpinning of a digital nation"* UK Government Digital Strategy 2017

The UK Government's 2017 strategy sets out in detail why connectivity is a vital element of the nation's digital strategy which provides a foundation for economic strength, thriving communities and successful localities. Following the conclusion of its *Future Telecoms Infrastructure Review* in the summer of 2018 the government has restated and refined its ambitions – underlining the importance of full fibre connectivity in supporting better connectivity and facilitating the development of next generation mobile 5G services for a world leading digital economy.

The County Council, along with Peterborough City Council, set up the joint Connecting Cambridgeshire programme in late 2011, with a primary purpose of addressing the lack of commercially delivered "Superfast broadband" services (defined as 24mbps and up), which in 2010 covered less than 60% of homes and businesses in Cambridgeshire and Peterborough.

The remit was broadened to encompass all aspects of digital connectivity infrastructure, including mobile coverage and public access Wi-fi. In August 2018 the Council's Economy and Environment Committee endorsed the expansion of the programme and approved a partnership approach with the Cambridgeshire and Peterborough Combined Authority (CPCA) with additional funding to support new targets for mobile and full fibre coverage.

The Department for Digital, Culture, Media and Sports (DCMS), alongside its delivery arm Broadband Delivery UK (BDUK) is responsible for UK government digital policy and associated intervention and support funding. The Local Full Fibre Networks Programme (LFFN) was set up in 2017 to disperse funding to support the UK's full fibre targets on a competitive basis to local areas. The Council was successful in the initial round of funding with a £4m bid.

The LFFN programme encompasses several interlinked funding streams to support "gigabit capable" infrastructure delivery, including:

1. Connectivity vouchers for small businesses and associated residential communities (known as the Gigabit Voucher Scheme - run as part of a national scheme by DCMS).
2. Support for full fibre connectivity for public sector buildings (known as LFFN PSBU – public sector building upgrades)
3. Support for the development of public sector digital connectivity assets, including fibre ducting (known as LFFN PSAR – public sector asset re-use).

The Connecting Cambridgeshire LFFN bid encompasses both PSBU and PSAR. The LFFN PSBU will provide funding for fibre upgrades to over 150 public buildings across Cambridgeshire, primarily in parts of Huntingdonshire, East Cambs and Fenland in areas where there is currently a lack of full fibre available to support gigabit capable services. This work stream will dovetail with the recent procurement exercise for collaborative public sector connectivity (known as Eastnet) which the County Council led on behalf of the sub region, for which the contract was awarded to MLL Telecom in 2018.

It is the second work stream, LFFN PSAR which is the main subject of this paper.

2. MAIN ISSUES

2.1 Introduction

There are two discrete sections of the Cambridgeshire Guided Busway, comprising of the Northern section, from Milton Road in Cambridge through to St Ives and the Southern section from Cambridge central station through to Trumpington Park and Ride, with a spur to the Addenbrookes Biotech Campus.

When construction of the Cambridge Guided Busway was started in 2007, fibre ducting was incorporated into the design, potentially providing digital connectivity across Cambridge and out towards the rural areas. However the fact that the two sections of busway are not linked and do not have any capacity to offer "break-out" chambers means that the two sections of fibre ducting are essentially "stranded", and are currently providing limited connectivity for the busways own operational management.

The LFFN PSAR bid is focused on the development of the Council's fibre duct assets in the Northern and Southern sections of the busway. It includes plans to link and extend the ducts in the busway by deploying additional fibre ducting and access chambers as part of the Chisholm Trail and the Linton Greenway walking and cycling scheme to provide a 40km fibre corridor from St.Ives to Linton. See **Appendix One** for infographic with further details.

LFFN PSAR funds of up to £800k are available to support the development of the Council's assets, provided certain criteria are met. These include the requirement to market the assets on a commercial basis in a manner which is state aid compliant. In order to meet these criteria and to provide a more commercially viable offering, the PSAR project includes a proposition to build on recent collaborative working with the University of Cambridge. This will link the University's 60km fibre network with the County's assets and establish a commercial joint venture to market the fibre ducting for use on a wholesale basis by local telecommunications providers and provide "dark fibre" services directly to businesses.

