

INFRASTRUCTURE BOARD

29th AUGUST 2019

**SUPERFAST SOUTH YORKSHIRE BROADBAND PROGRAMME AND
DEVELOPING A DIGITAL INFRASTRUCTURE PLAN FOR THE CITY REGION**

Purpose

To provide the Chief Executives with an update on the Superfast South Yorkshire programme and to introduce a discussion on the need to produce a digital infrastructure plan for the City Region.

Freedom of Information and Schedule 12A of the Local Government Act 1972

This paper would be available under the Combined Authority Publication Scheme.

Recommendations

Chief Executives are asked to:

1. Note the progress and success of the Superfast South Yorkshire broadband programme.
2. Note the standard condition that is applied to all BMBC planning decisions and agree that adoption of these across the City Region should be considered by the Heads of Planning.
3. Agree to work to prepare a SCR Digital Infrastructure Plan.

1. Introduction

- 1.1** The commercial rollout of fibre broadband across South Yorkshire, funded by BT and Virgin Media, is currently expected to reach around 80% of premises across South Yorkshire. The remaining coverage will be covered by the Superfast South Yorkshire (SFSY) project, which a partnership between the South Yorkshire authorities of Barnsley, Doncaster, Rotherham and Sheffield and BT Openreach, to specifically address intervention areas across South Yorkshire that are not commercially viable for providers to service without subsidy.
- 1.2** This report provides an update on the SFSY programme, its performance, future delivery and take-up rates. The report also begins to set the scene for the potential production of a digital infrastructure plan for the City Region, which will aim to build on SFSY and ensure the region is well positioned to take advantage of the next wave of digital technology, such as 5G.

2. Proposal and justification

- 2.1** The South Yorkshire Superfast Broadband Programme began in 2014, when there was only 80% of area with Superfast broadband Services. The intention was to increase this to nearly

100% coverage over the lifetime of the programme. The Programme was funded from a range of sources including Government (through Broadband Delivery UK (BDUK)), local authorities and the SCR. The SCR Local Growth Fund contribution was £10.6m.

2.2 In May 2019, Openreach achieved their SFSY Phase 1 contractual commitment, claiming over 94,496 Total Homes Passed (THP) with speeds greater than 24Mbps (Megabits per second) in the intervention area. In recognition of that, prior to that target being met, in November 2018 a second contract was signed, covering an additional 9,726 properties with fibre broadband across South Yorkshire.

2.3 Delivery has now commenced on that second contract with 413 premises in Sheffield (Park Hill & Kelham Island) going live, already receiving customer orders thanks to early demand stimulation activities.

2.4 Through the SFSY programme, the following will be achieved:

- Coverage of superfast broadband has increased from 80% to over 97% and will reach c99% by 2021;
- The take-up of superfast broadband has increased from 18% to over 47%;
- Business parks in South Yorkshire were amongst the first to access gigabit full fibre broadband;
- Business development programmes have helped SMEs to use digital to sustain and grow their business;
- Voucher schemes have covered 50% of our SMEs digital connection and innovation costs; and,
- Sheffield city centre now benefits from arguably the best public access wi-fi network in the country.

2.5 A key area of challenge for the SFSY project is to ensure new developments are provided with appropriate broadband connectivity. This can be achieved through the application of appropriate planning conditions for new developments. An example of how this is being achieved within Barnsley is where the following standard planning condition below has been applied:

Upon commencement of development, details of measures to facilitate the provision of full fibre broadband for the dwellings/development hereby permitted, including a timescale for implementation, shall be submitted to and approved in writing by the Local Planning Authority. The development shall be carried out in accordance with the approved details.

Reason: In order to ensure compliance with Local Plan Policy I1.

Definition:

What is full-fibre? Full-fibre networks use fibre optic cables to connect the exchange directly to each premises. Full-fibre connections are capable of delivering speeds greater than 1 gigabit per second (Gbps; 1 Gbps is equal to 1000 Mbps). Full-fibre networks are more reliable than copper-based networks and cheaper to maintain and operate. Full-fibre networks are also important for supporting high capacity mobile broadband networks, particularly future 5G networks. Full-fibre networks, also referred to as fibre-to-the-premises (FTTP) or fibre-to-the-home (FTTH), consist of fibre optic cables running from the local exchange directly to each premises. Fibre optic cables transmit data using light and can carry more data with faster speeds and significantly less signal loss with distance compared to copper cables

2.6 Adopting a similar approach across the City Region would help ensure that new developments benefit from appropriate connectivity moving forward. It is therefore proposed that this is given further consideration by the Heads of Planning.

