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**Decision Maker:** **RENEWAL, RECREATION AND HOUSING POLICY DEVELOPMENT AND SCRUTINY COMMITTEE**

**Date:** **Wednesday 19 June 2024**

**Decision Type:** Non-Urgent                      Non-Executive                      Non-Key

**Title:** **DIGITAL INFRASTRUCTURE WORK PLAN UPDATE**

**Contact Officer:** Daniel Murray, Head of Economic Development  
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**Chief Officer:** Director of Housing, Planning, Property and Regeneration

**Ward:** (All Wards);

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1. Reason for decision/report and options

- 1.1 The Digital Infrastructure Work Plan (DWP) was adopted by the Council in February 2021 (Report No. DRR20/017). This report provides an update on progress of digital connectivity within the borough.
- 1.2 An update on the Digital Infrastructure Work Plan is provided to RR&H PDS bi-annually.

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2. **RECOMMENDATION(S)**

This report is to provide an update only.

**That Members of the Renewal, Recreation and Housing PDS:**

- 2.1 Review the content contained within the report, which sets out progress in relation to the delivery of the Digital Infrastructure Work Plan within the borough.

### Impact on Vulnerable Adults and Children

1. Summary of Impact: Improved digital infrastructure will create opportunities with regards to work, education and access to public services. This will be supported by ICT training for residents at the Council's libraries and resource shops.
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### Transformation Policy

1. Policy Status: Existing Policy
2. Making Bromley Even Better Priority:

(3) For people to make their homes in Bromley and for business, enterprise and the third sector to prosper.

(5) To manage our resources well, providing value for money, and efficient and effective services for Bromley's residents.

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### Financial

1. Cost of proposal: No Cost
  2. Ongoing costs: Not Applicable
  3. Budget head/performance centre: Culture and Regeneration – Economic Development
  4. Total current budget for this head: £127k
  5. Source of funding: Existing Revenue budget. Future investment will be sourced from grant funding
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### Personnel

1. Number of staff (*current and additional*): 1
  2. If from existing staff resources, number of staff hours: 28 p/w
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### Legal

1. Legal Requirement: None
  2. Call-in: Applicable
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### Procurement

1. Summary of Procurement Implications: None
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### Property

1. Summary of Property Implications: Any apparatus to be installed on Council owned property must be formalised.
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### Carbon Reduction and Social Value

1. Summary of Carbon Reduction/Sustainability Implications: Digital connectivity is a growing necessity and the proposals support digital inclusion.
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### Impact on the Local Economy

1. Summary of Local Economy Implications: A significant positive impact on the local economy is anticipated, due to the improved digital connectivity for our Council assets, residents, businesses & visitors; including additional digital infrastructure investment attracted to Bromley. These measures will serve to future-proof Bromley.

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### Impact on Health and Wellbeing

1. Summary of Health and Wellbeing Implications: Being digitally inclusive means barriers to digital access that can cause digital poverty and negatively impact health & well-being, are removed for all social groups.

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### Customer Impact

1. Estimated number of users or customers (*current and projected*): All persons in Bromley who use analogue landlines, internet or mobile products and services including in the workplace and at home.