Making these assets available on a commercial basis will offer a range of benefits, which include:

a. Contributing to the increased full fibre targets for the area and improving connectivity for residents, businesses and public services.

b. Providing a long term commercial return to the Council from assets which are currently underused.

c. Helping to deliver "connected transportation routes" which will provide digital infrastructure to underpin anticipated developments in autonomous vehicles and infrastructure to vehicle, infrastructure to infrastructure and vehicle to vehicle communications over the next decade or two.

2.2 University Network

The Granta Backbone Network (GBN) is the collegiate University's privately owned optical fibre network. It consists of a series of underground ducts, mounted cable tray and optical fibre cables, which are used to distribute the numerous University and College IT networks around the University's city campuses. The University's network team have developed and run the 60km

Granta Backbone Network (GBN) over the last twenty-five years, delivering high speed, high availability network services to over 40 colleges, institutions and research bodies linked to the University. The University are increasingly being asked to provide network connectivity and interfaces between the burgeoning bio-tech and high tech industries in the Greater Cambridge area and University based research and academic institutes. However they do not currently have a commercial vehicle to do so. A conceptual "tube map style" schematic of the GBN is at **Appendix Two** *Granta Backbone Network*.

2.3 Partnership Approach

Cambridgeshire County Council and the Network Team at the University's Information Service (UIS) have been working in a collaborative manner since the inception of the Connecting Cambridgeshire Programme when a representative from the University joined the multi-agency Connecting Cambridgeshire Delivery Group in 2012.
The collaboration was extended in 2014 when the University, working with the Connecting Cambridgeshire Programme provided a high-speed public access Wi-Fi service along key sections of the route of the Tour de France depart in Cambridge. The solution included rolling out more than 20 wireless access points in open spaces, hosted on Council owned lampposts, buildings and CCTV poles to provide both public and academic Wi-Fi services. The University continues to provide public access Wi-Fi in open spaces in Cambridge and now also provides "Internet breakout" services to the Cambridgeshire schools network via their data centre in Cambridge.

These experiences have highlighted the mutual interests and complementary infrastructure/assets of the University and the County Council. It has also demonstrated that although the core purpose of both institutions are very different, they have a symbiotic interest in both the short and long term economic and academic success of the Cambridge area.

2.4 State Aid Considerations

As the County Council is a public body there is a key risk in relation to contravening state aid rules with a venture of this nature. The detailed position is set out in further detail in **Appendix 3**. In summary the Council must demonstrate a commercial approach, as set out in the European Commission's Market Economy Operator Principle (MEOP) and must take steps to validate this approach via the provision of a MEOP report.

The LFFN programme incorporates a number of assurance gateways following on from the initial announcement of success in the bidding process. The County Council has successfully passed the first two gateways (A and B) and needs to pass Gateway C in order to proceed with a funding agreement. DCMS have confirmed that they expect the MEOP approach to be followed as part of the PSAR project and will require evidence of compliance in the form of a MEOP report to be included as part of the Gateway C assurance process.

2.5 Joint Venture

In order to operate in a MEOP compliant, commercial manner (see **Appendix 3** for further details) it is necessary to establish a formal company structure to operate the joint venture between the Council and the University. This requires a number of steps, including agreeing the articles of

association, devising a formal company structure, creation of a shareholders agreement and registration of a company name.

An outline business plan has been developed with two products envisaged initially:

a. Duct Access - Access to ducts for others to use to pull/blow their own fibre.

b. Point to Point Dark Fibre - Dark fibre available on a point to point basis for a customer which they light.

An overview of the joint proposed joint venture structure is summarised below, with further details in **Appendix 4 Joint Venture Structure**.

I. The company will be set up with 50/50 ownership and equal control and each party will offer their assets under licence to the joint venture, with full ownership retained.

II. Profits are anticipated to be modest, but appreciable given the long term value of the assets. This is expected to be a long term venture, with a small number of customers.

III. Given the anticipated life of the infrastructure assets and underlying fibre technology it is expected that the term of joint venture term could extend to between 20-30 years.

IV. All profits will be returned to the company for further development of the fibre assets for the first five years. Thereafter the shareholders will review whether to withdraw up to 50% of profit as a dividend or invest 100% of returns in further development of the network.

