

# **DERBYSHIRE COUNTY COUNCIL**

## **IMPROVEMENT AND SCRUTINY COMMITTEE – RESOURCES**

**8 December 2016**

### **REPORT OF THE CHAIR OF THE IMPROVEMENT AND SCRUTINY COMMITTEE – RESOURCES**

#### **REVIEW OF BROADBAND ACCESS – PROGRESS REPORT**

##### **1. The Purpose of the Report**

To inform the Committee of the progress made by the working group conducting the review of broadband access in Derbyshire.

##### **2. Information and Analysis**

This is the second progress report regarding the review of broadband access in Derbyshire. The Members of the working group are Cllrs Moesby (Chair), Lauro, Booth, Marshall-Clarke and Kemp.

The main objectives of the review are to consider:

- How well rural communities are connected;
- How businesses are benefitting from the Digital Derbyshire programme
- What plans are in place to provide affordable alternative solutions to rural areas where the broadband service has not been upgraded.

The review working group met with Paul Bimson, Regional Partnership Director and Rob Shakespeare, BT Contract Manager on 27 October. During the meeting the following points were made:

- Superfast Broadband is delivering economic and social benefits to private households and SME's across the UK. Furthermore due to competition between Internet Service Providers (ISP's) prices are continuing to fall.
- The capacity of fibre optic cable is vast and the current roll-out will "future-proof" Derbyshire's infrastructure. It will enable faster speeds to be delivered in the future and accommodate technological advances that will facilitate new ways for the Council to deliver services.
- The main approach for supplying broadband under Contract 1 of the Digital Derbyshire Programme has been to run fibre cables to street

cabinets. The final connection from the cabinet to each property is via the existing copper wires. This technology is referred to as Fibre to the Cabinet (FTTC) and allows speeds of up to 80Mbps.

- Contract 1 was completed ahead of schedule. The successful delivery of this scheme and the financial savings made was helped by good weather conditions. BT has also paid gain share monies early to the Digital Derbyshire programme as customer take up of superfast broadband (SFB) has increased to more than 30%.
- Contract 2 is likely to include a mixture of FTTC and Fibre to the Premise (FTTP) installations. FTTP is where a fibre connection runs from a distribution point directly to the property. Currently there is a limited number of suppliers offering FTTP services but it is anticipated that this will increase as the FTTP footprint expands. Consumers opting for FTTP will pay a connection fee as part of the initial set up costs. It should be noted that to be eligible for the standard FTTP connection fee the property must be within a certain distance from the distribution point.
- In accordance with State Aid regulations, the Digital Derbyshire team has undertaken consultation to ascertain commercial rollout plans in Derbyshire. The team has also liaised with District and Borough Councils to identify priority areas for the delivery of SFB under phase 3 of the project. It is anticipated that early in 2017 it will be clear what communities will (and will not be) included in the roll out and Openreach will model relevant solutions.
- Some properties are so remote that the provision of fibre broadband will not match the value for money criteria and will prove to be prohibitively expensive. In these circumstances mobile technology may provide a solution. BT now owns EE which has the government contract to change the current radio technology that emergency services use, to 4G and ultimately to 5G. Therefore there is an extensive programme currently underway to increase 4G coverage.
- At the present time 20Mbps is considered to be a good speed to meet the needs of most families (this allows multiple users to access on-demand TV, stream music, browse the internet etc). BT is continuing to investment in the development of new technologies to further increase broadband speeds to meet the growing demand for digital technologies.
- New technology has been developed to increase the speeds that can be achieved over copper wire. "G.fast" and "XG.fast" are

technologies that can be installed in fibre enabled street cabinets. G.fast will deliver download speeds of up to 500Mbps (and approximately 50Mbps upload) and is effective over distances of up to 350m. "XG.fast" can achieve speeds of up to 5.6GB but is only effective over short distances of up to 35metres. Therefore these technologies will not solve the long line issues experienced by rural communities. The best approach continues to be extending fibre cable as far as possible so that rural communities will then also be able to benefit from these new technologies.