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### Ward Councillor Views

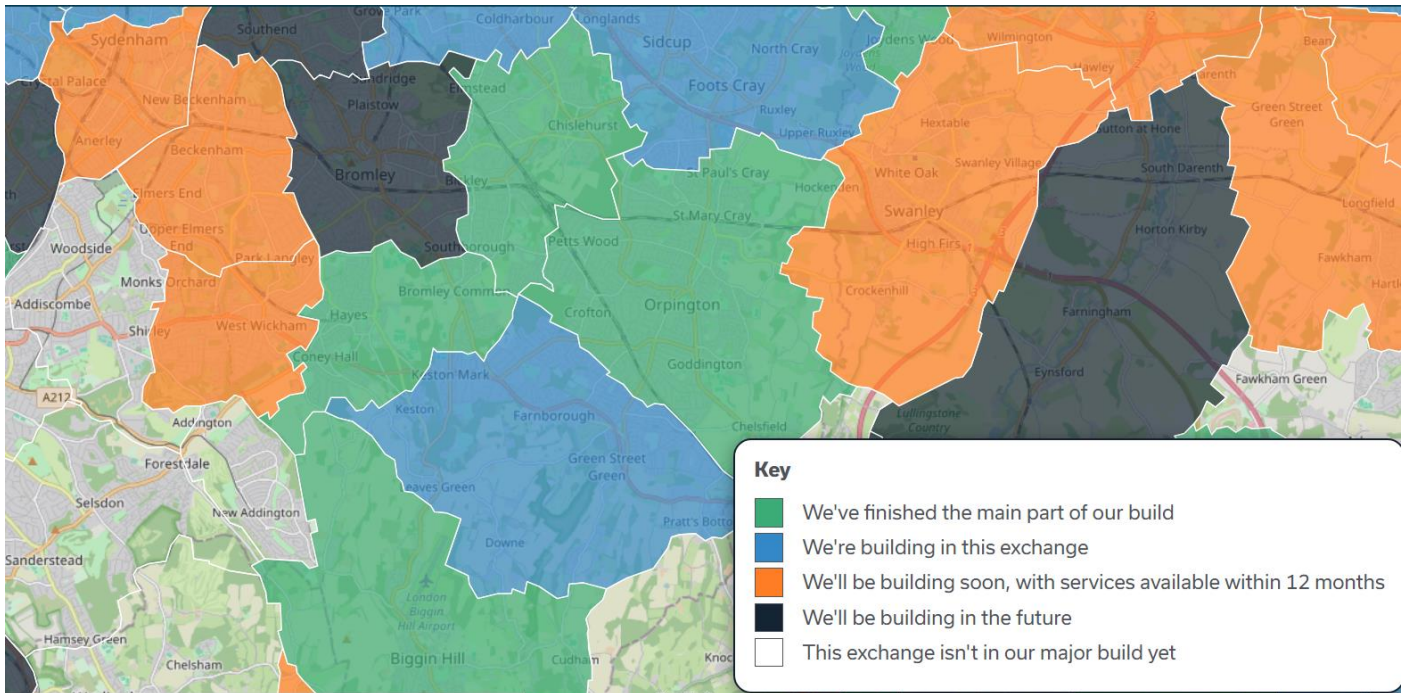
1. Have Ward Councillors been asked for comments? N/A
2. Summary of Ward Councillors comments: N/A

### 3. COMMENTARY

- 3.1 In February 2021, members of the Executive approved the Digital Infrastructure Work Plan (DIWP), which sets out a way to move forwards and improve Digital Connectivity within the borough in support of the government's aims for the benefit of Bromley residents and businesses.
- 3.2 Digital connectivity is critical for the ongoing social and economic prosperity of Bromley. Interventions continue to be made by the Council through the DIWP, in order to support the roll-out of gigabit capable connectivity (internet speeds of over 1 gigabit per second), notably through facilitating the development of:
- Full-fibre to the premises broadband (FTTP)
  - 4G and 5G mobile networks

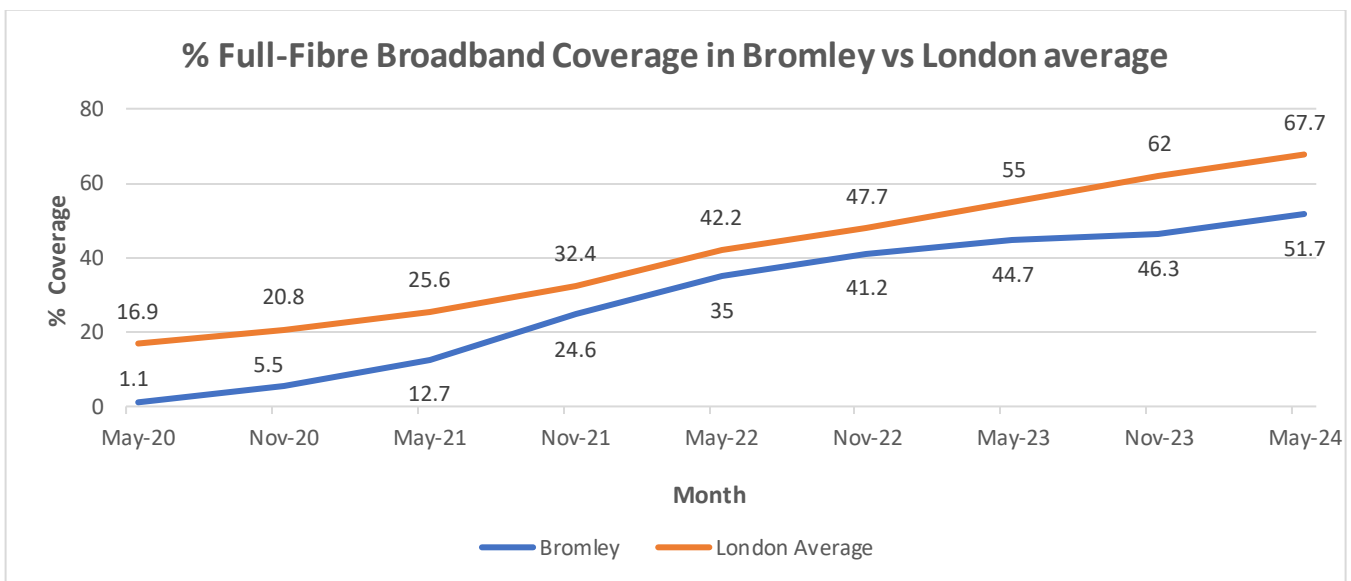
#### **Full-Fibre To The Premises Broadband (FTTP)**

- 3.3 *Openreach rollout* – The Council originally established a Memorandum of Understanding (MoU)/Digital Charter with Openreach in March 2021 to set out the commitments made by both parties. The MoU is designed to speed up the delivery of the Openreach full-fibre broadband to the premises (FTTP) deployment plans for their national 'Fibre First' roll out programme, which runs until 2026. This is achieved through Bromley Council committing to reducing barriers to development for Openreach (e.g by allowing an 'up-front' approach to permits, instead of dozens of individual applications to save Openreach significant time). The intention is that this increased efficiency will maximise the amount of investment delivered in Bromley, ensuring the most expansive FTTP network possible. The MoU also contains commitments from Openreach that they will work to minimise disruption when undergoing works in the borough and take measures to ensure residential amenity is maintained as far as possible. However, the Council has had limited influence over which telephone exchanges Openreach announce, or which premises are upgraded by these infrastructure providers as the roll out is commercially driven.
- 3.4 The benefits include the following:
- to increase the quantity of full fibre connections to premises across Bromley.
  - to demonstrate Bromley Council's forward thinking and collaborative approach to digital connectivity and show that Bromley is an inviting and hospitable host for digital infrastructure development.
  - to encourage ongoing development from Openreach as well as set an important precedent for prospective investors to secure additional investment from other providers.
- 3.5 The initial 5 local exchanges announced by Openreach in their 'Fibre First' commercial roll-out (i.e. Farnborough, Orpington, Biggin Hill, Chislehurst and Hayes Common) have now generally been upgraded to full-fibre. More recent Openreach rollout programme plans announced in December 2023 (see map below), include upgrades to the remaining 4 local exchanges (ie. Bromley Central, Beckenham, Sydenham and West Wickham). Almost all of these latest exchanges are anticipated to be completed within the current year.



3.6 The rate of increase in full-fibre broadband coverage across the borough over the past 6 months has increased to match the average rates of increase experienced across London (albeit there remains a gap behind the average coverage across London). ThinkBroadband data in the graph below, shows full-fibre broadband coverage across the borough is almost **52%**, compared with the **68%** average coverage across London. The contribution by Openreach is 46% and so it continues to provide the majority of the coverage in the borough.

3.7 However, the other alternative digital infrastructure network providers/Altnet providers (e.g Community Fibre) have also made some additional impact, which has seen their coverage across the borough almost double to **25%** during the past 6 months (although much of this is due to overbuild). In general, the combined contribution from these Altnet providers across the wider London area is over **53%**, which is over half of the full-fibre coverage.



Source: ThinkBroadband

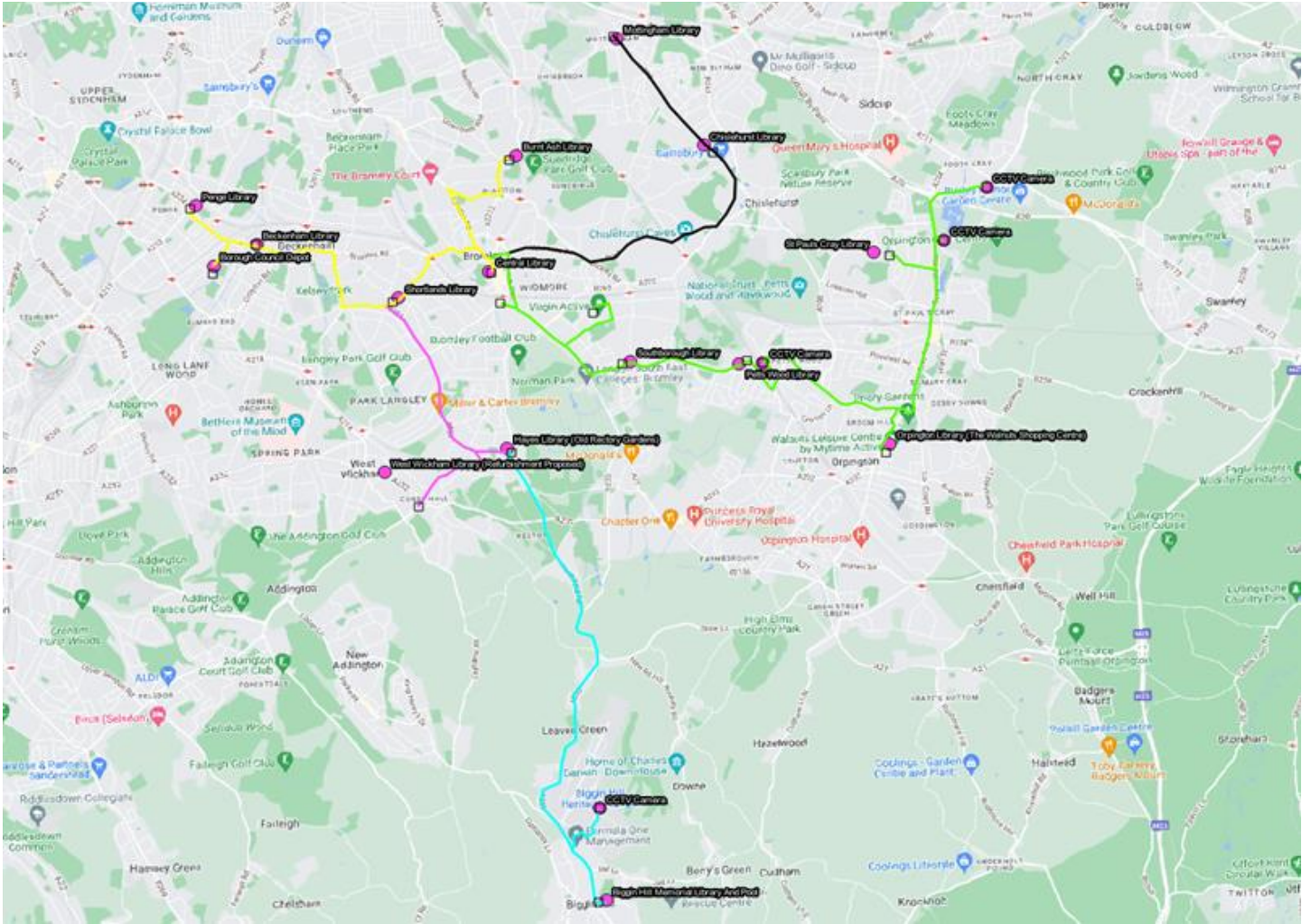
- 3.8 *Community Fibre rollout* - Community Fibre had originally proposed to upgrade approximately 50,000 single-dwelling units/SDUs (houses) in key areas across Bromley, during the initial year of their roll out programme. However, following their upgrade of over **28,000** premises across the borough last year; this roll out programme has been suspended until further notice (due to a change in the organisation's strategic direction. Community Fibre is now focussing on customer acquisition on their existing network, instead of the expansion of their network. This decision was mainly due to increased build costs (other Altnet providers such as Hyperoptic are also in a similar position). Nevertheless, the additional full-fibre broadband infrastructure supplied in the borough by Community Fibre has provided additional capacity; including a wider range of options for ISP/digital services locally.
- 3.9 Council Officers are also continuing to engage and monitor the situation with other digital infrastructure providers/Altnets to identify further investment opportunities in digital infrastructure.

### **Strategic Infrastructure Fund (SIF)**

- 3.10 A grant valued at over £937k was awarded to the Council through TfL, in order to deploy a new full-fibre (dark-fibre) network to connect **21** Bromley Council sites (includes 14 libraries, 2 depots, 4 new & existing CCTV sites, along with the new Civic Centre). Boldyn Networks & ITS (Tfl contractors) will also provide added value by commercialising the additional full-fibre capacity and passive infrastructure deployed under this project. Hence, it will help to stimulate further commercial investment to increase the coverage for residents or businesses, as well as improving the general full-fibre footprint across the borough to address gaps in connectivity at key or strategic locations.
- 3.11 Specifically, Boldyn Networks & ITS will:
- connect the sites via 50km of additional new dark-fibre network infrastructure by December 2024,
  - include capacity for extra connections by public & private sector
  - extend connectivity to key economic growth/strategic areas (e.g Biggin Hill and Cray Valley)
  - provide £450k additional inward investment/match funding to commercialise the fibre by connecting businesses & residents.
  - identify suitable ISPs, or existing service/channel partners to encourage and promote commercial take-up of services.
  - provide additional inter-connectivity to existing ITS networks to the west of the borough in Lewisham and the east in Bexley. This will ensure resilience and diversity which will allow the 500 ISPs that are ITS wholesale customers to serve businesses in Bromley using the new fibre network
- 3.12 The proposed dark fibre network offered by Boldyn/ITS is effectively a 'star' topology as shown on the map below. The initial phase is coloured in green. The second phase, in yellow and the pink and black lines represent phase 3 and 4. The final phase, in light blue, will be the last phase, connecting the two Biggin Hill sites.

ITS Fibre Topology (to reach Bromley's site list)





3.13 The funding agreement with TfL was signed in January 2024. Further to this agreement, an initial kick-off project management meeting was held in February 2024 with stakeholders (including Boldyn, ITS and representatives from relevant Council service teams) with additional weekly check-in meetings scheduled thereafter on an on-going basis.

3.14 The Project Initiation Documentation (PID) highlighted various activities and stages of the project. The initial high-level deployment plan indicated an overall 10-month project delivery period, commencing from the contract signature in January 2024 and ending in October 2024. However, the completion date has now been postponed until November 2024. This is partly due to delays experienced during the planning stage. In particular, there was additional research conducted on the feasibility of the re-assignment of the library head-end site from Central library to Petts Wood library (with the aim of future-proofing the new network against the anticipated relocation of the Central Library to the ex-Top Shop high street unit in 2026). The re-assignment also required a formal change management process, which added to the delay. However, the identification of this option was beneficial overall, since it offers a more permanent site solution in Petts Wood and enables a significant cost-saving over the planned alternative head-end site proposed by Boldyn/ITS at Orpington library.

3.15 The establishment of the new Civic Centre server room is reported by the Digital/IT team to be proceeding as planned and well ahead of the December 2024 deadline (after which point there would be an additional cost of £50k incurred directly by the Council for the fibre connection). The CCTV team are currently in negotiations with the existing contractor (Tyco) to erect the new CCTV lamp columns, although it has been agreed by our CCTV team to deliver the new CCTV dark fibre to the curtilage, as necessary.

- 3.16 A pre-survey questionnaire was completed for all 21 sites and this was submitted to TfL by the Council, prior to commencement of the project. All the necessary site surveys, except two, have been conducted and the Site Specific Risk & Method Statements (SSRAMS); along with wayleave agreements are currently being prepared to enable the build work to commence at applicable sites. Negotiations relating to these approvals and agreements are currently taking place between Boldyn/ITS and the Council's Property/Estates Legal team, including the Facilities Management team. Additional input is being provided from other relevant stakeholders (e.g Mytime Active, Libraries & Repairs Programme, Digital/IT, CCTV, Depots teams etc).
- 3.17 The preferred format for wayleaves is a simpler master/multi-site wayleave arrangement, since most sites are owned by the Council (except in a couple of cases where there may additional considerations for 3<sup>rd</sup> party landlords or leaseholders involved). The nature of the wayleave agreements agreed will also determine how quickly the build work is able to proceed. The standard short form wayleave will be attached to the above SSRAMS and this will require less input from a legal/cost perspective and will not necessitate any further approval from the Council's Executive Committee (in accordance with The Council's Property Scheme of delegation). Priority has been placed on establishing these SSRAMS and wayleaves, to avoid any further impact on the project timelines. In the meantime, the external build work is continuing on the network spine, including the fibre ducting required for the 50km dark-fibre network.
- 3.18 An End User Licence Agreement (EULA) and Maintenance agreement with Boldyn is also being finalised. It will include a side-letter, which incorporates the terms of the payment (up to £50k) to Boldyn, in the unlikely event of a delay to the new Civic Centre beyond December 2024.

#### **4G & 5G Mobile Networks – Small Cells on Lamp Columns Infrastructure**

- 3.19 Mobile network operators rent space on council assets such as lamp columns to host 4G & 5G infrastructure such as small cells, which increase capacity in a mobile network. The Department for Digital, Culture, Media and Sport (DCMS) previously published a Digital Infrastructure Toolkit, containing guidance and templates to assist local authorities to best manage the roll out of 4G & 5G infrastructure by working with operators and infrastructure providers. Bromley Council was one of the first local authorities to adopt the DCMS Digital Infrastructure toolkit, which was adapted to Bromley's context. This contractually and procedurally standardized arrangement aims to:
- describe the engagement process between operator and the Council
  - provide guidance to operators seeking to host 4G/5G cells on Bromley Council assets
  - provide standard financial terms for the use of our assets
  - set out the technical, legal, commercial requirements from the council.
- 3.20 The Council has signed 4 agreements with mobile infrastructure providers (Freshwave, Cellnex, BT/EE and Ontix). Freshwave have deployed over 27 small cells across town centres in Bromley (i.e. Bromley Town Centre, Penge, Orpington and Beckenham) and this has increased coverage and capacity, along with the generation of **£23,400** (including recurring annual income from rental of spare capacity on lamp columns) for the Council so far. The deployment is totally commercially driven and relies on the demand expressed by the MNOs to mobile small cell infrastructure providers. Nevertheless, additional demand and infrastructure deployment is anticipated in future.

#### **4G & 5G Mobile Networks – Macro Cells on Masts & Towers Infrastructure**

- 3.21 Following their initial engagement with the Council Economic Development team and the pre-application advice provided; planning approval was granted to Cellnex UK in April 2023 to enable the erection of 2 new masts in order to enhance 4G/5G mobile network connectivity in



the Anerley/Penge area. The new infrastructure is required to improve 4G/5G mobile connectivity for both mobile phone users on Network Rail mainline trains (e.g London to Brighton Mainline railway), as well as residents and businesses in the surrounding area. Both sites are being progressed towards the build stage, following earlier negotiations with the landowners. However, one of the sites is currently under review to determine whether it is still required for the project.

3.22 The latest Ofcom mobile coverage data for Bromley (up to January 2024) shows 5G mobile network coverage has continued to increase. The 5G mobile network coverage by all mobile network operators (MNOs) is now at **64.1%** (previously 22.7% in January 2023) of premises (5G mobile network coverage of premises by at least 1 MNO is at 99.9%). This is well above the national figures, which show 5G mobile network coverage of premises by all MNOs at approximately **22%** (5G mobile network coverage of premises by at least 1 MNO is at 90%).

#### **4. IMPACT ON VULNERABLE ADULTS AND CHILDREN**

- 4.1 Improving digital connectivity throughout the borough will increase the availability of online services to a wider audience, including those vulnerable adults and children.
- 4.2 Improving the reliability and speed of broadband connections, particularly in wards where there are indices of deprivation including to public services, will support better access to online services. This will be supported by ICT training for residents at the Council's libraries and community support centres. Full-fibre digital connectivity also helps to facilitate 'Digital Switchover' from analogue landlines to support Voice and Telecare services for households.

#### **5. TRANSFORMATION/POLICY IMPLICATIONS**

- 5.1 Making Bromley Even Better Priorities supported include: (i) For children and young People to grow up, thrive and have the best life chances in families who flourish and are happy to call Bromley home; (ii) For adults and older people to enjoy fulfilled and successful lives in Bromley, ageing well, retaining independence and making choices; (iii) For people to make their homes in Bromley and for business, enterprise and the third sector to prosper; (iv) For residents to live responsibly and prosper in a safe, clean and green environment great for today and a sustainable future; (v) To manage our resources well, providing value for money, and efficient and effective services for Bromley's residents.

#### **6. FINANCIAL IMPLICATIONS**

- 6.1 Members are asked to review the content contained within the report, which sets out progress in relation to the delivery of the Digital Infrastructure Work Plan within the borough.
- 6.2 There are no direct financial implications arising from this report, any costs associated with the programme will be contained within the existing revenue budget.

#### **7. LEGAL IMPLICATIONS**

- 7.1 Members of the Renewal, Recreation and Housing PDS are requested to review this update only report, which sets out progress in relation to the delivery of the Digital Infrastructure Work Plan within the borough of Bromley. In accordance with Part 4 of the Constitution, the Terms of Reference of this Committee includes, "The development of the Council's plans within the policy framework that make up this portfolio and exploring whether such plans are being achieved effectively."

#### **8. PROPERTY IMPLICATIONS**

- 8.1 All necessary formal consents\approvals will need to be in place prior to any apparatus being installed on Council owned property. As well as the apparatus itself, the consents\approvals will also need to cover access for the purposes of the installation and future maintenance. Property records to be formally updated.

## **9. CARBON REDUCTION/SOCIAL VALUE IMPLICATIONS**

- 9.1 Digital connectivity is a growing necessity and the proposals support digital inclusion. With better access to high speed, reliable broadband or mobile connections; residents and businesses can access public/Council services more conveniently/efficiently or purchase goods online at a lower cost. People can work from home, reducing the necessity for travel and commuting to minimise their carbon footprint. Businesses can grow, become more productive and make goods available online. The improved digital infrastructure will also form a key component of the national 'Digital Switchover' programme, to enable local residents, workers and vulnerable individuals to use services such as Voice over IP (VOIP) or Telecare services (for vulnerable households) via full-fibre digital broadband, in the absence of analogue landlines. It will also support any future developments to improve the management of Council services such as environmental monitoring for air quality, flooding, pedestrian flow or parking spaces.

## **10. IMPACT ON THE LOCAL ECONOMY**

- 10.1 A significant positive impact on the local economy is anticipated, due to the improved digital connectivity for residents, businesses and visitors; including additional digital infrastructure investment attracted to Bromley. These measures will serve to future-proof Bromley; since a healthy economy is becoming increasingly hinged upon digital infrastructure that enables businesses or residents to access fast, reliable and high-capacity internet, which facilitates increased productivity, alongside a wider range of services/applications.
- 10.2 The national 'Digital Switchover' programme is also a key driver; which emphasises the need for premises to have alternative full-fibre digital broadband connections/solutions available as a result of the switchover from the analogue landlines on the Public Switched Telephone Network (PSTN). Moreover, research has shown that access to affordable gigabit capable connections could see SME productivity increase by 7-10%. Federation of Small Businesses (FSB) found that 94% of small business owners rate a reliable broadband connection as critical to the success of their business. With house prices already affected by connections to higher broadband speeds (and increased agile/home-working); it is expected that demand for faster connections will affect where people choose to live and work, or where businesses/developers choose to invest. Mobile broadband is generally associated with positive impacts, such as higher GDP, along with increased employment.

## **11. IMPACT ON HEALTH AND WELLBEING**

- 11.1 Digital connectivity is a growing necessity, with better access to high speed and reliable broadband and mobile connections, residents can access public services more conveniently and purchase goods online at a lower cost. People can work from home, reducing the necessity for travel and commuting; business can grow, become more productive and make goods available online. Improved connectivity is also linked to improved tourism, as people can find out more information about local places, share experiences on social media. With services (including the Council's) increasingly moving online, access to fast and reliable internet connections is a social issue as well as an economic one, with insufficient provision of infrastructure having potentially detrimental effects on individuals and households.
- 11.2 Being digitally inclusive means barriers to digital access are broken down for all social groups and access to use of information & communication technologies are experienced by all. This

includes access to civic participation, education, healthcare, skills, training and generally communicating with others. Greater digital connectivity allows for enhanced communication with potentially vulnerable, isolated and quarantining family and friends. Exclusion of any of these can cause significant and obvious social disadvantages, known as digital poverty. Official guidance from Ofcom has also been published clarifying the nature of the mobile technology in use and its compliance with guidelines on International Standards (which have also been endorsed by Public Health England).

## 12. CUSTOMER IMPACT

12.1 All persons in Bromley who use internet or mobile products and services including in the workplace and at home

<b>Non-Applicable Headings:</b>	Personnel Implications; Procurement Implications; Ward Councillor Views
Background Documents: (Access via Contact Officer)	Digital Infrastructure Work Plan (Report No. DRR20/017) - Tuesday, 2nd February 2021 Digital Infrastructure: Strategic Investment Fund (Report No. HPR2023/033) - RRH Executive Committee, Wednesday, 5th July 2023