

# Digital Innovation and Efficiency Committee

Item No.

<b>Report title:</b>	<b>The Final 5% Fibre Broadband Coverage</b>
<b>Date of meeting:</b>	<b>11 May 2018</b>
<b>Responsible Chief Officer:</b>	<b>Tom McCabe – Executive Director, Community and Environmental Services, Simon George – Executive Director, Finance and Commercial Services</b>

## **Strategic impact**

The successful Better Broadband for Norfolk Programme (BBfN) has dramatically improved the availability and performance of fixed internet connectivity across the county.

However, the programme, which funds Openreach to provide a “superfast” service is not available to all of Norfolk’s residents and businesses. There are currently 9% of Norfolk’s properties which are not yet connected and there are anticipated to be 5% still without superfast connectivity levels when the programme ends in April 2020.

Norfolk’s residents and businesses would also benefit from greater choice of provision, this choice could allow buyers to choose lower cost packages (perhaps without landlines) or higher speed connections.

## **Executive summary**

The focus of Norfolk County Council and its partners on broadband provision in the county has seen Superfast coverage improve from 42% in 2013 to 91% today, with firm plans to rise to at least 95% by April 2020.

The council is also pursuing government funded opportunities to increase availability of Ultrafast connectivity for businesses via fibre to the premise (FTTP).

Although there is competition in the marketplace as Openreach provides its infrastructure to over 100 Internet Service Providers (ISPs), there is a gap in provision and alternative options right now which the Council wishes to address by also providing support to alternatives options.

Various companies that offer alternatives (to Openreach and Virgin Media) network solutions have been identified as operating in Norfolk. These companies are anticipated to fill the remaining gaps in connectivity where the BBfN programme has not yet and may never provide an option. They are also important for Norfolk’s residents and businesses as they provide healthy competition and different package options in terms of price and speed. It should also be noted that the Government’s Better Broadband scheme offers vouchers (available through BBfN) for use with five of Norfolk’s local providers.

The committee is committed to working in partnership with alternative network providers to improve broadband coverage and options. The council recently met the main companies and organisations providing (or starting to provide) these services and this report covers what they provide and how the Council can assist them to provide the additional services that are needed.

## **Recommendations:**

- 1. That the committee note the availability of the alternative internet connectivity providers.**
- 2. To help raise awareness and provide publicity to support the providers.**
- 3. To work with the providers to help them obtain quick and cost-effective access to council owned assets to improve wireless broadband coverage as soon as possible.**
- 4. To work with the providers to help them obtain quick and cost-effective wayleaves for works involving council owned land and / or highways.**
- 5. To publish easy to consume intelligence which can be used by the suppliers to inform where they might best target their investments.**

## **1. The Background and Context**

- 1.1. The current superfast broadband coverage levels across Norfolk are at an all-time high of 91% but the committee is committed to delivering 100% coverage. The BBfN target is to deliver 95% coverage by April 2020 and so there will still be a final 5% gap in Openreach superfast availability when the programme ends. The Council is seeking further funding however and so it is possible that this figure may reduce further in time.

It should be noted that the alternative providers can offer higher speeds but are generally below superfast speeds, which will be most relevant to the 6% of Norfolk where coverage is below 10Mbps.

Norfolk county council wishes to use its assets and its influence to improve the consistency and quality of broadband coverage and choice across the county.

The committee leadership and officers have therefore held a series of meetings with a group of the main alternative (to Openreach and Virgin Media) broadband providers currently working to deliver services across the county. These meetings have been held to better understand the current position, the organisations' aspirations and what the Council can do to assist them to provide coverage where BBfN and Openreach cannot.

It should be noted that there is generally a financial rather than a technical reason why Openreach cannot connect more locations within the BBfN funding arrangements. This is particularly the case for remote located properties. The good news for residents and businesses in these locations is that there are some innovative organisations developing and maintaining alternative solutions for cost effective connectivity in Norfolk.

The following organisations were consulted as a representative group of suppliers:

- a. B4RN East Anglia ([www.b4rnorfolk.org.uk](http://www.b4rnorfolk.org.uk)) – community fibre
- b. Better Broadband for East Ruston ([www.bb4er.org.uk](http://www.bb4er.org.uk)) – community fibre
- c. ITSWisp / ThinkingWisp ([www.thinkingwisp.co.uk](http://www.thinkingwisp.co.uk)) – Fibre and Wireless

- d. Wispire ([www.wispire.co.uk](http://www.wispire.co.uk)) – Wireless broadband
- e. Rural Broadband ([www.ruralbroadband.co.uk](http://www.ruralbroadband.co.uk)) – 4G & Satellite broadband
- f. SimRush ([www.simrush.com](http://www.simrush.com)) – 4G broadband
- g. Symmetris ([www.symmetris.co.uk](http://www.symmetris.co.uk)) - Fibre and Wireless broadband
- h. Virgin ([www.virginmedia.com](http://www.virginmedia.com)) – Fibre broadband

The council wishes to thank these organisations for their engagement in these discussions and for their commitment to improving broadband connectivity across Norfolk County.

## **2. How BBfN and the Alternative Network Providers Work**

- 2.1. The superfast broadband provision from Openreach is generally provided through what's known as fibre to the cabinet. This involves digging trenches to the cabinet nearest to the target property, laying ducting and fibre in the trenches and then using existing copper cables to carry the signal from the cabinet to the property (this last leg dependence on copper is why speed at the property is highly dependent on the distance from the cabinet to the property). It should be noted that most BBfN commissioned cabinets are close enough to the cabinets to enable superfast speeds.

As the BBfN investment in Openreach infrastructure comes from public subsidy, the expenditure for the BBfN rollout is based on the cost to provide a specific fibre solution, divided by the number of properties that will benefit, to assess the value for money on a per property basis.

The companies that the committee engaged with provide connectivity in essentially three different ways which makes their solutions cost effective in some cases where Openreach is not. These are as follows:

- a. Fibre to the property made cost effective through a not for profit community group. Where available this approach provides a very high level of connection speed (upload and download) at a very low cost (1000mbps for approx. £30 a month). However, provision of this service is just getting started in Norfolk, though it has proven to be effective in Lancashire where B4RN (Broadband for Rural North) started. This approach is being led in South Norfolk by B4RN East Anglia (Broadband for Rural East Anglia) and another community group operating on a similar model called BB4ER (Better Broadband for East Ruston) operating North East of Norwich.
- b. Use of 4G LTE connectivity, boosted by a dedicated receiver located outdoors to provide stated 30-80mbps speeds. The data usage on these connections is capped but allowances have been increasing significantly. In some rare occasions Satellite connections may be used rather than 4G but these do tend to be more expensive and suffer from higher latency levels. SimRush and Ruralbroadband are currently using these technologies to provide connectivity into hundreds of locations across the county.
- c. Use of fixed wireless so that the final section of the broadband connection is provided by a point to point wireless connection. This well-established approach is already being used by hundreds of properties in Norfolk and has been provided by at least three main companies, including Symmetris (whose prices start at under £20 a month – though speed and data cap levels apply), ITSWisp/Thinking Wisp and WiSpire. It is notable that around

half of all the Churches in the country used for this sort of wireless broadband connectivity are located in Norfolk.

Although not really an alternative provider in terms of the 5% Virgin Media provide an alternative option across approximately 25% of the county in areas which Openreach would also consider financially viable.

There are other organisations operating in Norfolk providing alternative network connectivity. The council would be keen to hear from them to see if it may be able to assist them in providing their alternative broadband solutions.

There is a national funding scheme accessible through BBfN which offers a voucher arrangement for properties which have connection speeds below 2mbps (and where there are no planned improvements coming soon). The voucher scheme may be used to pay up to £400 towards the cost of capital and some installation costs for alternative connection service.

The Better Broadband for Norfolk website ([www.betterbroadbandnorfolk.co.uk](http://www.betterbroadbandnorfolk.co.uk)) has full details of the voucher scheme, including eligibility criteria and contact details for many of the companies listed in this report (and others). See <https://www.betterbroadbandnorfolk.co.uk/better-broadband-subsidy-scheme/> for more information.

## 2.2. **How NCC Can Help**

During the meetings with the representative alternative network providers, it was established that there are many practical ways that the Council can help. It is important to clarify that any support provided must be available to all providers and must comply with state aid regulations.

The proposed ways that NCC can assist are as follows:

- a. To help raise awareness and provide publicity to support the providers, this would be through links from the Council's website and an advice and guidance process which would establish what a consumer needs from their broadband service and listing what types of connectivity would be most suitable (along with links to all the relevant providers). This would be separate to the Better Broadband for Norfolk site, but would be complimentary.
- b. To work with the providers to help them obtain quick and cost-effective access to council owned assets to improve wireless broadband coverage. This would include a more direct route to the right contact in the council, with greater internal capacity and priority allocated to processing applications along with early introduction of code power based rates. In return the council would seek wider public benefits (where possible) and greater flexibilities to allow relocation of masts, in future where required.
- c. To work with the providers to help them obtain quick and cost-effective wayleaves for works involving council owned land and / or highways. As with (b) above this would be a streamlined process which recognises the community and economic development benefits in line with members stated aspiration to provide 100% high speed broadband coverage.
- d. To publish easy to consume intelligence which can be used by the suppliers to inform where they might best target their investments. This would

include datasets in machine readable formats that could be used to assess the market opportunity along with access to mapping and planning information. It should be noted that the BBfN site already includes as much information as we are able to provide regarding when and where BBfN will provide coverage.

### **3. Financial Implications**

- 3.1. Considering community benefits in relation to pricing of wayleaves is not new for the authority, though factoring in broadband connectivity options could reduce income. This would be considered on a case by case basis when setting fee levels in line with members stated aspiration to achieve 100% superfast availability.

### **4. Issues, risks and innovation**

- 4.1. There are no specific risks arising because of this report, but the proposals would be likely to improve broadband coverage and choices.

### **Officer Contact**

If you have any questions about matters contained in this paper or want to see copies of any assessments, e.g. equality impact assessment, please get in touch with:

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