

Executive Report

Ward(s) affected: Clandon and Horsley, Effingham, Holy Trinity, Merrow, and Tillingbourne

Report of Director of Environment

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Proposal for investment in Broadband for Surrey Hills Ltd. Community Benefit Society

Executive Summary

On 23 July 2018 the Department for Digital, Culture, Media & Sport (DCMS) published *The Future Telecoms Infrastructure Review* as part of its response for delivery of the Industrial Strategy. The *Review* details the changes that are needed to give the majority of the population access to 5G (*the fifth generation of mobile networks*) and to connect 15 million premises to full fibre broadband by 2025. Full fibre infrastructure is vital to underpin 5G coverage and the National Infrastructure Commission's 2018 *National Infrastructure Assessment* anticipates that the UK telecoms network should have replaced copper wire with full fibre by 2033.

This full-fibre ambition was anticipated in the Council's *Rural Economic Strategy 2017-2022*, which predicted that rapid changes in technology – in particular around 5G mobile communications pioneered in Guildford at the University of Surrey – will transform daily life and the way we work, learn, travel or spend time online for recreation, shopping or healthcare. Reflecting also the Council's Corporate Plan, delivery of the *Rural Economic Strategy's* Action Plan Priority **Infrastructure for Enterprise** has seen full-fibre broadband emerge as the enabling technology on which the other rural strategic priorities will depend.

The key feature of full-fibre broadband is the level of connectivity that it provides – that is, the capacity of the fibre itself and the data transmission speeds in both download and upload. The ideal capability is full symmetric fibre – where the down and up speeds match and provide at least 1Gigabit per second (1Gbps) in each direction.

The following proposal focuses on providing the Borough's rural communities with full symmetric fibre. This exceeds the DCMS ambition to provide "*next generation Fibre to the Premises (FTTP)*" as defined in *The Future Telecoms Infrastructure Review*.

The proposal is that the Council should invest an initial sum of £10,000 in Broadband for Surrey Hills Ltd. (B4SH), which is an important first step in an evolving local digital strategy with full fibre as the enabling technology for a range of applications, including

Guildford town centre WiFi and LoRa (Long-Range) networks and, of course, 5G. All will support the 'Internet of Things' (IoT). The Executive may wish to consider a higher investment of up to £50,000 in due course after the initial roll out in the Albury/Chilworth area and the first phase has been fully evaluated.

As well as working closely with the University of Surrey's 5G Innovation Centre, neighbouring Boroughs and Districts and Surrey County Council, we have contacted Network Rail as a potential delivery partner/provider to facilitate broadband access through its lineside ducts and crossing points along six different rail routes into Guildford.

Known locally as "BASH", Broadband for Surrey Hills Ltd. (www.gigupanddown.net) is modelled on Broadband for the Rural North (www.b4rn.org.uk) which was founded in Cumbria in 2011 and has since spawned off-shoots in other parts of England, including the Yorkshire Dales National Park Authority. The Park Authority has provided B4RN with loan funding for a number of specific fibre projects over many years. Repayment of the loans with interest has enabled investment in new community-led broadband projects. Key to B4RN's success has been the negotiation of free wayleaves with landowners.

Incorporation as a Community Benefit Society has already helped B4SH with its own wayleave negotiations, receiving active support from the Duke of Northumberland's Albury Estate. As joint managers of the public open access parts of the Albury Estate, Surrey County Council and Surrey Wildlife Trust have also been, together with Natural England, helpful parties in the wayleave discussions to date with local landowners.

The Future Telecoms Infrastructure Review states: "investment is key to improving consumer outcomes in terms of choice, service quality, innovation and price over the longer term." The deployment of full symmetric fibre to the premises by B4SH will realise all of these outcomes, offering the Council a leading role in facilitating broadband delivery and inspiring other Councils to add their support.

Attached as Appendix 1 is the Executive Summary from *The Future Telecoms Infrastructure Review* published by DCMS on 23 July 2018.

Recommendation to the Executive:

- (1) That the Council invests the initial sum of £10,000 in Broadband for Surrey Hills Ltd., as described in this report.
- (2) That the Council agrees, as a landowner, to provide free wayleaves where B4SH fibre crosses its land, as other landowners have done in support of their communities.

