

**1<sup>st</sup> April 2014****Agenda Item: 5****REPORT OF THE CORPORATE DIRECTOR, POLICY, PLANNING AND  
CORPORATE SERVICES****BETTER BROADBAND FOR NOTTINGHAMSHIRE – PHASE ONE****Purpose of the Report**

1. To inform Economic Development Committee of Phase One BT exchange area locations for the Better Broadband for Nottinghamshire (BBfN) programme.

**Information and advice**

2. The BBfN programme (which has been the subject of numerous reports and more recently a dedicated broadband Economic Development Committee meeting held on 14 January 2014) is set to bring a bonus to thousands of people living and working in the county, as around twenty four BT Exchange locations are due to get faster broadband in Phase One of project delivery.
  3. The BBfN programme involves a very large and technically complex rollout, involving laying over 1 million metres of fibre optic cable, installing over 2,500 fibre distribution points and more than 92,000 hours of construction time. An intensive programme of capital works is about to commence which will run until 2016.
  4. This report specifically concentrates on the first exchange area locations to benefit from the co-investment partnership which will be able to connect to fibre-based broadband by the summer of 2014 (or even earlier if the rollout can be expedited).
  5. One of the biggest pieces of work for the BBfN programme is the installation of 318 new fibre roadside cabinets. The engineering plans and delivery timecales depend on factors such as the availability of electricity connections for these new roadside cabinets. Before the build can begin, the assumptions that underpin the indicative implementation plan need to be tested by undertaking physical surveys e.g. inspecting ducting to ensure it is suitable to carry fibre optic cables. If problems are identified an impact assessment will take place to see if the intended implementation can still be technically achieved/is financially viable. The impact assessment will also confirm whether the original timing is still achievable.
- Phase 1
6. The table overleaf provides the exchange area locations where BT Openreach (the infrastructure division of BT Group) will start work. More detailed

announcements on locations will be made typically every two months once survey work has been completed.

7. Member's attention is drawn to the fact that most exchanges will be listed several times as the rollout plan develops. This means that fibre-based broadband will be available to batches of premises over different periods. Unfortunately, it is not possible to provide rollout information down to postcode level. Further, the County Council is unable to confirm exactly when a cabinet will be fibre-enabled or when a premise will be able to access a fibre-based broadband service for a number of reasons (some of which are detailed above – see *Appendix B* for an additional explanation as to why the rollout is not always straightforward).
8. The deployment plan takes into consideration best value for money and where the Council can get the most coverage for the funding available. Due consideration is also made to the existing BT Openreach infrastructure and accounts for any planned commercial rollouts taking place before 2015.
9. The illustrative exchange area locations in the table overleaf may be subject to change during the network design and build phases. This is because technical problems may be encountered which means that the planned implementation is either not technically or financially viable, or will take longer than anticipated. These include issues arising from survey where practical problems are identified which require more work than originally anticipated.
10. The table indicates the month the work is scheduled to commence and should NOT be read as reflecting the date that fibre-based broadband will be made available.

	<b>BT Exchange Name</b>	<b>Councillor</b>	<b>Month Work Commences</b>
1	Arnold	Allan, Pauline Allan, Roy Payne, Michael Weiz, Muriel	April 2014
2	Misterton	Yates, Liz	
3	Bilsthorpe	Laughton, Bruce	May 2014
4	Farnsfield	Jackson, Roger	
5	Trentside	Calvert, Steve Plant, Liz Wheeler, Gordon	
6	Collingham	Dobson, Maureen	
7	Sutton on Trent	Laughton, Bruce	
8	Newark	Roberts, Tony Wallace, Stuart	
9	Southwell	Laughton, Bruce	
10	Kirkby in Ashfield	Knight, John Madden, Rachel	
11	Sutton in Ashfield	Carroll, Steve Hollis, Tom Kirkham, David Zadrozny, Jason	

	<b>BT Exchange Name</b>	<b>Councillor</b>	<b>Month work commences</b>
12	Mansfield	Bell, Alan Bosnjak, Joyce Garner, Stephen Harwood, Colleen Langton, Darren Meale, Diana Sissons, Andy Tsimbiridis, Parry	June 2014
13	Woodborough	Elliot, Boyd	
14	Bingham	Suthers, Martin	
15	Burton Joyce	Brooks, Nikki Clarke, John	
16	Cotgrave	Butler, Richard	
17	Radcliffe on Trent	Cutts, Kay	
18	Ruddington	Adair, Reg	
19	Saundby	Yates, Liz	
20	East Leake	Brown, Andrew	
21	Lowdham	Jackson, Roger	
22	Blyth	Fielding, Sybil	
23	Sandiacre	Cross-border – Derbyshire	
24	Worksop	Fielding, Sybil Gilfoyle, Glynn Greaves, Kevin Rhodes, Alan	

11. BT's local network business, Openreach, will install the fibre network which will be open to all companies offering broadband services on an equal basis. Households and businesses in Nottinghamshire will therefore benefit from a highly competitive market, bringing greater choice and affordable prices from the service provider of their choice.
12. Although we are unable to confirm the exact locations to benefit from Phase 1 at this stage, BT is committed to providing access to fibre broadband for at least 10,959 homes and businesses during this phase. To both speed up implementation and derive efficiencies, engineers have identified areas where BT's existing fibre-based infrastructure could be quickly extended (see *Appendix A* - what happens during the rollout). The roadside fibre-based broadband cabinets that are being connected to the new network serve very localised areas, so in each location only certain parts of towns and villages will be able to receive faster broadband speeds.
13. Two specific points are worthy of mention. Firstly, not everyone will receive superfast broadband speeds (of at least 24Mbps) as it depends on the length of the phone line to the cabinet which is providing the broadband service. Secondly, even when fibre-based broadband is available in a given area, individuals/businesses will need to contact their/an Internet Service Provider (ISP) should they wish to sign up for fibre-based broadband. This will NOT happen automatically.

