Subject: Telecoms and fibre broadband improvements in Great Yarmouth Borough

Report to: Economic Development Committee   3 June 2019

Report by: Adam Nicholls, Head of Planning and Growth

SUBJECT MATTER
Telecoms and fibre broadband improvements in Great Yarmouth Borough

RECOMMENDATIONS
That Economic Development Committee:

  i)   **Endorses and supports the progress and approach set out in this report and expresses views on the potential prioritisation of sites for the rollout of ultrafast broadband; and**

  ii)   **Asks officers to prepare a separate report on the opportunities that the rollout of ultrafast fibre broadband to about 48 public sector sites will have for the Borough's residents, businesses and visitors**

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1   BACKGROUND

1.1   High-speed (or super-fast, or fibre) broadband access and the availability of (especially) 4G mobile phone reception are critical components of the attractiveness of the Borough (as anywhere) as a place to live and work. Whilst there is generally good availability of fibre broadband and 3G and 4G mobile reception in the main urban areas of the Borough, the picture is less rosy in more rural areas.

1.2   Committee members will be aware that advanced preparations are being made for the rollout of the next generation of mobile phone technology (5G) across England. This is essential for the so-called "Internet of Things" and will help facilitate the explosion in connected devices (e.g. home technology and driverless cars) requiring high-speed, always-on connections.

1.3   All Norfolk authorities, but particularly Norfolk County Council, have been working hard to try to improve the current situation (for 3G and 4G mobile telephony and 'normal'-speed broadband), but also increasing rollout of fibre broadband and the introduction of 5G (which is expected to commence in earnest in England later in 2019). As part of this work, a small group of Norfolk officers (chaired by the Borough Council's Head of Planning and Growth and including the County Council's Head of Information Management and Technology and a representative of trade body Mobile UK) has been working on a planning guidance document to try to ease the uptake of and improvements to fibre broadband, 4G and 5G infrastructure, to help meet the County Council's ambition for Norfolk to become the best connected rural county in the UK.

2   THE CURRENT SITUATION FOR FIBRE BROADBAND IN NORFOLK

2.1   The rollout of fibre broadband (defined as 24+ megabits per second for residential properties) in Norfolk has been led for some years by Better Broadband for Norfolk (BBfN, https://www.betterbroadbandnorfolk.co.uk/). It commenced rollout in July 2013, when only 42% of Norfolk properties had access to fibre broadband.

2.2   At April 2019, fibre broadband coverage has reached 92% of homes and businesses in Norfolk. The stated ambition of BBfN is to increase this to 95% by the end of March 2020. As is common knowledge, the remaining areas without fibre broadband access tend to be the most isolated, rural sites, which are therefore the most expensive to provide cabled broadband to.

2.3   Earlier in 2019, Norfolk County Council heard that it had been awarded an extra £11m by various Government departments for fibre broadband upgrades to 372 public sector sites across Norfolk (to be spent by April 2021). These sites comprise 230 schools, 108 corporate sites (council offices, libraries etc) and 34 fire stations. It is important to note, however, that the list is being "validated" by the Department for Culture, Media and Sport to ensure that there would not be any breaches of state aid rules, and so some changes are considered likely.

2.4   The aim of the project is to provide ultrafast (1000 megabits (1 gigabit) per second) fibre access to the premises. This will enable improved effectiveness of the operations on these sites, but there will also be potential for nearby businesses to benefit too (about 8,000 across Norfolk will be close). A national Gigabit Voucher Scheme (run by the Department for Culture, Media and Sport) which enables small businesses to apply for a grant to help access ultrafast services, saw the grant amount increase from £2,500 to £3,500 in May 2019.

2.5   Whilst a range of factors are being considered in terms of prioritisation, in general an "outside in" approach will be taken, whereby the most rural sites (small primary schools, for example) will be upgraded first. This work could therefore assist in getting closer to 100% coverage of fibre broadband for homes and businesses. (It is recognised that there are also some fibre broadband gaps in some urban areas, with "digital exclusion" an issue in some more deprived areas.) Norfolk County Council advises that the implementation plan for the rollout will be determined in conjunction with its supplier, and will be based on clusters of sites rather than individual sites.

2.6   Noting the caveat about ongoing "validation" of the sites mentioned in paragraph 2.3 above, within Great Yarmouth borough, 48 public sector sites are currently identified to get access to ultrafast broadband through the project (see Appendix A for details). They are mostly schools, but also include: fire stations; County and Borough council buildings, offices and depots; libraries; health centres; and museums. No details are yet available on the timing and prioritisation of the works, and the general views of the

Committee as to potential prioritisation are sought, to be able to feed into discussions with the County Council.

2.7   The advantages to the public sector sites themselves will be very considerable, but the full benefits will not be realised unless nearby residents and (particularly) businesses also exploit the opportunities to get access to ultrafast broadband. This could assist in improving the competitiveness of the businesses and help attract further businesses to the borough. Officers will be working with others to raise awareness of the opportunities with existing and prospective new businesses, and all councillors are asked to spread the good news too.

Fibre broadband to new developments

2.8   Across most of England, the most common way that most houses (particularly) and businesses (some) have received broadband in the past is by "fibre to the cabinet" (FTTC). In essence, the high-speed broadband cabling, operated by Openreach, has ended in a "cabinet" on the road. From this, the broadband signal is transmitted along copper wires into the home by the provider (such as BT, Sky, TalkTalk and many other smaller companies). This limits the maximum upload and download speeds and also the overall capacity – all too often, particularly at peak times, speeds well below "superfast" are achieved.

2.9   Some other broadband providers – of which Virgin Media is probably the biggest and best-known – do not use FTTC. Instead, they bypass this system completely and have their own, separate, fibre-optic cabling system, which connects straight into homes (or businesses) – "fibre to the premises" (FTTP). This system is normally much faster than FTTC.

2.10   Fibre to the premises must become the standard, because of the inherent limits of FTTC. The Government has been clear, on this and through recent changes to the Building Regulations, and forthcoming changes to the planning system, there is and will be an increasing requirement on developers of new sites to demonstrate how the properties will be supplied with FTTP. Details of the final Department for Culture, Media and Sport position on this matter are expected soon (following a consultation last year), but in essence it appears that a "Site Connectivity Plan" will need to be provided as part of all relevant planning applications. In most cases, Openreach will be in a position to bid to provide FTTP (alongside other companies) and the threshold of development size for Openreach to provide FTTP free of charge is falling all the time – it is believed to be 10 currently but this will fall further.

3   MOBILE TELEPHONY

3.1   As a large and mostly rural county, Norfolk has always had "not-spots", areas where no (or only a very weak) mobile signal (voice, 3G and 4G) can be received. Despite continual improvements by the four main companies (EE, O_2, Three and

Vodafone), this is a major source of frustration to residents, visitors and businesses.

3.2   In April 2018, Norfolk County Council undertook a detailed study of mobile reception of the whole county, driving and walking more than 5,000 km (see https://www.norfolk.gov.uk/what-we-do-and-how-we-work/policy-performance-and-partnerships/policies-and-strategies/digital-inclusion-strategy/mobile-coverage-in-norfolk). The results showed that 4G coverage is at 84%, although it is likely to be higher now. NCC is working with Ofcom to measure improvements to 2G, 3G and 4G; the most visible recent improvements have been made by Vodafone, but EE is also adding further equipment to increase coverage too.

3.3   Although coverage in Great Yarmouth borough is better than some of the larger rural districts (especially Breckland and North Norfolk) there is still a need for improvements to mobile coverage.

3.4   A separate (later) report to Economic Development Committee will detail the emerging proposal for a public wifi and 4G wifi system in Great Yarmouth Marketplace, as part of the Go-Trade project. Such initiatives are becoming increasingly important to help attract visitors and shoppers.

5G

3.5   As mentioned above, the next generation of mobile telephony is rapidly approaching. 5G will offer vastly higher speeds and capacity, and this will be needed to accommodate both the seemingly exponential growth in data usage from "normal" activity and also to enable the "Internet of Things" – driverless cars, "always-on" monitoring and telemetry systems, real-time high-definition (HD) video conversations (for remote GP consultations, for example) and the like.

3.6   Whilst the rollout of 5G is seen by the mobile companies as being an evolution of 4G, with much sharing of existing equipment and sites, the different frequencies that 5G will use mean that a higher density of booster and base stations will be necessary. Further national changes to the "permitted development" regime (to allow the development of some telecommunications equipment without the need for express planning permission) are thought likely, although proposals in the most sensitive areas (such as the Broads and Norfolk Coast Area of Outstanding Natural Beauty – such as Winterton) will still need particular care. Allowing the use of existing public sector assets to host 5G equipment will assist significantly – such as buildings, roads lamp-posts and other street furniture – as could the use of buildings like churches, village halls etc.

3.7   Norfolk is held in high regard by DCMS for its forward-thinking approach to mobile and broadband technology. For 5G to really work, it needs to have complete coverage – automatically-guided tractors and combine harvesters in remote fields cannot have patchy 5G reception, for example. In this way, it may also be that wireless (5G) broadband coverage supplants the need for cabled (fibre) broadband in the areas most

difficult to provide cabled broadband in a cost-effective way.

3.8   Great Yarmouth Borough Council therefore needs to play its part in welcoming the opportunities that 5G will offer – and this will likely mean the acceptance of more mobile transmitting equipment (masts, booster stations, antennae etc), especially in rural locations. The emerging Great Yarmouth Borough Part 2 Local Plan will therefore set out a supportive policy approach for 5G.

4   FINANCIAL IMPLICATIONS

4.1   No direct implications, but the wider – extremely significant – economic benefits of ultrafast fibre broadband and 5G are highlighted above in the paper. Norfolk County Council assesses that the gross value added of ultrafast fibre broadband could be more than £18m. There may also be the opportunity for the Borough Council to explore opportunities to accommodate additional/new mobile equipment on its plant and buildings, bringing in additional income.

5   RISK IMPLICATIONS

5.1   None.

6   CONCLUSION

6.1   The excellent work that has been undertaken by Norfolk County Council and the Norfolk districts and boroughs means that the county is well-placed to maximise the benefits of ultrafast broadband and 5G. For the Borough itself, there is a critical need for existing and potential new businesses to build on the opportunities provided by the forthcoming ultrafast fibre broadband connections – and the Council will play the leading role in raising awareness and providing help and support.

7   RECOMMENDATIONS

That Economic Development Committee:

   i)   **Endorses and supports the progress and approach set out in this report and expresses views on the potential prioritisation of sites for the rollout of ultrafast broadband; and**

   ii)   **Asks officers to prepare a separate report on the opportunities that the rollout of ultrafast fibre broadband to 48 public sector sites will have for the Borough's residents, businesses and visitors**

Areas of consideration: e.g. does this report raise any of the following issues and if so how have these been considered/mitigated?

Area for consideration	Comment
Monitoring Officer Consultation:	N/A

Section 151 Officer Consultation:	N/A
Existing Council Policies:	Corporate Plan; Local Plan Core Strategy; Great Yarmouth Town Centre Masterplan
Financial Implications:	Discussed in the paper
Legal Implications (including human rights):	None
Risk Implications:	None
Equality Issues/EQIA assessment:	None
Crime & Disorder:	None
Every Child Matters:	None

Appendix A – List of public sector sites In Great Yarmouth Borough to be upgraded to ultrafast broadband connections by April 2021

Great Yarmouth Borough Council	Maritime House
Independence Matters	Stepping Out
Great Yarmouth Borough Council	Community Neighbourhood Centre
Norfolk Museum Service	Elizabethan House Museum
Great Yarmouth Borough Council	Crematorium
Great Yarmouth Borough Council	Novus Centre
Norfolk Fire & Rescue Service	Gorleston Fire Station
Norfolk Fire & Rescue Service	Martham Fire Station
Norfolk Fire & Rescue Service	Great Yarmouth Fire Station
Norfolk County Council Highways	Caister Depot
Gorleston Library	
Great Yarmouth Central Library	
Great Yarmouth Borough Council	Communal Room
Caister Library	
Martham Library	
Time and Tide Museum	
Independence Matters	Caister Community Hub
Independence Matters	Pine Lodge
Adult Social Services	James Paget Hospital
Adult Social Services	Herbert Matthes Block, Northgate Hospital
Childrens Services	Norman House
Independence Matters	Great Yarmouth Community Hub
Independence Matters	The Lawns Community Hub
Moorland Primary Academy	
Caister Junior	
Filby Primary	
Edward Worlledge Community Junior	
North Denes Junior	
Northgate Infants	
St Nicholas Priory Middle	
St. Georges Primary School	
Southtown Infant	
Hemsby Primary	
Hopton CE Primary	
Ormesby Infant	
Ormesby Village Junior	
Rollesby Primary	
Great Yarmouth Borough Council	S Yarmouth Area Housing
Great Yarmouth Borough Council	Gorleston Area Housing
Winterton Primary	
John Grant School	
Norfolk County Council	Havenbridge House
Great Yarmouth Borough Council	Sheltered Housing, Wherry Way
Norfolk and Suffolk NHS Foundation Trust	Northgate Hospital

Fleggburgh CE Primary	
Ormiston Herman Academy	
Peterhouse Primary	
St Mary and St Peter Catholic Primary	