V. Income to the joint venture from all assets will be equally shared and assets jointly developed using profits derived by the joint venture will be joint owned on a 50/50 basis.

VI. The company will not directly employee any staff, and all resources will be provided by the parent organisations.

VII. The company name is expected to be Cambs UniFibre.

2.6 Risk Management Approach

Although the Council and the University are very different organisations there is a shared view of the guiding principles in the design of the joint venture, which seek to operate on a commercial basis whilst minimising financial exposure or reputational risk to either party. Accordingly it is proposed that several provisions are included as “reserved matters” (which must be signed off by the company board and approved by both shareholder representatives). These include confirmation that the company will not enter into any borrowing without explicit and unanimously agreed approval from both shareholders and that additional shareholders will not be accepted without explicit and unanimously agreed approval from both shareholders. This will ensure that the joint venture operates appropriately within the governance context of the parent organisations.

Further detail about the planned provisions, including exit/termination clauses, insurances and liabilities and reserved matters are in **Appendix 4** *Joint Venture Structure*

2.7 Funding

The majority of the costs associated with the PSAR project (c£800k) will be provided via a government grant through the LFFN programme. The remaining set-up costs, which are estimated to be between £60-80k in addition to staff resources are covered within the existing Connecting Cambridgeshire Programme delivery budget. Therefore the C&I Committee are not asked to allocate any additional Council funding to the project. Given these circumstances, and the nature of the assets being utilised/developed by the joint venture a conventional return on investment calculation has not been undertaken to date. However a full business plan is being developed as part of the establishment of the joint venture which will demonstrate the anticipated return on investment over the duration of the arrangement.

2.8 Timescales and Next Steps

The timing of the establishment of the joint venture is significant because the Chisholm Trail and other infrastructure schemes are due to commence during 2019, and therefore it is important to have the LFFN PSAR grant agreement in place before ducting costs are incurred as part of the scheme. In addition the LFFN programme is time limited and all LFFN (PSAR & PSBU) funds have to be spent by March 2021 at latest.

The next DCMS assurance gateway review (Gateway C, which is the precursor to the LFFN grant agreement and which is contingent on the establishment of the joint venture) is currently scheduled for end March 2019.

Following approval in principle, the key steps over the next month will be to:

I. Develop the detailed business plan for the joint venture
II. Commission a draft MEOP report to validate the state aid approach
III. Develop the legal structure for the joint venture company, including draft articles of association and shareholders agreement.

The University of Cambridge are currently working through their own governance processes and the joint venture proposals are due to be considered at the relevant sub-committee and main committees during February and March 2019.

Following on from the establishment of the joint venture it is anticipated that the Council's Economy and Environment Committee, as the overseeing committee for the Connecting Cambridgeshire programme, will monitor the progress of the LFFN programme delivery and the operation of the joint venture.

3. ALIGNMENT WITH CORPORATE PRIORITIES

3.1 Developing the local economy for the benefit of all

The report above sets out the implications for this priority in Section 1 above

3.2 Helping people live healthy and independent lives

The report above sets out the implications for this priority in Section 1 above

3.3 Supporting and protecting vulnerable people

There are no significant implications for this priority.

4. SIGNIFICANT IMPLICATIONS

4.1 *Statutory, Legal and Risk* – Legal input is being obtained in relation to the State Aid considerations and are ensuring compliance with MEOP. Further the formal creation of a company and its associated documents will provide some protection, and reassurance to the Council on how the company will operate. Any risks associated with the venture have been carefully considered and addressed as part of the Joint Venture Structure. Legal advice will continually be sought throughout the process to ensure that all statutory processes and requirements are met.

Source Documents	Location
Future Telecoms Infrastructure Review	https://www.gov.uk/government/publications/future-telecoms-infrastructure-review

Appendix One Digital Infrastructure Assets

Connected Futures: Digital Innovation Corridor for Cambridgeshire

Bringing fibre connectivity to homes and businesses in proximity, improving mobile coverage and offering a testbed for 5G pilot and trials.

Cambridge Railway Stations

- Cambridge Station is the busiest railway station in the East of England – used by almost 11.5 million passengers in 2016/17.
- Cambridge North Railway Station opened May 2017 – used by over 75,000 passengers in first 6 months and growing.

Smart Cities Programme

- Autonomous Shuttle trials on Southern section of the Busway.
- Linking to Rapid Mass Transit proposals.
- Mobility as a Service (MaaS) plan.

Cambridge Biomedical Campus (CBC)

- Addenbrooke's site expanding rapidly with new Papworth Hospital opening on site September 2018, AstraZeneca from December 2018 and Abcam in 2019.
- 26,500 visits to the Campus every day from staff, patients, academics, scientists and visitors.
- 17,250 employees currently. Campus will have 22,000 working on the site by 2021 increasing to >30,000 by 2031.

Guided Busway

- Over 4 million passengers in 2017.
- Northern and Southern sections ducting to be linked by Chisholm Trail - currently under construction.

CBC / Southern Section Guided Busway

Connectivity Corridor

Bringing into use existing ducting to link with new ducts in routes under construction to create a 40km stretch of dark fibre with breakout points at regular intervals along the route. Duct only option also available.

Southern Busway section available during 2018, further sections from 2019.

Street lights, traffic gantries and other street furniture available for small cell and other telecoms infrastructure deployment.

Future phases include deploying ducting with other Cambridgeshire and Peterborough infrastructure schemes (eg A47, A10 duelling).

Exploring options for Cambridge – Oxford digital infrastructure corridor with rail & road schemes.

Over 50,000 premises within 1km of corridor.

Linton Greenway

- New pathway for cyclists and pedestrians.

Technology and Life Science Clusters

- Babraham, Research Campus – 60 bioscience organisations, employing 1200 people, expanding labs and offices by 2019.
- Cambridge Science Park – over 100 companies from small start-ups and spin-outs to subsidiaries of multinational corporations.
- Granta Park – 20 life science companies, employing 2,500 people, expanding to 4,000 by 2020.

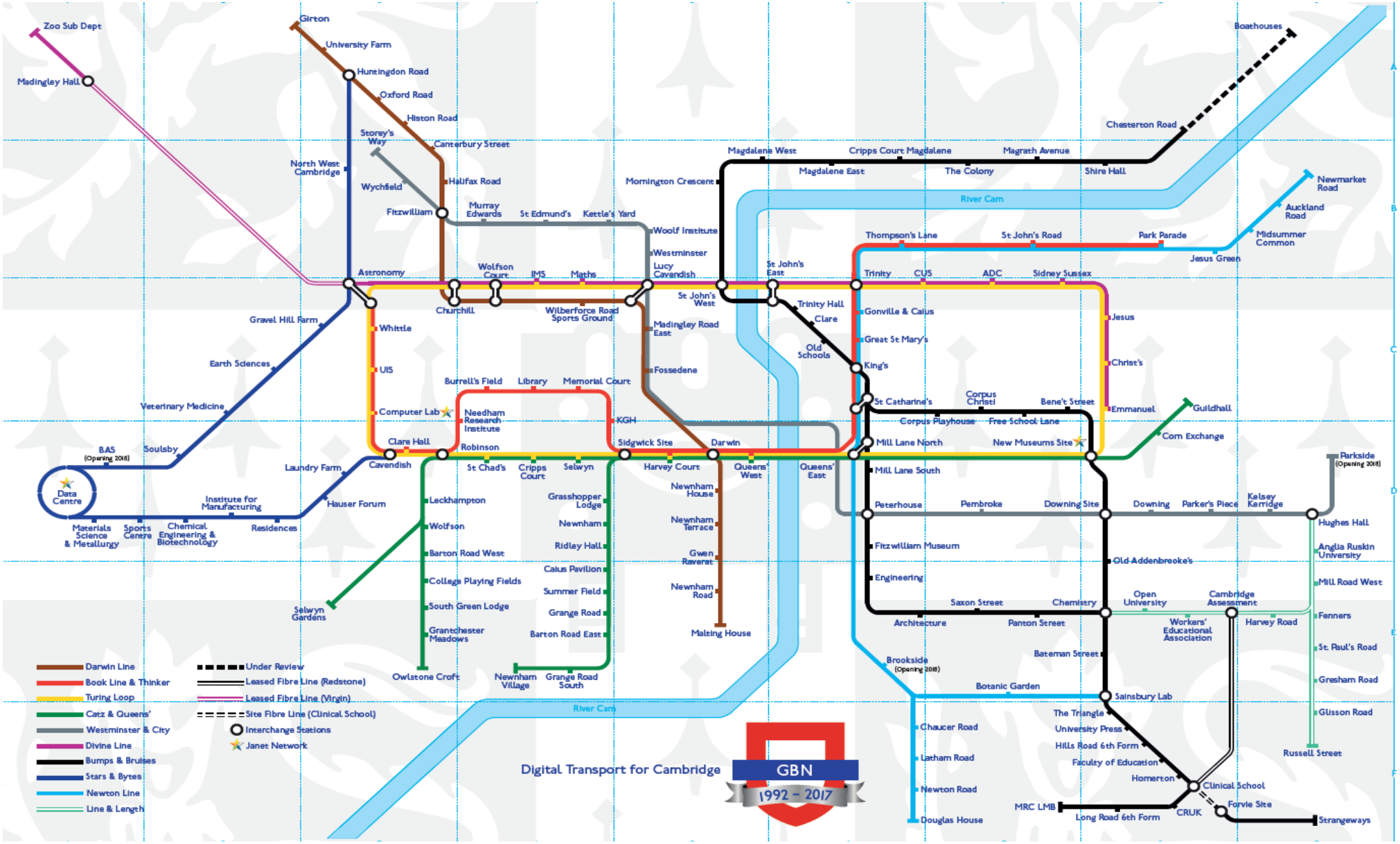
Cambridge City Region

- >8million visitors per year, with footfall of >147,000 on a Saturday.
- Population set to grow by up to 30% by 2030 across Greater Cambridge.

connecting CAMBRIDGESHIRE

CAMBRIDGESHIRE & PETERBOROUGH COMBINED AUTHORITY

Appendix Two Granta Backbone Network



Appendix 3 – State Aid Considerations

The University of Cambridge is not deemed to be a public body in terms of state funding as the majority of its funding is derived from private sources. However as Cambridgeshire County Council is a public body consideration must be given to state aid. Under EU rules state aid is defined as any advantage granted by public authorities through state resources on a selective basis to any organisations that could potentially distort competition and trade in the European Union (EU). This is particularly important because the Government's LFFN programme has been designed on a "no aid" basis".

Under article 107 of the Treaty on the Functioning of the European Union, public funding, investment or other aid triggers the State aid rules if it:

- Is granted from state resources;
- Is selective in nature;
- Favours an economic undertaking; *and*
- Has an effect on competition and on trade between Member States of the EU.

Public investments are only deemed to constitute state aid if ***all four*** conditions are met. The EU has developed a test for determining whether an economic undertaking will confer advantage (aid) which is known as the Market Economy Operator Principle (MEOP). In essence this states that financial activities carried out by a public body do not constitute state aid if they are done so in line with normal market conditions – in other words if a private investor operating in normal market conditions is likely to have made a similar investment. If MEOP can be demonstrated in relation to a commercial endeavour then no aid is conferred and therefore no contravention of state aid rules.

This approach is very different from the Superfast Broadband work streams in the Connecting Cambridgeshire programme, which incorporate gap funding investment to deliver digital infrastructure to remedy market failure. In the Superfast Broadband programme *a state aid exemption* (administered by DCMS on behalf of the European Commission) was granted as a consequence of demonstrable market failure.

There is a direct commercial benefit to the University and the Council in pursuing the development of digital connectivity infrastructure and no evidence of market failure in relation to fibre availability in the Cambridge city area. The joint venture is predicated on a purely commercial "no aid" basis and therefore the County Council is obliged to demonstrate that MEOP applies in order to ensure that it is acting legally and will consequently be able to draw down the Government's LFFN funding to develop the County Council's digital infrastructure assets.

As outlined in the main report, the LFFN programme incorporates a number of assurance gateways following on from the initial announcement of success in the bidding process. The accepted manner of demonstrating MEOP compliance is through the compilation of an economic evaluation comparable to that which a rational market operator would have carried out in similar circumstances, based on objective criteria carried out by an individual or body with specialist knowledge of the market. DCMS have confirmed that they expect the MEOP approach to be followed as part of the PSAR project and will require evidence of compliance in the form of a MEOP report to be included as part of the Gateway C assurance process.