- In the immediate future there are no plans to replace copper wires. The approach will be to have a mix of technologies. Fibre to the premise for the majority of new builds and G.fast electronics (or similar) to increase the speeds achieved over the existing copper wires.
- BT have a license obligation to provide basic telephony services (that allows access to the 999 emergency services that is independently powered from the main electricity network) to any new property. However in terms of access to faster broadband the onus is on the developer to make provision if they decide to do so. BT has prepared an information pack to guide developers through the process.
- Planning regulations do not impose conditions relating to access to high speed broadband. Within the last 12 months, however, Openreach agreed to provide free of charge FTTP (directly from the exchange) if the development consisted of more than 250 homes. More recently this threshold has been reduced to 30 properties. Where there are less than 30 homes there will generally be a cost to the developer.
- BT offers other products that are not part of the Digital Derbyshire scheme. Property owners and businesses that are a long distance from a cabinet or distribution point may choose to pay for their own FTTP installation known as 'Fibre on Demand' (FOD). The cost for the FOD product varies depending on the terrain, distance and circumstances associated with each property. Therefore each property is assessed individually and an estimate provided. The pricing structure includes a fixed connection charge, and annual rental charge and a distance based charge for the civil engineering work. Once the FTTP technology is in place the consumer can then choose which internet service provider they would like to purchase their broadband service from.

- In the last 6 months BT has set up a Community Fibre Partnership (CFP) programme. This is where a community can choose to pay the difference between the cost of the commercial business case and the total cost of delivering broadband to that community. Open reach has set up a website where communities can register their interest and provide details of the target area (households and telephone numbers). BT will then model a solution and provide an estimate of how much it would cost the community. It is anticipated that communities might fund the gap in a number of ways including crowd funding or revenue from local income generating community projects. There is BT grant funding available (of up to £20,000) if the community has a school that has a broadband speed of less than 20Mbps. Furthermore the Department of Culture Media and Sport voucher scheme (available to residents to install satellite or wireless broadband if their download speed is less than 2Mbps) has been extended to allow it to be used for fibre infrastructure. Therefore eligible households can group together and combine their vouchers (worth £350 each). “Self-dig” schemes allow rural communities and individual property owners to undertake some of the groundwork themselves in preparation for FOD installations or community fibre partnerships.
- In response to a series of questions Members on the working group were advised that:
  - If an area engages in a CFP, any funding that had been allocated to the area as part of the Digital Derbyshire programme would be reallocated.
  - A community might consider a CFP to gain certainty and control over the delivery of broadband to their area (particularly if they feel they maybe in the 2% that will not be reached by the Digital Derbyshire programme).
  - Open reach have the capacity to meet the current demand for CFP schemes alongside its commitment to deliver contract 2 of the Digital Derbyshire rollout and its commercial rollout.
  - The infrastructure supporting a CFP will go live within 12 months of the community accepting the contract and paying 50% of the communities total contribution.

### Next Steps

It is anticipated that at future meetings Members will talk with providers who offer alternative broadband solutions and local businesses.

### **3. Social Value Considerations**

Throughout the course of the review Members will consider the economic, environmental and social benefits of the way in which broadband is being delivered across Derbyshire and, whilst doing so, will look for opportunities to maximise social value.

### **4. Other Considerations**

The relevance of the following factors has been considered in preparing this report; Finance, Human Relations, Legal and Human Rights, Prevention of Crime and Disorder, Equality and Diversity, Environmental, Health, Property and Transport

### **5. Recommendations**

The Improvement and Scrutiny Committee – Resources is asked to;

(1) Note the investigations undertaken by the review working group and the evidence gathered so far.

**Councillor Clive Moesby**

**CHAIR, IMPROVEMENT AND SCRUTINY COMMITTEE – RESOURCES**