Reason for Recommendation:

This is an opportunity to support a community-led initiative having a mainly social benefit for those parts of the Borough that are currently poorly served by broadband connectivity. Full symmetric fibre broadband will hasten delivery of the Government's Industrial Strategy as set out in *The Future Telecoms Infrastructure Review*, create the conditions for the economic transformation of our local rural communities, and facilitate many of the Strategic Priority Objectives set out in the Action and Delivery Plans of the *Rural Economic Strategy 2017-2022*.

1. Purpose of Report

- 1.1 With its origins in the Council's first Rural Economic Strategy, the purpose of this report is to propose support for the development and delivery of a strategic approach to the roll-out of full fibre broadband, in line with the stated aspirations of the Enterprise M3 Local Enterprise Partnership, the Surrey Leaders' Board and the recently published DCMS *Future Telecoms Infrastructure Review*. At the same time, it will deliver a valuable new community service to Guildford's rural areas.

2. Strategic Priorities

- 2.1 To address delivery of the Government's Industrial Strategy, the National Infrastructure Commission published its *National Infrastructure Assessment* on 10 July 2018, which recommended the rollout of a national full fibre programme to cover all parts of the country by 2033. On 23 July, the DCMS published its 90-page *Future Telecoms Infrastructure Review*, the Executive Summary of which is attached as **Appendix 1**.
- 2.2 The *Rural Economic Strategy 2017-2022* addressed all strands of the Council's Corporate Plan, with Infrastructure for Enterprise having emerged as the priority that underpins the others. In terms of what type of infrastructure should be the priority, full fibre broadband will provide the level of connectivity required – meaning the capacity of the fibre itself and the data transmission speeds in both download and upload. The ideal capability is full symmetric fibre – where the down - and up - speeds match and provide at least 1Gigabit per second (1Gbps) in each direction. This hyper-fast speed of delivery is promised by Broadband for Surrey Hills Ltd. (www.gigupanddown.net), a new Community Benefit Society established for the specific purpose of reaching those rural communities that currently have next to nothing in terms of broadband connectivity. With some parts of our Borough still barely able to achieve 1 Megabit per second (1Mbps), this investment opportunity will have the potential to deliver a service 1,000 times faster and, in so doing, provide a valuable, future-proofed community resource that regenerates villages and rural businesses through enterprise and innovation.
- 2.3 The existing broadband provision through Superfast Surrey is a mixture of old and new technologies, typically using fibre from the telephone exchange to the street cabinets but with copper wire completing the lines to individual premises. The significantly slower speeds that are possible through copper wires means that commercial and residential users alike will, increasingly, be unable to cope with large file uploads as demand for Cloud access and "big data" flows increases. The *Future Telecoms Infrastructure Review* wants the majority of the population to have 5G coverage by 2025 and anticipates that the UK telecoms network should have replaced copper wire with full fibre by 2033.
- 2.4 To support delivery of the Government's Industrial Strategy the Department for Digital, Culture, Media and Sport has announced a number of funding initiatives over the past year, including:

- Local Full Fibre Networks (LFFN) programme
- 5G Testbeds and Trials programme
- Urban Connected Communities programme

