
Meeting: Sustainable Communities Overview and Scrutiny Committee

Date: 13.11.2014

Subject: Superfast Broadband

Report of: Cllr Richard Wenham, Deputy Executive Member for Corporate Resources

Summary: The report provides an overview of the Councils existing activities in improving broadband services and proposes ongoing support for the Council's engagement in the Broadband Delivery UK Phase 2 project.

Advising Officer: Jason Longhurst, Director of Regeneration and Business

Contact Officer: James Cushing, head of Investment

Public/Exempt: Public

Wards Affected: All

Function of: Council

CORPORATE IMPLICATIONS

Council Priorities:

1. The delivery of superfast broadband directly addresses the Council's priority of Better Infrastructure – improved roads, broadband reach and transport and the delivery of the Council's Joint Broadband Plan. Additionally, the provision of superfast broadband also contributes to a range of wider Council objectives including Enhancing Central Bedfordshire – particularly creating jobs and enabling businesses to grow, Delivering Great Services and Value for Money - through supporting the accessing of services online and on demand.

Financial:

2. The Council has invested in the initial Broadband Delivery UK (BDUK) broadband project and has agreed to invest further resources in the Phase 2 extension project. Public sector external funding is made up from £200k and £250k secured from Central Bedfordshire Together for the respective phases and £1,285 and £2,040 secured from BDUK.

	Gross Expenditure	External Funding	Net Expenditure
	£ 000	£ 000	£ 000
BDUK Phase 1	2,485	1,485	1,000
BDUK Phase 2	4,140	2,290	1,850
Total	6,625	3,775	2,850

3. The project utilises a GAP funding model to secure private sector investment from the selected delivery partner. For phase 1, over the wider Central Superfast area the delivery partner BTs will contribute £3.9m capital plus £5.7m operating costs over the 15 years bidder timeline, representing a leverage ratio of 151% on public funding. Due to the bidding process it is not possible to break this investment down to a Local Authority Area. The second phase of the project will also use the GAP funded model with private sector leverage, being a minimum of 11% in line with the state aid and BDUK framework requirements. The contract with BT also contains clauses that any savings in the project delivery, or super profits generated by higher than expected take up of services (the contract assumes 20% take up of services) are reinvested in the project, further extending coverage.
4. Central Bedfordshire Council is the accountable body for a wider partnership, Central Superfast, covering Bedford Borough and Milton Keynes Councils for the Phase 1 project and in addition to these authorities, Luton Borough Council has been included in Phase 2.

Legal:

5. The Council has the power to support broadband deployment under Section 2 of the Local Government Act 2000. There are no statutory requirements for the Council to undertake improved broadband works. The Council is able to secure a private sector partner and undertake delivery activities utilising a national BDUK State Aid notification and a procurement framework which is compliant with European Union (EU) requirements. Council legal, financial and procurement rules will also be adhered to throughout delivery of the plan. The Council's Audit team have been an active partner in the project to ensure compliance from a Council perspective.
6. A binding collaboration agreement between the Council and other Local Authorities has been developed to ensure that funding is directed according to each local authority's requirements and in line with BDUK contractual requirements, ensuring a proportionate bearing of risk. This will be updated inline with project requirements.

Risk Management:

7. The project is subject to procurement and state aid risks. The compliance with and use of the BDUK procurement and state aid frameworks mitigates these, with BDUK acting as a national competency centre and undertaking assurance/ checkpoint assessments of the project.
8. The project has developed an officer lead project team, and utilises formal project management techniques, including a project risk register, which is reviewed as a standing agenda item at member lead programme board meetings.

- 9 There will be a number of risks associated with the detailed delivery of the project, from a delivery partner perspective. These include for example, planning, highways, way leaves and day to day project delivery. These are mitigated through weekly supplier/ project team meetings, and internal BT project and risk management plans and processes, with appropriate risk ownership clauses, where failure to deliver results in non payment.

Staffing (including Trades Unions):

10. Existing Council resources have been utilised to manage Council inputs- i.e. financial legal, planning, highways and communications.
11. The Council contributes to joint project management costs, including any necessary specialist consultancy and a joint project manager role (the Council acts as the employing body). This is based on a formula of, taking into account a 50% equal split of costs between partners and a 50% proportional split of costs based on total public sector. The Council Contributions to this have come from existing Regeneration and Business Budgets and a future approval from the Council for £50k towards future project costs.

