Report No. HPR2023/057	**London Borough of Bromley**
	PART ONE - PUBLIC

Decision Maker:	**RENEWAL, RECREATION AND HOUSING POLICY DEVELOPMENT AND SCRUTINY COMMITTEE**
Date:	**Wednesday 15 November 2023**
Decision Type:	Non-Urgent Non-Executive Non-Key
Title:	**DIGITAL INFRASTRUCTURE WORK PLAN UPDATE**
Contact Officer:	Ose Akpom, Economic Development Manager E-mail: ose.akpom@bromley.gov.uk
Chief Officer:	Director of Housing, Planning, Property and Regeneration
Ward:	All Wards

1.   Reason for decision/report and options

1.1   The Digital Infrastructure Work Plan (DIWP) 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 Committee quarterly.

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2.   RECOMMENDATION(S)

2.1   That Members of the Renewal, Recreation and Housing PDS review and note the update, 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.

Transformation Policy

1. Policy Status: Existing Policy
2. Making Bromley Even Better Priority *(delete as appropriate)*:
   (1) 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.
   (2) For adults and older people to enjoy fulfilled and successful lives in Bromley, ageing well, retaining independence and making choices.
   (3) For people to make their homes in Bromley and for business, enterprise and the third sector to prosper.
   (4) For residents to live responsibly and prosper in a safe, clean and green environment great for today and a sustainable future.
   (5) To manage our resources well, providing value for money, and efficient and effective services for Bromley's residents.

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

Personnel

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

Legal

1. Legal Requirement: None
2. Call-in: Not Applicable: No Executive decision.

Procurement

1. Summary of Procurement Implications: None

Property

1. Summary of Property Implications: Any apparatus to be installed on Council owned property must be formalised.

Carbon Reduction and Social Value

1. Summary of Carbon Reduction/Sustainability Implications: 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 support any future developments to improve the management of Council services such as libraries, environmental monitoring for air quality, flooding, pedestrian flow or parking spaces.

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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; so that access to use of information & communication technologies are experienced by all. This includes access to civic participation, education, healthcare, skills, training, home-working; as well as the purchase of goods conveniently online at a lower cost and generally communicating with others (particularly those who are vulnerable, isolated and quarantining family and friends).

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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? Not Applicable
2. Summary of Ward Councillors comments: N/A – This is an information only update on the approved Digital Infrastructure Work Plan.

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 majority of the 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 been upgraded to full-fibre. This has been expedited in Bromley, via the Council's Memorandum of Understanding (MOU) with Openreach. The remaining 4 local exchanges (ie. Bromley Central, Beckenham, Sydenham and West Wickham) have not been announced for upgrade by Openreach as yet.

3.4 The rate of increase in full-fibre coverage across the borough over the past 6 months is less than previously reported and the gap behind the average coverage across London, is beginning to widen once again; despite the significant initial progress made. The ThinkBroadband data in the graph below, illustrates this increasing gap (with full-fibre broadband coverage across the borough currently at over **46%,** compared with the **62%** average across London). Some key contributing factors include less ownership of social housing and multi-dwelling units (MDUs) by the Council, which restricts its ability to enter into master wayleave agreements with infrastructure providers. Hence, the borough has been primarily reliant on the Openreach full-fibre rollout; whilst most of the other boroughs are able to benefit from their wayleaves, due to social housing ownership, which also attracts alternative digital infrastructure network providers (e.g Community Fibre, Hyperoptic etc); who currently provide almost **48%** of the full-fibre broadband coverage on average across London (as compared with **14.5%** coverage in Bromley at present primarily due to overbuild).

% Full-Fibre Broadband Coverage in Bromley vs London average
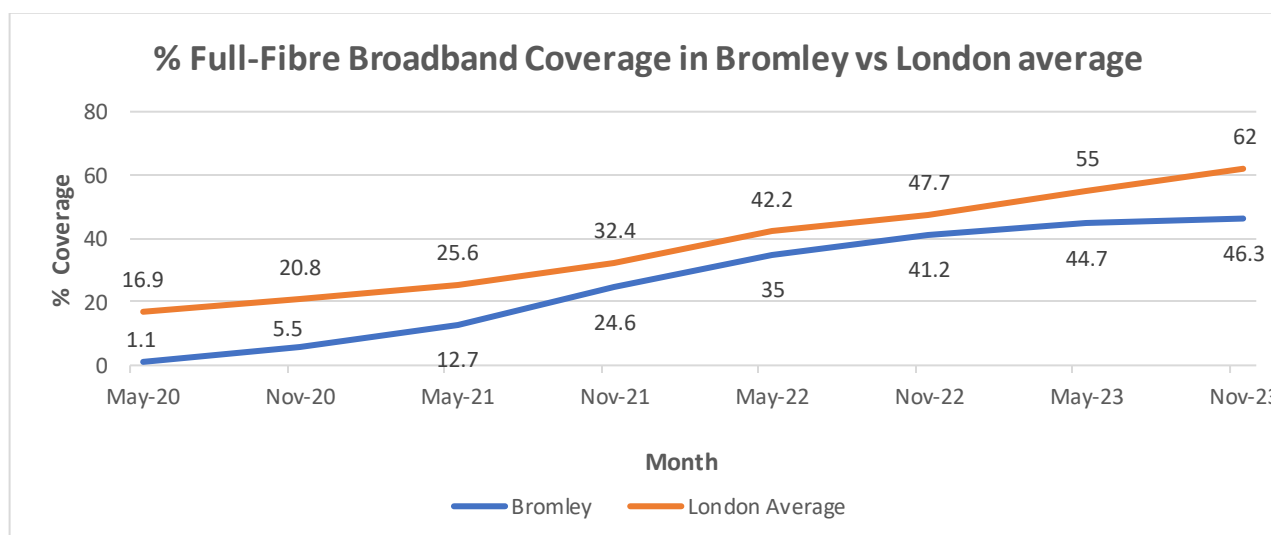
Source: ThinkBroadband

3.5 Clearly there has been a degree of 'market failure' in the nationwide programmes to address the lack of full-fibre/gigabit coverage across boroughs, despite proposed interventions such as Project Gigabit (which is continuing to explore investment in geographical 'not spots'). Additional plans are being implemented locally to provide alternative approaches and address the required connectivity across the Borough. Further investment in full-fibre broadband is being strongly encouraged to enable Bromley to keep pace with other London boroughs, as outlined below.

3.6 *Community Fibre rollout* - **Community Fibre** is presently upgrading approximately **50,000** single-dwelling units/SDUs (houses) in key areas across Bromley, during this initial year of their rollout programme. Almost **20,000** premises (14% of premises) were upgraded during the 4 months covering the period June – Sept 2023. The new digital infrastructure currently provides wider choice of options for available ISP/digital services; as a result of the presence of a new provider at these premises.

3.7 The Council is also facilitating further engagement between local social landlords/key stakeholders and these infrastructure providers to raise awareness. Recent examples include presentations delivered by Community Fibre to Bromley Federation of Housing Associations, as well as the facilitation of a digital workshop for local community organisations to help address the digital divide.

3.8 Council Officers are also continuing to engage with Community Fibre to identify locations and promote service take-up. The map below shows the sequence in which Community Fibre plan to build each area across Bromley. Key areas identified also overlap with locations where there are high concentrations of businesses, or residential premises; particularly around some town centres.
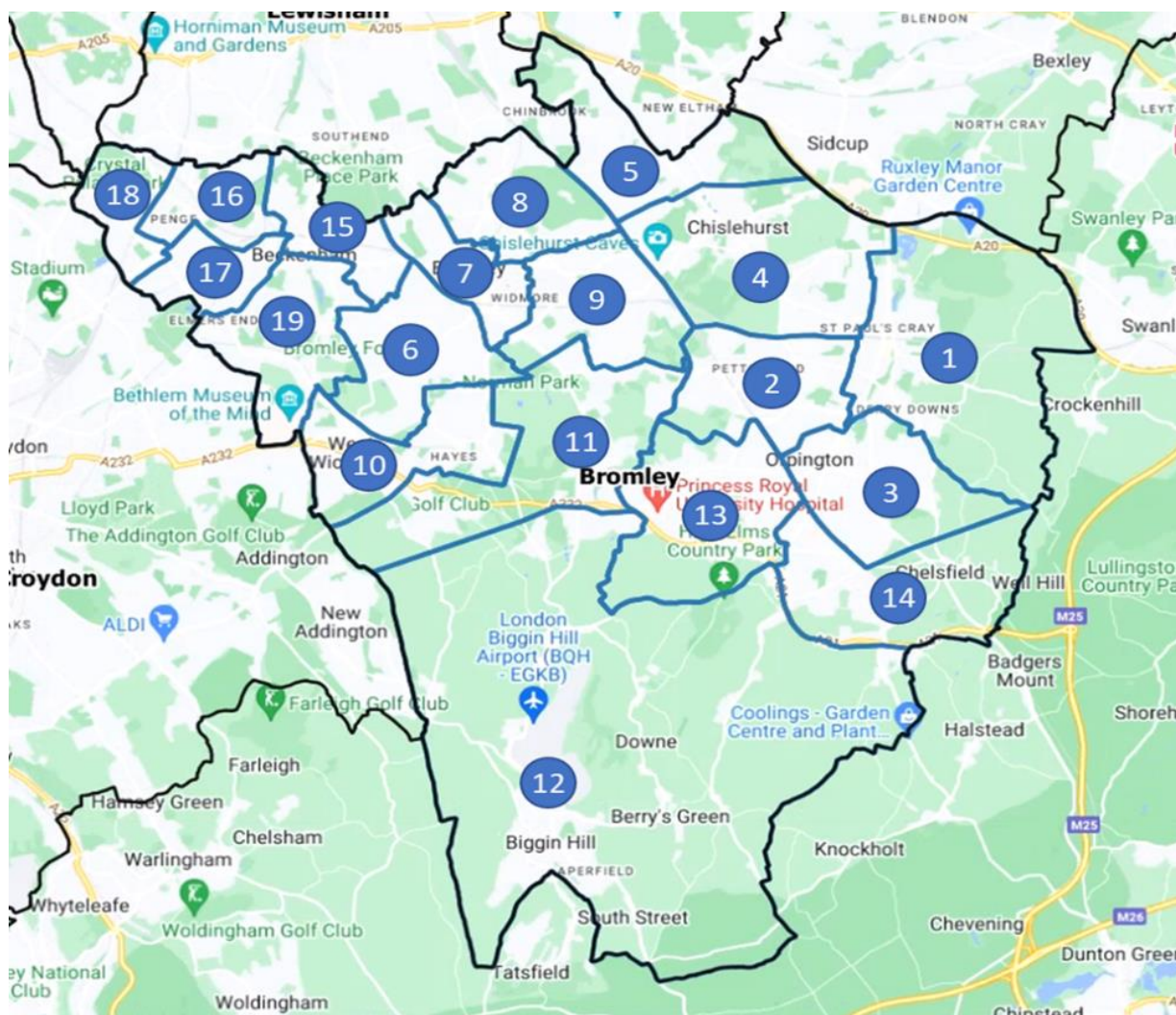
Strategic Infrastructure Fund (SIF)

3.9   To pick up pace in Bromley, officers proactively applied to the Strategic Infrastructure Fund (SIF) to increase dark fibre infrastructure across the borough. Details of this bid and the project can be found in report HPR2023/033. The Strategic Infrastructure Fund is a Works Funded by Grant (WFbG) programme administered by GLA/TfL through their commissioning and procurement framework, which is designed to enable investments of up to £1m in new digital infrastructure development across London boroughs. This opportunity was made available through our membership of Local London sub-regional partnership. The SIF/WFbG projects have the objective of developing a roadmap to achieving ubiquitous full fibre Gigabit capable infrastructure that serves public sector requirements. Doing this helps to stimulate provision to residential and business premises in the borough by leveraging inward investment from the telecoms industry. Dark fibre deployment through SIF must be anchored in a public site or risk breaching state aid/subsidy control rules. TfL and its main contractor, Boldyn Networks (formerly BAI Communications) have a Telecoms Commercialisation Project (TCP) contract for Boldyn to use TfL assets to build infrastructure

3.10   Approval was granted by the RRH Executive Committee on 5th July 2023, to progress with the use of up to £1m of SIF/WFbG funds, in order to deploy dark fibre using the communications infrastructure provider procured by GLA, via the TfL framework as recommended in the report. The Committee also approved the use of a one-off capital budget of £48,600 (funded from the Council's Growth Fund earmarked reserve) for connecting three new CCTV camera sites and one existing dark fibre network extension. The annual recurring £600 maintenance costs are covered by existing CCTV service budgets.

3.11   The Council submitted its SIF/WFbG proposal & specification to GLA/TfL (which was agreed by key senior stakeholders in the various service teams) to use the SIF funding to connect both new and existing Council sites in the borough that currently do not have access to full fibre broadband, by deploying new dark fibre infrastructure in strategic locations. The Council currently has a number of its assets on its own existing dark fibre network, accessing full fibre broadband through this existing network (albeit this existing network is for the sole use of the Council).

3.12   Boldyn presented a number of proposals submitted by its sub-contractors/partners (i.e ITS, Virgin Media Business and BT Plc) in response to the specification provided. Following further dialogue and negotiation between the parties, senior stakeholders across key Council service teams, approved the final option presented by Boldyn on behalf of ITS (with a total cost to the borough of £937,744). This was in order to address the full project requirements and progress with delivery.

3.13   Using SIF/WFbG funding, the Council will deploy new (separate to Council's) dark fibre across the borough; anchored at key sites (21 sites overall that primarily include 14 libraries, 4 CCTV sites and a waste re-cycling depot) and managed by Boldyn/ITS, with the potential to offer this dark fibre to the public sector. ITS will own and maintain the new infrastructure (ITS does not plan to use existing Council ducting). The provisions within the agreements will ensure that the Council has the right to use the new infrastructure initially over a 20-year term.

3.14   In addition, as part of the wider project objectives resulting from the SIF/WFbG award, Boldyn/ITS will provide additional inward investment/match funding (estimated at £450k); which will enable the extra capacity to support ISP/digital overlay services for commercial use by the residents and businesses. This includes free connection fees for around 120 businesses within 250m - 1.7km of the new dark-fibre network, over the initial 2 years (an estimated 4,000 potential businesses are passed by the new network infrastructure). Boldyn/ITS will stimulate

the new network and identify suitable ISPs, or existing service/channel partners (via various marketing activities) to encourage take-up of services.

3.15 The benefits of this grant funded project include:
- new full-fibre broadband connectivity at all 21 required buildings and CCTV cameras with over 50 km of new fibre infrastructure
- new full-fibre broadband connectivity to Bromley's 5 renewal areas (Bromley Common, Crystal Palace & Penge, Mottingham, Ravensbourne & Plaistow and the Cray Valley) and 3 economic growth/strategic areas (Bromley Town Centre, Crays Business Corridor and Biggin Hill Airport)
- project match funding/inward investment by ITS estimated at over £450k, with new full-fibre connectivity available to over 4,000 potential businesses and 350 public sector sites. This funding aims to address wider objectives by providing the opportunity to connect businesses within 250-400m of the new network for free, including those at the strategic locations (each connection will normally cost £1,500 per business)
- 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.
- a commitment to improved mobile connectivity across the borough by Boldyn, which includes signing up to Bromley's Open Access Agreement for use of its Highways/Streetscape assets to support existing arrangements with the four mobile network operators (MNOs) by using ITS fibre infrastructure.

3.16 The SIF proposal is in the final stages of dialogue. Delivery is anticipated to commence from late November 2023, following the signed agreements with TfL (grant in-kind agreement) and Boldyn (EULA and Maintenance agreements). The anticipated maximum delivery period is 10-months, and it should be noted that the Council cannot cause delays to the delivery of the dark fibre. Therefore, the re-location of the IT/CCTV server to the new Civic Centre site at Churchill Court must take place within the next ten months to enable the final CCTV connection. These plans involve an initial connection at the new Civic Centre site in preparation for the new IT/CCTV server room; which will then be followed by a re-visit to the new site (within a reasonable period amounting to 3 months after the anticipated 10-month build period to complete the final connection to the new IT/CCTV server).

3.17 Boldyn Networks will mobilise its sub-contractor, ITS by working closely with them to establish an effective engagement strategy and plan with the local authority, land/premise owners, plus highways agencies. Boldyn Networks and ITS will collaborate closely to define the project requirements, align the resourcing plan, as well as ensure effective communication/co-ordination throughout the project.

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

3.18 Bromley was one of the first local authorities to develop its own Bromley Digital Infrastructure Toolkit (which includes an Open Access agreement in line with the Digital Infrastructure Toolkit published by DCMS), in order to attract MNOs to improve mobile coverage in the borough. There are currently agreements between Bromley and 4 mobile small cell infrastructure providers (i.e Freshwave, Cellnex, BT/EE and Ontix). The deployment is totally commercially driven and relies on the demand expressed by the MNOs to mobile small cell infrastructure providers. Having these agreements in place with Bromley is attractive to MNOs, since it enables a faster process for the deployment of their mobile cells, once suitable locations have been identified.

3.19 Over 27 of the 4G/5G mobile small cells have been deployed so far by Freshwave, at key high street locations in 4 local town centres (i.e Bromley Town Centre, Penge, Orpington and

Beckenham). This has served to increase the coverage and capacity across town centres for mobile network operators (MNOs) such as Virgin Media/O2. It has also provided an additional income stream for the Council from the annual revenue from the rental of spare capacity on lamp columns. A total of £23,400 in income has been generated for the following from Freshwave so far:

- a one-off expression of interest fee of £3,100 in FY 2021-22 (i.e £1,700 project co-ordination fee plus £1,400 which is based on £100 per piece of apparatus/small cell initially proposed),
- a recurring annual income of £4,200 for the initial 14 cells in FY 2021-22 (i.e £300 for the 1st cell on an urban column site and £250 for the 2nd cell on an urban column site)
- a recurring annual income of £4,200 for the initial 14 cells in FY 2022-23
- a recurring annual income of £3,850 for the latest batch of 13 cells in FY 2022-23
- a recurring annual income of £4,200 for the initial 14 cells in FY 2023-24
- a recurring annual income of £3,850 for the latest batch of 13 cells in FY 2023-24

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

3.20 Cellnex UK are presently finalising the negotiations with landowners, prior to the build phase, in order to install 2 new masts within the Anerley/Penge area. Planning approval was granted in April 2023 to enable this new infrastructure, which 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. The Economic Development and Planning teams within the Council also helped to facilitate their engagement process, including support with their pre-applications.

3.21 The latest Ofcom mobile coverage data for Bromley (up to January 2023) shows 5G mobile network coverage by all mobile network operators (MNOs) at 22.7% of premises (5G mobile network coverage of premises by at least 1 MNO is at 97.2%). Nationally, the figures are lower; with 5G mobile network coverage of premises by all MNOs at approximately 17% (5G mobile network coverage of premises by at least 1 MNO is at 78%).

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 resource shops. 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 from this report.

7. LEGAL IMPLICATIONS

7.1 This report provides an update on progress of digital connectivity within the borough with regards to:

   i)   Fibre To The Premises Broadband (FTTP)
   ii)   4G & 5G Mobile Networks – Small Cells on Lamp Columns Infrastructure
   iii)   4G & 5G Mobile Networks – Macro Cells on Masts & Towers Infrastructure

   The background to this report is set out in Report No. DRR20/017.

7.2 Section 1 of the Localism Act 2011 provides local authorities with a general power of competence to do anything that individuals may generally do provided that action falls within the law (the general power of competence). This includes any action calculated to the be in the best interests of the Council's residents.

7.3 The terms and conditions of any agreements relating to fibre should be complied with. Should officers require any legal assistance with regard to any contractual documentation they should liaise with the legal department.

7.4 This report comes within the remit of the Renewal, Recreation and Housing Committee which includes:

   i.   Reviewing working with partner organisations and groups including local businesses, business support agencies, sub-regional and regional organisations

   ii. Receiving reports and making recommendations on performance monitoring of services falling within the remit of this portfolio which would include:

   a) town centre management and
   b) regeneration

8. PROCUREMENT IMPLICATIONS

8.1 No procurement action required at this time.

9. PROPERTY IMPLICATIONS

9.1 Any apparatus to be installed on Council owned property must be formalised. In the case of property owned and let by the Council, the terms of the lettings will need to be reviewed and where necessary the consent of the tenant also obtained. Responsibility for the ongoing repair of the equipment and possible eventual removal should be identified.

10. CARBON REDUCTION/SOCIAL VALUE IMPLICATIONS

10.1 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.

Detail here any environmental, social or economic implications that have been considered as part of this proposal. This section should consider requirements of the 2012 Public Services (Social Value) Act if procuring goods or services. Authors should detail how the recommendations in this report will lead to a positive impact in terms of the Council's Carbon Reduction ambitions.

11. IMPACT ON THE LOCAL ECONOMY

11.1 A significant positive impact on the local economy is anticipated, due to the improved digital connectivity for residents, businesses & 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. 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. Increased broadband speeds could add £17 billion to UK output by 2024.

12. IMPACT ON HEALTH AND WELLBEING

12.1 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. 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).

13. CUSTOMER IMPACT

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

Non-Applicable Headings:	Personnel 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