Division(s):All

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CABINET – 17 March 2020

Digital Infrastructure Strategy

Report by Digital Infrastructure Programme Director

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RECOMMENDATION

1.   The Cabinet is RECOMMENDED to approve:

    (a)   the Digital Infrastructure & Delivery Plan; and

    (b)   the associated Memorandum of Understanding forming a Digital Infrastructure Partnership between Oxfordshire Local Authorities and OxLEP

Executive Summary

2.   The volume of global internet traffic is forecast to increase to 95 times that of 2005, by 2020, and is doubling every two years. In the mobile data domain traffic increases by 42% each year.

3.   There are many drivers increasing demand for ever-faster connectivity, orientated around two key areas – the move to cloud storage and applications, and huge growth in video-on-demand content. In tandem, the convergence of IoT (Internet of Things) and AI (Artificial Intelligence) is transforming service delivery and business models, creating what is increasingly understood as the 4th Industrial Revolution. With this in mind, the focus of the new Government (under the Department for Digital, Culture, Media, & Sport) is focussing on full-fibre broadband connectivity and 5G mobile data. The only way this rapid growth in bandwidth requirements can be accommodated is with full-fibre broadband which offers speeds of 1Gb/s today and capable of much higher speeds in the future. This same fibre is also the backbone for backhauling 5G mobile.

4.   There are few areas in the UK where the importance of world-class digital infrastructure is as pronounced as in Oxfordshire. The county itself, and the Oxford to Cambridge Arc is the home to an economic growth engine for the UK, and this is predominantly founded on high Gross Value-Added businesses in aerospace, advanced motor engineering, biosciences, space technologies, electronics & sensors, and Life Sciences. We also have a workforce with above average skills, and excellence in academia. It is reasonable to compare this environment with the likes of Silicon Valley, Beijing, Los Angeles, Tel Aviv, and other world centres introducing revolutionary technical change. These are the locations Oxfordshire businesses compete with, and every one of these top tech hubs already have world class digital connectivity.

5. Whilst this critical infrastructure will secure business competitiveness and growth, it will also have a positive impact in assisting with the actions required to mitigate climate change. Fewer car journeys will need to be made as increasing numbers of people will be fully productive working from home, and when travel is required, fully connected vehicles and interactive signage will optimise journeys, reducing congestion. Beyond the clear economic benefits enabled with good digital infrastructure, there are numerous benefits to residents too, both in the obvious entertainment categories, but health and social care, education, & many other aspects of life will equally benefit.

6. This Digital Infrastructure Strategy as well as the supporting Partnership MoU have also been welcomed by the Oxfordshire Growth Board, as well as being approved by the city and district councils and OxLEP.

Introduction

7. Delivery of full-fibre and mobile digital infrastructure requires huge investment, and the economics of this will drive Operators to focus delivery in not just urban areas, but those which present the fewest barriers to deployment, such as highways access, availability of public assets which facilitate delivery such as public land (for laying fibre ducting), CCTV ducting, street furniture (for example lighting columns for installing small cell mobile transmitters, etc.)

8. Delivery of full-fibre infrastructure on a commercial basis (entirely supplier investment), is expected to account for approximately 80% of premises. The Prime Minister has announced that £5bn of public funding will be made available to support the cost of deploying in the remaining 20% of semi-rural and rural premises via an intervention programme along the lines of the Oxfordshire Better Broadband programme.

9. Whether this infrastructure build is delivered entirely by commercial investment, or supported by the public purse, Oxfordshire will be much better placed to facilitate deployment by operating a Digital Infrastructure programme and having a Digital Infrastructure Strategy in place

10. Successful execution of this strategy will bring about;

- Greater equality of access across Oxfordshire by ensuring good digital connectivity is not just the preserve of the city and main urban areas;
- Sustainable growth by enabling businesses to fully transact online, a growth in micro-businesses (which often operate from home), greater efficiency in industries such as agriculture where water and chemical applications may be optimised, etc;
- Environmental benefits with reduced traffic and travel;
- Business productivity gains;
- Opportunities for the public sector to adopt greater collaboration in service delivery;
- Opportunities to reduce the cost of, and improvement in health and social care provisions;
- Thriving Communities.

11.   The Digital Infrastructure & Delivery Plan is attached to this report as Annex 1. The Memorandum of Understanding forming a Digital Infrastructure Partnership between Oxfordshire Local Authorities and OxLEP is attached as Annex 2.

Exempt Information

12.   There is no exempt information pertaining to this subject and full transparency of the strategy is encouraged.

Implementing the Digital infrastructure Strategy

13.   The council has a Digital Infrastructure programme operating already, managing the Better Broadband for Oxfordshire contract, and the new DEFRA funded contracts for delivering full-fibre to businesses in rural Oxfordshire. This programme team has five years' experience of working with both HMG and the industry and is well positioned to lead on the wider remit set out in the Digital Infrastructure Strategy & Delivery Plan.

14.   The Digital Infrastructure Partnership, supported by the MoU will be an important vehicle to help in driving the programme objectives, and is already supported by all the participating partnership authorities.

15.   It should be noted that this model is also being promoted to potentially include a wider partnership with local authorities of the Oxford to Cambridge Arc.

Financial and Staff Implications

16.   As the council has operated the joint public-funded Better Broadband programme, the county council is the contractual beneficiary of the funding agreement embedded in the contract with BT. This means that as the contract holder, we receive a share of the revenue generated under that contract, according to the percentage of take-up of the services enabled by our investment. With take-up at 70 % and growing (the highest in the UK), this generates cash receipts to Oxfordshire county council of c £13m over the next six years. The programme has also achieved an underspend (against forecast delivery costs), of some £3.6m.

17.   As such, the Digital Infrastructure programme is effectively operating as self-funding, not only for the operating staff costs of the programme, but also allowing (subject to individual business cases and scrutiny) some capital investment in pump-priming digital infrastructure deployment in support of anticipated further central government funding for this purpose.

Equalities Implications

18.   The Digital Infrastructure programme assists in reducing the gap between rural and urban communities in accessing fast fixed and mobile broadband services

Legal Implications

19.   The Digital Infrastructure Strategy & Delivery plan sets out approaches to how the Partnership will facilitate deployment of full-fibre and mobile services. As such there are commitments to '…follow where practically possible…' central government guidance from for example the Street Works Toolkit, or advice on removing barriers to digital infrastructure delivery provided by the Department for Digital, Culture, Media, & Sport. The language used is deliberately careful to avoid obliging the council to deviate from existing ways of working, but it should be noted that the advice referred to is generally best practice and the programme will generally seek for this to be adopted.   Equally, the Memorandum of Understanding is not a legally enforceable Agreement but sets out best practice to be considered by all Partners. An example of this pertaining to district councils and city, is a reference to favourable consideration being given wherever possible, to granting planning permission to Mobile Network Operators in deploying new or enhanced mobile masts.

Paul Feehily, Corporate Director Place & Growth

Background papers:
https://www.gov.uk/government/publications/future-telecoms-infrastructure-review

Contact Officer: Craig Bower, Digital Infrastructure Programme Director

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