Equalities/Human Rights:

12. Public authorities have a statutory duty to promote equality of opportunity, eliminate unlawful discrimination and to foster good relations in respect of nine protected characteristics; age, disability, gender re-assignment, marriage and civil partnership, pregnancy and maternity, race, religion or belief, sex and sexual orientation.
13. In developing the Local Broadband Plan and undertaking the procurement processes, consideration of the need to improve access for all has been a core principle, evidenced in the Council's priority to maximise coverage. Analysis of options for intervention, while meeting state aid guidelines, has mapped access to areas of deprivation and found very little correlation. Utilising the BDUK procurement process ensured the Council was compliant with national procurement requirements to ensure potential suppliers complied with necessary legislation. Likewise through the deployment process the Council works with the main supplier to ensure that broadband services are available to the maximum number of people and that access is not discriminated against in anyway:

Public Health

14. Increasing accessibility to broadband can allow for increased tele-health opportunities and access to online information, albeit that services will need to be independently provided and is not within scope of the project. .

Community Safety:

15. The availability of a superfast infrastructure network will support the deployment of real time monitoring and security systems, for community organisations, business and residents. This will ultimately open up new opportunities and technologies to support enhanced community safety.

Sustainability:

16. Delivery of the extended coverage of superfast broadband will positively impact on a number of sustainability considerations, including reducing the need to travel (by increasing access to online services and opportunities for home working) and resulting emission reductions. Further to this, the provision of superfast broadband will also support the delivery of jobs growth aspirations for the area, by supporting growth in existing businesses productivity, ensuring the area remains attractive to new inward investment and supporting new business to start up, through taking advantage of new technologies and market opportunities.

Procurement:

17. The National BDUK procurement framework, which has been out to Official Journal of the European Union competitive tender, was used for phase 1 and will be used for phase 2 to competitively select a private sector partner. A mini competition process will be used to call off providers to deliver infrastructure locally.

RECOMMENDATION(S):**The Committee is asked to:-**

1. **Note the progress of the broadband project to date**
2. **Support the continued investment in delivering superfast broadband through investment in the phase 2 broadband project**

Superfast Broadband Phase 1

18. The rollout of superfast broadband is a priority in the Council's Medium term Plan, such that the necessary infrastructure is in place, to ensure that the area remains competitive and attractive to current and new investors and residents.
19. Locally, the Council has launched a Demand Registration facility allowing residents and business to register their demand for improved broadband and to register their support for the project. To date there are almost 3,900 responses, with 96% supporting the Council's plans to improve broadband speeds.

20. The lack of superfast broadband (Speeds Greater than 24 Megabits per second, Mbps) services is a recognised barrier to new business formation, job creation and self-employment and hampers competitiveness. Recent evidence from the Department for Culture Media and Sport (November 2013) highlights that enhancing the availability and take-up of faster broadband speeds will add about £17 billion to the UK's annual Gross Value Added (GVA) by 2024. Likewise when considering wider global evidence, it has been shown that a doubling of broadband speeds can be expected to result in a 0.3% increase in Gross Domestic product. Superfast broadband will also have a number of environmental impacts, including reduced commuting, due to teleworking and improved efficiency. This would account for about 1.6 million tonnes of CO2 savings nationally per annum, by 2024.

21.

Furthermore, the Council undertook an analysis of the expected benefits of investing in superfast broadband. These identified that an expected return to the local economy of £98 million over a 15 year period from implementation. This means that for the Council's initial investment of £1 million and taken into account external funding secured there would be an expected return of almost £110-1. The main benefits of supplying superfast broadband are considered to be:

- **Jobs growth through Improving business productivity and efficiency** - through supporting business growth, attracting new high value activity investment into the area and supporting business and labour market skill development.
- **Supporting business start up and growth** – through access to new markets and opportunities and enabling improved access to customers and available support resources- ie Business Link is now delivered on line and promotion through online networks such as Linked In.
- **Strengthening the rural economy** - Information from our business survey highlights a number of potential barriers to rural businesses, including lower level of access to high speed broadband and limited commercial viability for rolling out NGA broadband. Improved broadband services to the rural area will help solve the problem of digital exclusion
- **Helping the transformation of public services** – allowing access to national online services, i.e. DVLA licencing and the Council's own online service channels, ultimately driving efficiency in service delivery.
- **Contributing towards greener environment** As a result of broadband connectivity, remote and flexible working opportunities will arise and enable workspaces to be used more efficiently. Faster broadband will also enable the development of environmental technology for the reduction of carbon emissions, such as real time monitoring of traffic flows.
- **Education and Training** – allowing access to new training and learning opportunities, such as online Moodle courses.
- **Tele-health-** superfast broadband is an essential in facilitating emerging tele -health technologies, including real time consultations and real time monitoring of conditions that may ultimately allow residents to remain in their own homes for longer.
- **Supporting equality for all** – With an increasing amount of services delivered digitally, it is critical to ensure access for all, for example new Universal Credits and job search requirements are requiring more residents to both have and be able to use broadband connectivity.

22. The Government identified approximately £500 million nationally to rollout superfast broadband to 90% of premises, defined as speeds of at least 24 megabits per second (Mbps), and ensure all had access to at least 2Mbps. As part of this the Government set up Broadband Delivery UK (BDUK) as its delivery arm. BDUK made initial allocations to local areas, based on a modelled need, and also required projects to form partnerships of minimum sizes, to ensure projects were attractive to the private sector delivery partners. The Council has invested £1million in the project, and secured external public funding of £1.4 million, this included successfully negotiating a further £600,000 from BDUK.
23. As part of the approval process for funding, BDUK also required areas to develop a Local Broadband plan, setting out the ambitions for the area and current broadband provision. The Council has entered into a formal collaboration agreement with Bedford Borough and Milton Keynes Councils and formed a joint Broadband Partnership (under the project title Central Superfast) to deliver the Joint Local Broadband Plan (endorsed by full Council at its meeting on the 14 February 2012), which set out plans to deliver access to superfast broadband (defined as being at least 24Mbps) to 90% of all premises with the aim to ensure that all premises in Central Bedfordshire have access to infrastructure able to provide at least 2Mbps.
23. The Joint Broadband Partnership consists of a decision making member led board, with Cllr Richard Wenham representing the Council, and an officer led board with James Cushing, Head of Policy attending. There are various task and finish sub groups for the project, including joint communications and planning and highways groups. A joint project manager role (with the Council acts as the employing body) has also been put in place, to meet the BDUK requirement for sufficient project management capacity.
24. The Council and its partners utilised the national BDUK procurement framework and state aid approval, on the grounds that this was considered to be the lowest risk and most efficient means of securing private sector partners. BDUK undertook a full Official Journal of the European Union (OJEU) procurement process. While initially there were a number of providers taking part in the procurement process, ultimately only BT and Fujitsu were on the final framework. Furthermore, Fujitsu made the commercial decision not to bid for the majority of BDUK projects. A key requirement of the project is that public funds are not used to compete with or over build existing or planned private sector provision. As such all premises supported under the programme would not have received a superfast service without intervention.
25. After successfully passing the various BDUK state aid approval processes and completing the procurement process, BT were selected as a partner to deliver necessary infrastructure. In addition to the public investment, BT are contributing £3.9m capital plus £5.7m operating costs over the 15 years bidder timeline, representing a leverage ratio of 151% against public investment. The contract was awarded to BT in August 2013.

26. Under the contract BT is delivering superfast services to almost 15,500 premises in Central Bedfordshire, with deployment complete in Q1 2016. Of the 9,152 premises not estimated to received speeds of at least 2 Mbps, 3854 are expected to be passed with fibre and benefit from speeds greater than 2 Mbps, 546 premises are now deemed by BT to already receive 2 Mbps, and 4,752 premises will be covered by infill technologies under the current plan, ensuring 100% 2 Mbps broadband coverage.
27. The Phase 1 project is making good progress. The first telecommunication cabinet went live in Stanford in June 2014. To date the project has delivered Superfast Broadband infrastructure to 3,544 premises, and is currently above target for delivery. Cabinets have been upgraded in Ampthill, Cranfield, Sandy, Shefford and Silsoe, with new the rate of delivery of new cabinets increasing.
27. As part of maximising transparency and public understanding of the project, the partners have published a draft deployment map online and developed a post code look up facility. This and wider background to the project is available at www.centralbedfordshire.gov.uk/broadband. In addition to the deployment maps, expected cabinets to be upgraded in the next stage of the project are also published in advance of activity. The Council was one of the first authorities nationally to introduce the postcode checker and is recognised as strongly performing by BDUK for the extent that project information and progress is made publically available.
28. The contract with BT contains clauses that any savings in the project delivery, or super profits generated by higher than expected take up of services (the contract assumes 20% take up of services) are reinvested in the project and extending coverage even further.

Phase 2

29. In the June 2013 Spending Round the Government announced a further £250m of funding to increase the availability of superfast broadband to 95% of premises in the UK by 2017, phase 2. Central Bedfordshire was indicatively allocated £1.74 Million as part of this. The total allocation to the Central Superfast Area and Luton was £3.18 million. Following negotiations with BDUK the Council was able to secure an additional £300k for Central Bedfordshire (as part of securing £800k for the wider area). The 19.08.14 Executive approved the Council's contribution of a total of £1.85 million additional funding to match BDUK resources. This will bring the Council's total investment in Superfast Broadband to £2.85 million over both phases.

30. Participating in the SEP is likely to result in supporting at least an additional 7,100 premises to receive superfast broadband services. These premises are not currently being served through commercial plans or the existing Central Superfast Project and there is very little chance of these premises being supported through other means. Through a competitive process, the Council will again select a private partner to put in place necessary broadband infrastructure and seek to maximize coverage as far as possible above the 95% target.
31. Following the agreed principles of the Phase 1 project, the Council has considered and agreed (at the 11th September 2014 and 12th June 2014 Council meetings) to continue with the existing priorities to roll out superfast broadband services:
- Maximising overall superfast broadband coverage
 - Ensuring all have a minimum access to infrastructure able to deliver 2 Mbps services
 - Subject to maximising superfast, seek a balance between residential and business premise coverage and
 - Subject to maximising superfast coverage, achieve a reasonable geographic spread, taking into account local demand, demonstrated through responses to the Broadband survey and response to consultation

These reflect the fact that evidence from the phase 1 project nationally highlights that deployment is based on the most cost effective solution for the provider, in terms of planning and resource deployment/ phasing. Specifying locations, such as business parks or particular settlements has shown that this can reduce total coverage, due to both increased costs in resource deployment and actual delivery costs. Likewise, the BDUK framework has a spending limit per premises of £1800, to ensure value for money from the use of public resources.

32. The major costs of deploying broadband relate to either the equipment required, network organisation or distance from existing fibre sources. Superfast broadband can be delivered through predominantly either Fibre to the Cabinet (FTTC) or Fibre to the Premise (FTTP). FTTC is based on providing fibre from national networks to a local exchange and then to a local cabinet. Existing copper infrastructure is utilised to connect the cabinet to the premise. This technology is the most widely used in the UK, and represents the lower cost deployment option, though currently speeds are limited to around 100 Mbps. This is ultimately due to the physical properties of copper and speeds drop away drastically when premises are over 1 km from the cabinet. FTTP provides a fibre line directly to the premise. This offers speeds currently limited to around 300 Mbps, but has the potential for higher. This is the higher costs option and also requires additional work and disruption to connect to individual premises. The Council project is almost exclusively utilising FTTC to provide superfast broadband services. The differing cost of providing services ultimately drives deployment, in line with the Council's requirement to maximise coverage for all. The highest value for money areas have been determined, based on a factor of total number premises supported and cost to achieve this. Some areas may have higher deployment costs due to being further from existing fibre connections, based on Exchange only Lines, where regulation requires new cabinets and networks to be deployed, and ultimately whether upgrading cabinets will improve services to speeds of at least 24 Mbps, a requirement of the BDUK framework. For example, where a premise is much more than 1km from the nearest cabinet, even upgrading that cabinet to fibre will not mean it will necessarily be able to receive superfast services, due to the long copper line and associated drop off in speeds.
33. BDUK have extended the national procurement and state aid frameworks, the Council will again utilise these in selecting a private sector bidder. Necessary pre procurement and state aid requirements, including undertaking an Open Market Review in August and launching a State Aid Public Consultation on eligible intervention areas has been launched. These are both requirements of the state aid process and determine the existing and future roll out plans of commercial telecom infrastructure providers. These do not determine where final investment will take place, only where is eligible under state aid rules. Depending on BDUK approvals and timescales, it is expected that a tender will be published in November 2014, with a private partner selected in February 2015. Detailed planning will then be undertaken, and the Council would propose undertake a similar public mapping and postcode look up facility to allow residents to know our plans. Final delivery of would be by March 2018. It is likely that the award of the Phase 2 contract will positively impact phase 1, with the possibility for accelerated delivery and use of new technologies, such as Fibre to the Remote Node, where the technology in cabinets is effectively placed on existing telephone poles. This has the potential to dramatically reduce costs to support our most remote communities.

Additional Activities

34. In addition to the BDUK projects to tackle existing premises, the Council's emerging Development Strategy and any new Council led masterplans highlight the requirement for new developments to consider putting in place superfast broadband infrastructure, to ensure that new premises are planned for from the outset and so not creating future need for public sector intervention.
35. The Council is also required to promote the take up of broadband services. To do this a range of demand stimulation activities are being undertaken, including IT demonstration within Library services, provision of IT courses through our Adult Skills programmes, use of IT to access Advice and Guidance and employment opportunities through the Work Clubs run by the Council.
36. Furthermore, the Council on behalf of the Central Superfast project was successful in securing £75,000 from the Department of Communities and Local Government to support the Women Business and start ups make better use of broadband. This programme will support at least 150 female entrepreneurs, 20 new businesses and 25 new jobs.
37. The Council has also been leading in ensuring that The South East Midlands Local enterprise Partnership European Structure and Investment Fund (ESIF) plan includes support to improve digital skills and take up of the opportunities of superfast broadband.
38. The Council also continues to utilise the demand registration data and engage with the wider telecoms market, to seek to attract new providers to the area and ensure existing providers continue to invest in the area. Likewise the Council has been working with a number of Parish Councils to explore options to improve broadband provision locally. For example at Kingsreach, Biggleswade, where continual Council engagement has led to a private funded solution between BT and developers to provide superfast services to this major housing development.

Conclusion and Next Steps

40. The Council is actively working to extend the coverage of superfast broadband infrastructure and ensure all have access to infrastructure that can support at least speeds of 2 Mbps.
- Responding to strong local demand for improved broadband services, 96% support the need for better broadband
 - BT has been selected to provide superfast broadband services to an additional 15,500 premises (bring superfast coverage to 90%) and minimum speeds of 2 Mbps for all.
 - The Council has invested £1 million and secured £11.05 million, in the Phase one broadband project
 - Currently the project is on track, delivering services to 3,544 premises by the end of September 2014.
 - Deployment of phase 1 is expected to be complete in early 2016.
 - BT contract contains provisions for payback to be reinvested in extending coverage.
41. The Council is currently progressing with a Phase 2 broadband project, in partnership with Milton Keynes, Bedford and Luton Councils, to increase coverage to at least 95%.
- The Council is investing £1.85 million in this phase, having already secured £2.29 million of external funding.
 - Supporting an additional 7,100 premises.
 - Progress is well underway, with a State Aid Publication launched to determine eligible investment areas.
 - A tender will be published in November 2014, with a private partner selected in February 2015.
 - Final delivery of would be by March 2018.
42. A series of demand stimulation activities are underway, such as the Women Business in Broadband project, to support the take up and wider benefits of improved broadband access.
43. Projects to further extend coverage and increase take up are being investigated. Likewise planning policies have been put in place to require new developments to have superfast broadband infrastructure in place.

Appendices:

Appendix A – Broadband Phase 1 Deployment Map

Background papers and their location: (open to public inspection)

Joint Local Broadband Plan.

http://www.centralbedfordshire.gov.uk/Images/Joint%20Local%20Broadband%20Plan_tcm6-41719.pdf#False

State Aid Public Consultation. <http://www.centralbedfordshire.gov.uk/local-business/broadband/broadband-plans.aspx>