- 2.7** In addition to delivering the physical infrastructure, driving take up of service is of critical importance to achieve the economic benefits of fibre broadband. Overall take up of fibre broadband services in the SFSY intervention area currently sits at **47.47%**. The original demand stimulation strategy had a target of 30% take up by end 2019 but an aspiration for 50%. It is expected that this aspirational target will be achieved before the end of the programme.
- 2.8** Over 550,000 premises have taken out a contract for a fibre broadband service. Take up of Fibre to The Premise (FTTP) services is 16.7%. It is expected that this will increase when more internet service providers (ISPs) offer a FTTP service and business leased lines come up for renewal.
- 2.9** Demand stimulation activities included mailshots, boosted social media campaigns including competitions and giveaways, Digital AdVans in key locations, “Art of the Possible” awareness raising events, fully funded digital workshops, leafleting campaigns, and attendance at business and residential focused events utilising SFSY’s interactive “speed test” game. In December 2018 SFSY secured £20k funding from BDUK for demand stimulation, this funding was used for radio advertising with Hallam FM to complement the ongoing ERDF funded demand stimulation activities.
- 2.10** Within the delivery contract, once 20% take up is triggered, South Yorkshire starts to generate finance through a gain share mechanism (clawback). The clawback is credited into an Investment Fund and not released until 2024. As of December 2018, an indicative figure of £1,590,341 clawback has been presented by Openreach, but will rise as take-up increases. Clawback is split between SCR and BDUK as per the final funding investment ratio. This provides a potential source of funding for investment into future SCR digital infrastructure.
- 2.11** Although the SFSY is still in delivery, it is clear that digital infrastructure remains critical in terms of achieving future sustained growth within the City Region, with the emerging Strategic Economic Plan and Local Industrial Strategy seeing further improvements as being essential to the long-term health of the economy.
- 2.12** As the City Region develops and grows over the next 3-5 years, there will become increased demand for high speed, ubiquitous connectivity. As such there is a clear need for a new digital infrastructure plan for the City Region in order to give residents and businesses confidence that their future connectivity needs will be met. It will help to demonstrate that the City Region is pro-investment and is open for business. The plan will ensure that the Region has the infrastructure in place to meet the following connectivity requirements:
- To enable businesses to be more productive and more competitive, to grow through digitisation;
 - To sustain and grow the digital sector, in new and emerging technologies;
 - To provide ubiquitous coverage, so that residents, workers and visitors are always connected;
 - To facilitate rapid adoption of smart services such as 5G, Internet of Things (IoT), Connected Vehicles;
 - To enable public services to be delivered more efficiently, more effectively, and to be accessible online;
 - To create jobs, to learn and apply the skills needed for the infrastructure, products and services;
 - To meet the demands from an increasing resident population, ensuring sufficient network capacity;

- For smart city solutions that improve energy use, public safety, traffic management and air quality;
- To ensure that no one is excluded from the digital age and the socio-economic benefits of being online;
- To establish a reputation as a 'go to' place for innovators, researchers and investors;
- To gain a competitive advantage from ensuring supply is available ahead of demand; and,
- To meet consumer demand for higher bandwidth for video streaming, gaming, home working.

2.13 The SFSY project board has been recently working on what the next phase of digital infrastructure development might be for the City Region. Several key themes from this work are starting to emerge, including:

- **Access for All**
Increase coverage and take-up across the whole of the Region
- **Economic Growth**
Business connectivity and support for competitive advantage
- **Innovation**
Adopt the latest technology innovations at an early stage
- **Exploit Public Assets**
Reuse infrastructure to deliver quickly and economically
- **Enables Wider Benefits**
Support and enable digital inclusion, public service transformation and 'smart city' Initiatives

2.14 Using this as a starting point for a broader discussion, it is proposed that the four South Yorkshire Authorities work with the SCR Executive Team to scope out the work required to produce a fully evidenced, ambitious and deliverable digital infrastructure plan for the City Region. This should build on the success achieved to date by SFSY, but seek to look beyond current technologies and consider the future roll-out of full fibre and 5G, and the potential use of public sector assets in that process.

2.15 It is recommended that a task and finish group is formed, which the SCR Executive Team can instigate, to outline a scope of work required and timescales, before this is agreed by the SCR Infrastructure Board.

3. Consideration of alternative approaches

3.1 An alternative approach would be to revert to a market led approach to the roll-out of digital infrastructure once the SFSY programme comes to a conclusion. However, history has indicated that hard to reach areas in South Yorkshire will not receive the level of digital infrastructure required unless there is a degree of public sector intervention. As such the digital infrastructure plan will begin the next phase of what is required.

4. Implications

4.1 Financial
None arising from this report.

4.2 Legal
None arising from this report.

4.3 Risk Management
None arising from this report.

4.4 Equality, Diversity and Social Inclusion

None arising from this report.

5. Communications

5.1 None arising from this report.

6. Appendices/Annexes

N/A

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Background papers used in the preparation of this report are available for inspection at: 11 Broad Street West, Sheffield S1 2BQ

Other sources and references: