

Report subject	<b>Accelerating Gigabit Fibre</b>
Meeting date	27 July 2022
Status	Public Report
Executive summary	<p>Gigabit fibre is critical digital infrastructure, providing the connectivity backbone for many vital public, private and voluntary services and helping to power our businesses and local economy as well as supporting our Smart Place Programme. The provision of ubiquitous, high speed, affordable Gigabit connectivity is therefore now a priority for the Council. The Council's Big Plan states: <i>'We will invest in the physical and digital infrastructure of our coastal city region, to ensure that BCP has the best connectivity in the country'</i>.</p> <p>As well as many residents not having access to affordable broadband, leading to a 'digital divide', poor connectivity also has a significant impact upon local economic productivity, costing an estimated £150m per annum. Therefore, there is an urgent need for the Council to accelerate the deployment of affordable Gigabit fibre to almost every home and business across the whole BCP area.</p> <p>Following a recent open 'Request for Information' (RFI) exercise and the responses received from the telecommunications industry, it has been concluded that procuring a 'Neutral Host Operator' (NHO), to work together with the Council, represents the best prospect of delivering the digital connectivity that the area needs.</p> <p>In view of the above the following recommendation is made:</p>
Recommendations	<p><b>It is RECOMMENDED that:</b></p> <p><b>Cabinet give approval for the Smart Place Team, supported by Law and Governance and Strategic Procurement, to procure a Gigabit Fibre Neutral Host Operator.</b></p> <p><i>[Prior to the award of the NHO contract a further report will be brought back to Cabinet requesting authorisation to proceed to contract.]</i></p>
Reason for recommendations	<ol style="list-style-type: none"> <li>1. Helps to deliver significant economic and social benefits to the area.</li> <li>2. Helps to meet the Big Plan objective of BCP having the best connectivity in the country.</li> <li>3. Supports the Council's regeneration and place-shaping ambitions.</li> </ol>

	<ol style="list-style-type: none"> <li>4. Supports the Council's Smart Place programme.</li> <li>5. Supports the government's 'Levelling Up' missions particularly by helping to address the local 'digital divide' through more widely available and affordable broadband services.</li> <li>6. Encourages wider private sector investment into Gigabit fibre infrastructure and creates more competition in the Internet Server Provider (ISP) market.</li> <li>7. Is the most cost-effective solution for delivering the Council's Gigabit connectivity objectives whilst minimising the Council's financial commitment and commercial risks.</li> <li>8. Opens up the opportunity for income generation for existing ducting and fibre asset owners including the Council.</li> </ol>
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Portfolio Holder(s):	Councillor Philip Broadhead
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Wards	Council-wide
Classification	For Decision

## Background

1. Gigabit fibre is critical digital infrastructure, providing the connectivity backbone for many vital public, private and voluntary services and helping to power our businesses and local economy. Gigabit fibre is also a key foundation for many of the innovation aspects of the Smart Place programme, creating new business opportunities and the development of new technologies to help address many of the area's social and economic challenges.
2. The provision of ubiquitous, high speed, affordable Gigabit connectivity is therefore now a priority both within the Council's 'Big Plan' and the Smart Place Programme, helping to realise the Council's ambition of BCP having the best connectivity in the country.
3. It is currently estimated that there is an annual productivity deficit of £1bn within the BCP area with poor digital connectivity, fixed and mobile, costing the local economy around £150m per annum. Within the BCP area, in 2021 48% of homes and businesses in Bournemouth (West) had access to Gigabit connectivity. The figure for Bournemouth (East) is 18.5%. These figures compare favourably with the UK average of 15.1%. However, in 2021 the figure for Christchurch was only 10.5% and for Poole a very low 0.8%. By comparison, the average provision of Gigabit fibre in Europe (EU39) is 52.5%.
4. Whilst recognising the important contribution that the current Gigabit fibre provider market is making to the local area, in order to meet the Council's ambition of BCP having the best connectivity in the country there is an urgent need for the Council to encourage the acceleration of the deployment of Gigabit

fibre across the whole of the BCP area, ensuring that this is affordable to avoid any 'digital divide'.

## **Options Appraisal**

5. To understand how the Council could help to accelerate the provision of affordable Gigabit fibre the Smart Place Team, with support from the Council's Law & Governance and Strategic Procurement teams, conducted an open 'Request for Information' (RFI) exercise during April 2022. The purpose of the RFI exercise was to seek input directly from the telecommunications industry on the various possible models that could be employed to achieve the Council's Gigabit fibre ambition.
6. Responders to the RFI were asked to consider the following strategic objectives:
  - Gigabit fibre should be available across the whole of the BCP area.
  - Gigabit fibre needs to be rolled out at pace.
  - Gigabit fibre needs to be affordable to residents, businesses, public sector and the voluntary sector.
  - Create a market which attracts widescale investment in gigabit fibre.
7. As a result of the RFI exercise an Options Appraisal was carried out which considered five options:
  - (i) Do Nothing Option
  - (ii) Do Something Option 1 - Open Market Review/Government Investment
  - (iii) Do Something Option 2 - BCP Investment in further Gigabit network assets
  - (iv) Do Something Option 3 - Neutral Host Operator Model - Market-Led
  - (v) Do Something Option 4 - Neutral Host Operator Model - Working with BCP Council
8. Full details of the Options Appraisal are provided in Appendix 1

### ***Preferred Option:***

9. **The preferred option is Do Something Option 4 – Neutral Host Operator Model - Working with BCP Council**
10. An explanation of how this model works is provided within the 'Neutral Host Operator Model' section below.
11. With this preferred option the Council adopts a proactive approach to encourage a Neutral Host Operator (NHO) to establish itself early within the BCP area.
12. Whilst not currently common within the UK the NHO model is used successfully overseas in particular in Scandinavia where Sweden's fibre coverage is 95% compared to the UK's 36%. Responses to the RFI indicate that there is strong interest from telecommunication organisations in this model.
13. This option would require a formal open NHO procurement/selection process in order to comply with Subsidy Control legislation.
14. In this option the Council would typically:
  - endorse the NHO initiative, including licencing the Council brand in association (with safeguards in place).
  - provide finite supporting resources and expertise to help successfully establish the NHO within the BCP area.
  - offer all or part of its fibre assets for use by the NHO, under a separate commercial agreement, similar to other potential fibre owners.

15. The NHO would typically be responsible for:
- operating and managing the core network as a wholesale telecommunication provider.
  - negotiating access arrangements with other existing and future fibre owners within the BCP area.
  - attracting further investment to build out other parts of the Gigabit network across BCP.
  - creating the Internet Service Provider (ISP) marketplace and attracting ISPs to the platform.
  - acquiring broadband market share
16. This 'NHO Model - working with BCP Council' option is the preferred option for the following reasons:
- (i) This option has the greatest prospect of meeting the Council's Big Plan ambition of having the best digital connectivity in the country and delivering against its key Gigabit objectives as outlined in the RFI.
  - (ii) Financial commitment and commercial risks are minimised for the Council in meeting its Gigabit objectives.
  - (iii) Council involvement enables it to exercise greater influence over the delivery of its objectives.
  - (iv) Council involvement helps to strengthen and build the market for the NHO.
  - (v) Council involvement strengthens the Council's negotiating position in terms of income generation potential.
  - (vi) This option opens up the opportunity for existing asset owners to open up, share and monetise their assets, which in turn may reduce the pressure to dig up the highway for 'duplicate' duct runs.
  - (vii) The model has been successfully deployed elsewhere.
  - (viii) Responses to the RFI indicate that the establishment of an NHO would give rise to provision of new and innovative services and offerings such as affordable broadband in deprived areas.
  - (ix) Responses to the RFI indicate that there are companies willing and able to work with BCP to establish a NHO model, subject to due process.

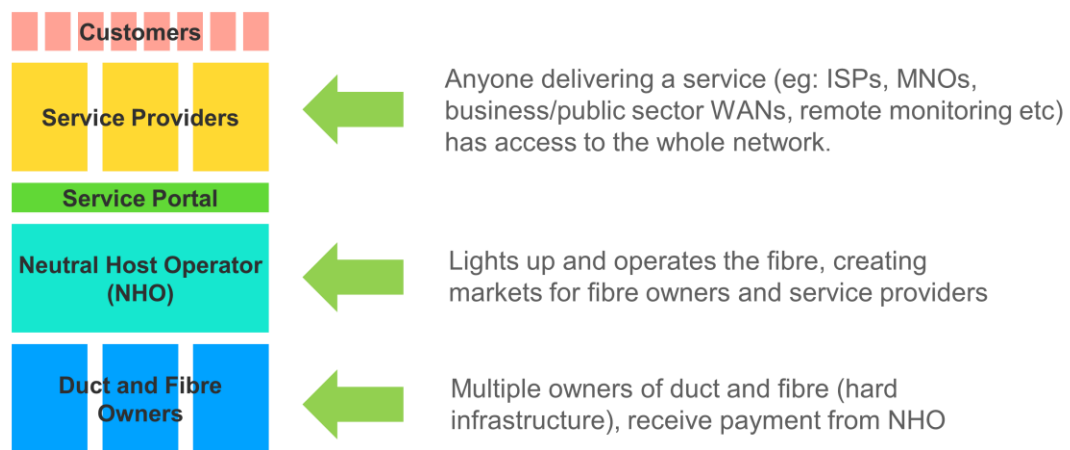
### **The Neutral Host Operator Model**

17. Traditional practice with the UK telecommunications market is that the organisation that funds, installs and owns fibre networks will either run services over the infrastructure itself or will work in partnership with specific partners to do so, typically internet service providers (ISPs). In contrast the NHO model decouples the physical fibre infrastructure from the services delivered upon it. The NHO, which manages and operates the network, provides a middle layer between the fibre owners and the ISPs running end-user services, in effect acting as a broker of the infrastructure.
18. The decoupling of the infrastructure from the services creates a wider market for fibre ownership beyond traditional telecom companies helping to encourage investment from non-telecom investors. The NHO model also lowers the barriers of entry to market for service providers. These service providers are not only providers of internet service (ISPs) but are those who require access to data networks to deliver a range of services such as mobile phone (5G) operators,

wireless ISPs, security and CCTV through to education and health services. By providing open access to the fibre and by being 'neutral' as to who owns it, the focus is on ensuring that the fibre is available irrespective of the owner's motive. This helps to ensure that services are available to solve the problems determined by the end users thereby creating an innovative, vibrant marketplace for service and solution providers.

19. The Neutral Host network would be based upon superior "peer-to-peer" architecture, giving the BCP Council area significant differentiation from other regions, making it more attractive to businesses and delivering on our Big Plan.
20. The model allows any party to own the physical elements (ducts and fibre) of a network, without the need to have any technical capabilities to operate or charge for its use. The NHO pays a fee directly to the duct and fibre owners. In addition, existing and new service providers can deliver their products over the network, by purchasing connectivity through the NHO, without worrying about who owns the fibre or how it is operated.
21. Table 1 below explains how a typical NHO model works:

**Table 1 – Typical Neutral Host Operator Model**



22. The network is operated and managed by the NHO. The peer-to-peer network provides symmetric upload and download speeds and enables many use cases such as telehealth, monitoring of vulnerable people, IoT sensor connectivity, school to pupil connectivity and 5G backhaul.
23. With the NHO model the Council can potentially buy connectivity for Council premises and assets at wholesale rates, greatly reducing costs for digitally enabled services.
24. Existing fibre owners in the region can potentially benefit as they can include their fibre within the Neutral Host network, giving them access to a larger customer base.

**Next Steps**

25. The next step is to procure the Neutral Host Operator (NHO). The Smart Place, Law and Governance and Strategic Procurement Teams will be working closely together to agree the most appropriate form of contract to secure a NHO, such as whether to use a licence and/or service agreement as well as the preferred procurement process to be followed. The form of contract will serve to minimise or remove any future liability on the Council in the event that the NHO fails to meet its obligations. Contract documents will then be drawn up typically setting out the various responsibilities of the NHO and the Council and specifying

specific outcomes, financial terms, timeframes and performance measures. An open competitive procurement process will then be conducted to select the most beneficial NHO.

26. Prior to the award of the NHO contract a further report will be brought back to Cabinet requesting authorisation to proceed to contract.
27. It is hoped that the procurement process can be completed within the next six to nine months.

### Summary of financial implications

28. The Table below summarises the financial implications of the proposed next step.

	<b>Additional Financial Cost</b>	<b>Financial Year</b>	<b>Comments</b>
<b>Procurement of Neutral Host Operator</b>	£0K	2022/23	Funding for the procurement process will be drawn down from the existing £277K provision within the 2022/23 budget for setting up the four key Smart Place work packages.

29. The selection of an NHO and the execution of this model places no additional direct financial obligation on the Council. The commercial risk of running the wholesale broadband network in BCP would sit wholly with the NHO and is not underwritten by the Council. Likewise, the Council will not be responsible and will not underwrite any investment returns of investors who choose to invest in fibre assets across the BCP region.
30. As with any other fibre owner within the BCP area should the Council choose to make its fibre assets available to the NHO there would be an expectation of a financial return.
31. Subject to agreement, by licencing its branding to the NHO there is the potential that a secondary income stream could be generated for the Council.

### Summary of legal and governance implications

32. The Council has considered the application of the Public Contract Regulations 2015, and Concession Contracts Regulations 2016 in relation to the procurement of the NHO and finds that these do not apply.
33. The Council has considered Section 111 Local Government Act 1972 (LGA 1972) for the purposes of procuring and contracting with a successful NHO appointed following a competitive tender exercise. The Council pursuant to Section 111 LGA 1972 is able to do anything that is calculated to facilitate, or is conducive or incidental to, the discharge of any of its functions, which includes the improvement of wellbeing and economic development of its area.
34. Furthermore, the Council pursuant to Section 1(1) of the Localism Act 2011 has the power to do anything that individuals generally may do, and which expressly includes the power to do something for the benefit of the authority, its area or persons resident or present in its area. The procurement of a Neutral Host Operator will be managed in accordance with the Councils Financial Regulations supported by the Council's Strategic Procurement Team.

35. The Council has considered the application of Subsidy (formerly referred to as State Aid) to the procurement of the NHO. Subsidy is defined as any advantage granted by public authorities through state resources on a selective basis to any organisations that could potentially distort competition and trade in the European Union (EU) and Northern Ireland. There will be no direct financial or in-kind subsidy and any risk of challenge in terms of unfair economic advantage or distortion in or harm to competition will be minimised by an open, competitive procurement process.
36. Under the NHO model the NHO would fulfil the role of telecoms operator and is subject to Ofcom rules and regulations. The Council does not become an operator.

### Summary of human resources implications

37. There will be the need to secure additional temporary resource from Strategic Procurement and from Law and Governance to assist with the procurement of the Neutral Host Operator. This resource will be funded from a previously agreed Smart Place budget.

### Summary of implications upon the Levelling Up agenda

38. Accelerating Gigabit fibre strongly supports government's Levelling Up agenda. (Levelling Up the United Kingdom: Executive Summary). In particular it supports the following Levelling Up 'Medium Term Missions':
  - a. Productivity: By 2030, pay, employment and productivity will have risen in every area of the UK,
  - b. Digital Connectivity: By 2030, the UK will have nationwide gigabit-capable broadband and 4G coverage, with 5G coverage for the majority of the population.
39. Accelerating Gigabit fibre will also indirectly support other government Levelling Up 'Medium Term Missions' relating to skills, health and well-being:
40. Locally, the Council has adopted the following 'Levelling Up' Goals with its three priority goals being 8 - Good health and well-being, 12 – Building homes and sustainable communities and 14 - Achieve equality through diversity & inclusion.



41. Accelerating Gigabit fibre will particularly support:

- Goal 8: Good Health and well-being
- Goal 9: Extending enterprise
- Goal 10: Closing the digital divide
- Goal 11: Infrastructure for opportunity
- Goal 12: Building homes & sustainable communities (sustainable communities' aspect)
- Goal 14 Achieve equality through diversity and inclusion

### **Summary of sustainability impact**

42. A Decision Impact Assessment has been created with recognition that if the recommendations in this report are approved, further work will be required to build sustainable resource into the whole life cycle of the project and to ensure that sustainable resource use is considered throughout the supply chain. The DIA has a 'low risk' outcome overall and is supported by Theme Advisors for Communities, Learning, Procurement, Consumption and Transport. The DIA Interim Report is included at Appendix 2.
43. Positive impacts only have been identified in the following areas: Climate Change and Energy; Communities and Culture; Economy; Health and Wellbeing; Learning and Skills; Natural Environment; Transport and Accessibility.
44. Waste and Resource Use is rated amber because we have not yet assessed whether the proposals will reduce water use and Sustainable Procurement is rated amber as there is further work to do to consider sustainable resource use within the whole project life cycle and supply chain.
45. The Sustainable Development Goals supported by the proposal are 1. No Poverty; 3. Good Health and Well Being; 4. Quality Education; 8. Decent Work and Economic Growth; 9. Industry, Innovation and Infrastructure; 10. Reduced Inequalities; 11. Sustainable Cities and Communities; 17. Partnerships for the Goals.

### **Summary of public health implications**

46. By improving the availability of high-speed, affordable Gigabit fibre, which underpins many critical healthcare services, it is expected the establishment of a Neutral Host Operator within the BCP Council area will have a major positive impact upon public health. Examples include enabling remote surgery appointments and earlier interventions. Better connectivity to individuals' homes will enable people to access greater support, including more contact with friends and family. Improved and affordable gigabit connectivity will accelerate the deployment of healthcare technology, such as assistive living devices, helping to keep people living independently in their own homes for longer, thereby reducing the demand upon healthcare and Council services. Public services will be able to move and share health data around more quickly and cost-effectively.

### **Summary of equality implications**

47. Equality implications are positive. The Smart Place programme will benefit low-income households in the area with numerous positive outcomes anticipated,



including increased access to skills, jobs and services, better access to information, targeting of services, and better access to digital connectivity.

48. There are also many positive implications for people with protected characteristics, particularly those who experience a greater level of digital exclusion such as people with disabilities or who are in older age groups. The COVID pandemic has highlighted the digital divide for children in low-income families with access to sufficient bandwidth, digital devices and skills impacting on their learning. The programme seeks to address these inequalities and to enable people with other protected characteristics and organisations supporting them to benefit from better access to information and to online services.
49. An Equality Impact Assessment: conversation screening tool (Form 1) has been produced at a programme level. The Equality Impact Assessment (EIA) form was completed predominantly based upon evidence collected from the two consultation exercises that have taken place.
50. The EIA conversation screening tool form was reviewed by the Equality Impact Assessment (EIA) Panel on 5th August 2021. The Panel did not find any issues that would contravene the Council's statutory equalities responsibilities.
51. The key finding from the panel was that as the EIA form had been based solely upon auditable evidence it had not captured the full potential and ambition of the Smart Place programme to have a significant beneficial impact upon all people including those with "protected characteristics". For this reason, the panel awarded the EIA 'Amber' status. The screening tool has since been enhanced to reflect these comments and is included at Appendix 3.

### **Summary of risk assessment**

52. A project level Risk Register for accelerating Gigabit fibre (NHO model), covering the key risks of stakeholder support; finance and funding; programme delivery and legal considerations has been completed. The Accelerating Gigabit Fibre Project Risk Register can be found in Appendix 4.

### **Background papers**

None

### **Appendices**

1. Detailed Options Appraisal
2. Accelerating Gigabit Fibre (NHO) Decision Impact Assessment Interim Report
3. Smart Place EIA Screening Tool
4. Accelerating Gigabit Fibre (NHO) Project Risk Register