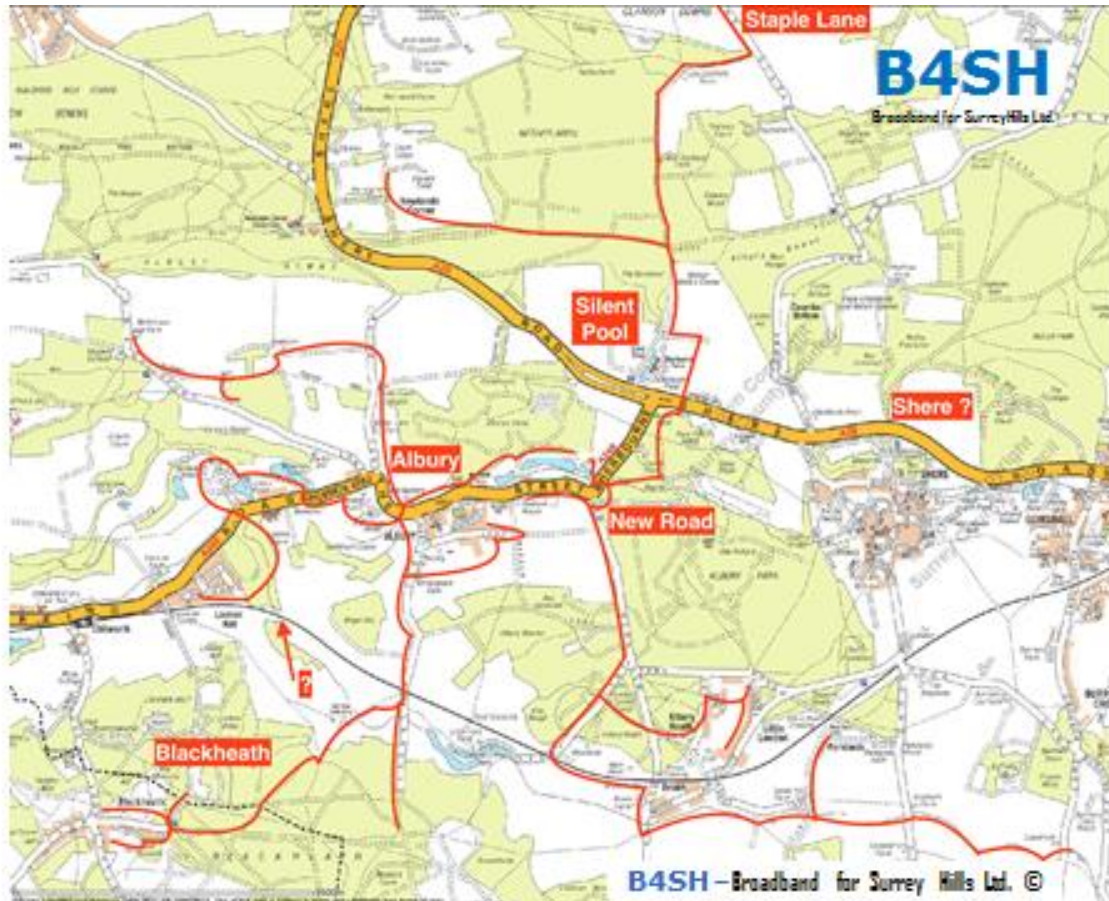
A Rural Connected Communities programme is anticipated in the coming weeks. Since these announcements – and the original discussion of this outline proposal at CMT (24 April) – the Government (DCMS) has published its visionary *Future Telecoms Infrastructure Review* that will shape delivery of all the above.

- 2.5 At the *Surrey Future Workshop* (21 June 2018) and the subsequent Surrey Leaders' Group, Surrey County Council's Deputy Leader, Cllr John Furey, highlighted the strategic importance of full fibre connectivity across Surrey and proposed its possible inclusion within a Business Rates Retention Year 2 bid.
- 2.6 Following Enterprise M3's (EM3) unsuccessful bid for 5G Testbeds and Trials/Urban Connected Communities funding, the Council is now discussing a potential partnership bid for LFFN funding. This will build on the CMT's recommendation (10 July 2018) that any partnership funding bid(s) should capitalise on Guildford's central geographical location in relation to both EM3 and SCC. Guildford's existing strong relationship with the University of Surrey's 5G Innovation Centre (5GIC) and our more recent approach to Network Rail adds further strategic value to help this specific proposal to invest in Broadband for Surrey Hills Ltd.

3. Background

- 3.1 The Council's first contact with Broadband for Surrey Hills (B4SH) was at an exploratory "Broadband Leaders' Workshop" arranged and hosted by the Economic Development team at the Council Offices in November 2017. The workshop achieved its intended purpose of identifying potential partners in a LFFN partnership bid. It also helped understanding of the relationship between full-fibre broadband and the 5G technologies now being developed at the University, with the 5GIC's Chief Operating Officer Keith Robson stating how vital it is. Prior to the meeting Mr Robson had not been aware of the progress made in Cumbria by Broadband for the Rural North. With investment support by the Council as proposed here, B4SH will be able to replicate the B4RN model locally.
- 3.2 Shortly after the Broadband Leaders' Workshop, the DCMS ran a workshop to explain the process for its Wave 2 round of funding. Because we felt it was important to undertake detailed research first into the technological options and explore which private and public partner organisations might be interested in a collaborative bid, we elected not to submit a Wave 2 application and to wait instead for the Wave 3/4 announcement.
- 3.3 A meeting with the Technical Director of B4SH in January 2018 was very helpful in defining the importance of full symmetric fibre in providing at least 1Gigabit per second (1Gbps) speed of transmission up as well as down. This actually goes beyond the Government's stated commitment to "full fibre" which omits any reference to symmetry. The B4SH proposal will thus deliver considerably faster broadband to rural parts of the Borough than is possible now through the current Superfast Surrey joint venture by BT Openreach and Surrey County Council. Not