14. The County Council recognises that the sooner broadband access in Nottinghamshire starts, the sooner the county, its residents and its businesses can reap the benefits. BT and the BBfN team continue to look for opportunities to bring forward these locations. Phase Two of the roll-out (which will see the fibre-based broadband infrastructure pass 14,151 premises) is on track for later this year too. By winter 2014 our fibre-based broadband landscape will be starting to look very different. Work will continue into 2015 and conclude in 2016 for our more rural areas which present a bigger challenge.

15. More detailed information on the roll-out will be made available as the rollout plans develops on the broadband dedicated website [www.nottinghamshire.gov.uk/broadband](http://www.nottinghamshire.gov.uk/broadband)

### Statutory and Policy Implications

16. This report has been compiled after consideration of implications in respect of finance, equal opportunities, human resources, crime and disorder, human rights, the safeguarding of children, sustainability and the environment and those using the service and where such implications are material they are described in the report.

### Financial Implications

17. The overall cost of the capital programme is £15.2 million.

18. The County Council approved its capital contribution of £2.15 million at Full Council on 15<sup>th</sup> December 2011. This forms part of the current capital programme to 2015-16. In addition to this, revenue funds of up to £450,000 were also approved to support the project management process. The funding breakdown is as follows:

Contributor	Amount
Nottinghamshire County Council	£2.15 million
BDUK	£4.5 million
European Regional Development Fund	£2.7 million
Ashfield District Council	£70,000
Bassetlaw District Council	£150,000
Broxtowe Borough Council	£33,754
Gedling Borough Council	£89,777
Mansfield District Council	£157,464
Newark and Sherwood District Council	£250,000
Nottingham City Council	£150,000
Rushcliffe Borough Council	£245,000
BT	£4.7m (£4.6m Opex)
<b>Total</b>	<b>£15.2m (£19.8m incl. opex)</b>

### RECOMMENDATIONS

19. That Economic Development Committee note the report.

**Report of the Corporate Director, Policy, Planning and Corporate Services,  
Jayne Francis-Ward**

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**Constitutional Comments [SLB 19/03/2014]**

This report is for noting only.

**Financial Comments [SEM 21.03.2014]**

The financial implications are set out in the report.

**Background Papers**

**Electoral Division(s) and Member(s) Affected**

All

## Appendix A: What happens during the rollout

The rollout of fibre-based broadband is a large and complex programme. To try to make things easier, the 'big build' and rollout have been down into five phases:



**Pre-planning:** A full assessment of the existing network to provide accurate information for BT's engineers.

**Exchange preparation:** Agree and plan when and where the new equipment will be placed inside the exchange, as every exchange is different. BT's exchange buildings house the equipment that enables the UK's telephone and broadband network to operate. Some will require additional space to be created for new broadband equipment, increased power supply or greater ventilation. BT has more than 5, 500 telephone exchanges in the UK.

**Surveying:** Planning the network, surveying underground ducts and planning where the new fibre, street cabinets and over-ground equipment will go. This work will be co-ordinated between BT, power companies and several teams within the local authority. We will work closely with our planning and highways teams and BT to ensure the locations of all the new cabinets meet all the necessary requirements.

**Installation:** Building the new network from the exchange to the new street cabinets and getting it ready for service. This is when you are most likely to see BT Openreach carrying out construction work in your area. The work will include; installing a new cabinet close to the existing one, digging a trench between both cabinets and the nearest suitable power supply and installing a fibre connection and a power supply. A more detailed explanation of what happens is available on the Openreach website.

**Ready for service:** Once the new network and cabinets have been installed, the fibre broadband services will be available to order. Residents and businesses will need to contact their Internet Service Provider (ISP) to check when they will be offering the upgraded service in the area.

## **Appendix B: It's not always straightforward**

The County Council is able to give individuals/businesses a broad indication of when they will be able to access a fibre-based broadband network but cannot always be precise for a number of reasons:

- Some underground ducts will have been buried for years, so it is no surprise that surveys can sometimes unearth a few unanticipated challenges. Often ducts have collapsed or been damaged over the years; or the duct routes themselves may be full of existing cables or new ducts need to be built where they do not already exist. Obviously any problems have to be sorted out before any fibre can be laid to these ducts.
- The majority of mains and back-up power supplies in exchanges will need to be upgraded, as the new equipment will place significant demands on them. Sometimes this means working with a local power company and co-ordinating what is needed.
- The same can be said for each individual roadside cabinet as an additional unit (known as a DSLAM) also has power requirements.
- Highway and way-leave applications also need to be considered, and can sometime delay work relating to a specific cabinet.
- Ofcom rules specify that cabinet level information cannot be made available until two weeks after a cabinet has been made live and other Internet Service Providers (ISPs) have been notified by BT that they are able to supply broadband services to prospective customers from it.
- And finally, the British weather has to be contended with. If it gets too cold below 3°C) it can create problems laying the concrete plinth for the cabinet to stand on.