Specialist market analysis has already been sought. MEOP advice, including the provision of a MEOP report to validate the "no aid" approach, has been investigated and is currently being procured.

Appendix 4 - Joint Venture Company Structure

The University has commissioned external legal advice from telecoms specialists at Bristow's to support the development of the formal structure of the joint venture. The following areas have been agreed to date:

a. The planned name for the company is Cambs UniFibre

b. The County and the University will be 50/50 shareholders with the company set-up on a deadlock basis (equal control).

c. Ownership of assets will be retained by the originating organisation and will not transfer into the company. A "licence to use" will be granted in relation to all assets and each parent organisation will have a right of veto about which assets will be available to Cambs UniFibre.

d. All assets developed using capital originating from the University or the Council (including LFFN funding) during the life of the joint venture will continue to be owned by the originating organisation and will be made available under licence to the joint venture.

e. Income to the joint venture from all assets will be equally shared and assets jointly developed using profits derived by the joint venture will be joint owned on a 50/50 basis.

f. There will be an equal number of directors from each organisation, with no casting vote for the Chair which will rotate on an annual/biennial basis.

g. One director from each organisation will also act as the shareholder representative on the board.

h. The University wish to field three directors (Director of IT, Head of Networks and a representative from the central Finance team). Proposed Council directors are: Finance representative (name TBC), Connecting Cambridgeshire Programme Director, Connecting Cambridgeshire Programme Manager.

i. The addition of one or two (voluntary) non-exec directors to the company board is being considered to provide an independent view, possibly providing dispassionate advice with experience from the telecoms sector.

j. The anticipated life of the joint venture is up to 20-30 years (fibre ducting has an anticipated longevity of at least this duration – both in terms of physical characteristics and technology application).

k. Exit, termination and dispute resolution provisions (including buyout/licence to use clauses for jointly created/owned assets) are currently being drawn up by the legal team and are in active discussion between the University and the Council. Colleagues from LGSS Law are advising on the Council's position.

l. The Council's point of escalation in the event of a dispute which cannot be resolved by the Board will be the Executive Director for Place and Economy.

m. The joint venture will not directly employ staff and all staff resources will be seconded to the joint venture on a part time basis.

n. Reserved matters (i.e. those items which must be signed off by the board and approved by both shareholder representatives) are currently being discussed and will include matters which could

have significant financial or reputational impact. Restrictions on borrowing and additional shareholders have been agreed to date.

o. An outline business plan has been developed with phased objectives for the first five years. Two products are envisaged initially: Duct Access (Access to ducts for others to use to pull/blow their own fibre) and Point to Point Dark Fibre (Dark fibre available on a point to point basis for a customer which they light).

p. All profits will be returned to the company for further development of the fibre assets for the first five years. Thereafter the shareholders will review whether to withdraw up to 50% of profit as a dividend or invest 100% of returns in further development of the network.

q. The University network team will provide the TDA (Technical Design Authority) function which includes network strategy, standards development and quality control.

r. Over the first two years (during the life of the LFFN PSAR project) resources from the Council and the University will be made available to Cambs UniFibre on a non-chargeable basis. A review point at 2 years will consider whether staff time will be recharged to reimburse the parent organisations.

s. The University will lead on contract negotiation and first-line customer engagement for the first two years, with the Council expected to lead on marketing, secretariat support and possibly (chargeable) finance and invoice processing.

t. The Council will also contribute project management resources, in particular to support delivery of the LFFN PSAR work stream which will develop further assets which will be commercially available via the joint venture.

u. The number of customers is envisaged to be small in the first two years (target of between1-5) whilst the assets are developed and the network is extended to provide additional links.

v. Once fully developed it is anticipated that the customer base will remain modest and the profits small but appreciable. The geography and nature of the assets means even when assets are developed more extensively across Cambridgeshire the b2b market for fibre and ducting assets will remain small. At maximum it is unlikely that the joint venture will attract more than 25 individual customers.