only that, but as a community-led venture involving farmers, investors, landowners and volunteers much of the fibre would be laid more easily, more quickly and more cheaply using “soft-dig” mole plough techniques. B4SH has already identified a fibre infrastructure provider – Zayo Group – whose trunk route between London, Woking and Gatwick could feed the embryonic B4SH network from a connection node at Staple Lane in the North Downs above Albury:



- 3.4 Initially, it was assumed that the limit of potential GBC engagement with B4SH would be in facilitating free wayleaves where these crossed GBC land – or brokering contacts and relationships between other partner organisations like Surrey County Council and Network Rail. In the latter case, B4SH had some operational contacts but, as a result of our own approach to Network Rail, it was possible to engage at a more strategic level. This will potentially enable the use of lineside ducts as well as the more conventional request to cross the railway by overbridge, foot/level crossing, culvert, etc. *The Future Telecoms Infrastructure Review* now recommends access to passive infrastructure owned by other utilities, where appropriate. The *Review* states that assets from utilities such as power, gas, water, and local authorities should be easier to access, and available for both fixed and mobile use. This not only includes multi-utility ducts and poles, but also potentially pipes in the case of water, sewers and gas. (NB: In rural wooded areas, overhead fibre conveyance using poles introduces risks that are clearly avoided using mole-plough or pipework installation.)

- 3.5 Further dialogue with B4SH's Technical Director led to discussion of the B4RN business model in Cumbria which has, since its foundation in 2011, proved highly successful in other parts of rural northern England. This included the Yorkshire Dales National Park Authority, which provided investment in the form of loan funding to deliver a series of community broadband projects across the Park. These have included:
- Installation of superfast broadband (B4RN) for Ireby which connects to Masongill (£5,000)
 - Installation of superfast broadband (B4RN) for Barbon and Middleton (£9,990)
 - A B4RN communications node at Dent Primary School to connect Barbon to Dent (£11,300)
 - Air based community broadband system using wi-fi and antennae in Upper Raydale (£5,000)
 - Installation of superfast broadband (B4RN) for Chapel le Dale (£9,950)
 - Installation of superfast broadband (B4RN) for Casterton (£9,950)
 - Installation of superfast broadband (B4RN) for Thornton in Lonsdale (£10,000)
 - Installation of superfast broadband (B4RN) for Clapham (£10,000)
 - B4RN cabinet, superfast broadband, Sedbergh Town, Cautley & Dowbiggin (£20,000)
 - B4RN cabinet, superfast broadband, Sedbergh - Firbank, Howgill, Marthwaite & Killington (£10,000)
- 3.6 The precedent of public sector investment demonstrated here by the Park Authority enables the original investment to be repaid with interest (about 4%) and then re-invested into new projects. While GBC could adopt a similar approach, it could simply invest in B4SH directly, albeit without the advantages that are available to personal investors, such as HMRC's new Social Investment Tax Relief scheme (SITR).

4. Consultations

- 4.1 Because the Guildford Business Forum Rural Group has oversight of the delivery of the *Rural Economic Strategy 2017-2022*, including the Action and Delivery Plans which cover broadband infrastructure, it was possible early in 2018 to highlight the benefits of full fibre and to introduce B4SH as a potential local partner to take broadband into the Surrey Hills. The then Lead Councillors for Rural Economy, Countryside, Parks & Leisure and Economic Development, together with some local ward councillors with particular local knowledge, interest

and/or expertise have provided valuable input throughout the evolution of this proposal to work more closely and pro-actively with B4SH.

- 4.2 The Rural Economy Officer has also had close and regular contact with County officers (esp. Countryside Team) as well as informal contacts with some Parish Council representatives, Surrey Community Action, University of Surrey and the owners of Send Business Centre. Such contacts led to other, more formal, opportunities to emphasise the importance of full-fibre broadband, including at GBC's Innovation Strategy Board, the Guildford-Surrey Board and the *Surrey Future Workshop*.
- 4.3 Within the past month, publication of *The Future Telecoms Infrastructure Review* has re-defined the Government's vision for full fibre broadband connectivity and its ambition to deliver that to all premises by 2033. In addition to direct technical discussions with B4SH, the Economic Development team has consulted with a range of private and public sector partners through Enterprise M3 and DCMS contacts. Together these contacts are helping to inform our wider digital strategy and it is important that this proposal to support B4SH dovetails with that.
- 4.4 A related development following discussion with Planning Policy colleagues is the revised draft text at Section 4.5 of the Local Plan Policy D1: Place shaping. This now specifies infrastructure requirements for all new developments, including sufficient ducting space for future digital connectivity infrastructure, Fibre to the Premises (FTTP) where practical and the encouragement of further innovation and provision for 5G, Wi-Fi and other technologies.

5. Equality and Diversity Implications

- 5.1 No specific implications apply and no Equalities Impact Assessment screening has been undertaken although the proposal to work with and invest in B4SH will support the aims of the Public Sector Equality Duty (Equality Act 2010) with regard to the nine protected characteristics: age, disability, gender reassignment, pregnancy and maternity, race, religion or belief, sex and sexual orientation. It will also have due regard to the need to eliminate unlawful discrimination against someone because of their marriage or civil partnership status.

6. Financial Implications

- 6.1 Beyond the Council's current commitment to extend the original two-year employment contract of the Rural Economy Officer, the financial commitment will be dependent on the Council's assessment of the B4SH Business Plan and the related due diligence report, both of which can be viewed in the "Not for Publication" Item 9 elsewhere on this agenda.

7. Legal Implications

- 7.1 These will follow from the Council's decision on how to proceed with the proposed investment in B4SH i.e. whether as a company shareholder or as a project commissioner along similar lines to the Yorkshire Dales National Park Authority's relationship to Broadband for the Rural North.

- 7.2 The sum of investment in the scheme falls within the de minimis exemption under the rules on state aid, and further analysis will be conducted following a decision to proceed to ensure that the manner of investment or support is state aid compliant.
- 7.3 The provision of wayleaves for nil consideration is open to the Council where it is found that to do so would promote the environmental, social, or economic wellbeing of the area.

8. Human Resource Implications

- 8.1 No specific HR implications apply.

9. Summary of Options

- 9.1 Subject to the acceptability of the Broadband for Surrey Hills Ltd (B4SH) Business Plan and any specific recommendation(s) arising from the due diligence report (see “Not for Publication” Item 9 elsewhere on this agenda), the sole recommended option is to support the proposal that Guildford Borough Council should invest in B4SH on the following basis:
- £10,000 should be the initial level of investment, subject to the proviso that councillors may propose a higher sum to enable flexibility of approach, if considered appropriate and recommended by the Director of Finance.
 - Investment may be direct i.e. as a corporate shareholder, on the basis that the Business Plan will enable return on the investment at the rate forecast and within the timescale envisaged
 - Instead – or as well – investment may follow the Yorkshire Dales National Park Authority model that enabled Broadband for the Rural North (B4RN) to grow so successfully through its incremental project approach. This approach will also complement other Surrey Hills projects e.g. local community housing developments or potential farm/estate diversification proposals.
 - It is also recommended that the Council should, as a landowner, provide free wayleaves where B4SH fibre crosses its land, as other landowners have done in support of their local communities.

10. Conclusion

- 10.1 Government policy announcements promoting the accelerated roll-out of full-fibre broadband make this a timely opportunity for the Council to invest in a vital technology that will enable the regeneration of rural communities in and around our Borough. Other local Boroughs and Districts bordering the Surrey Hills AONB have expressed interest in working with B4SH.

11. Background Papers

The following weblinks will help understanding of the proposal:

- www.gigupanddown.net
- www.b4arn.org.uk

- www.gov.uk/government/news/forging-a-full-fibre-broadband-and-5g-future-for-all

12. Appendices

Appendix 1: Executive Summary – DCMS Future Telecoms Infrastructure Review (*Key points highlighted by Chris Stanton, Rural Economy Officer*)