



## Connecting Shropshire Briefing Note – Mobile Telecommunication

### Context

- Shropshire Council recognises that there are significant economic and social benefits from having a robust, competitive and accessible mobile network across its geography.
- Shropshire has a higher than average percentage of home based and self-employed workers who rely upon accessible mobile infrastructure.
- Shropshire is impacted by poor mobile phone coverage across various parts of its geography. This is not isolated to rural areas.

### The Market and Mobile Network Operators (MNO's)

- Shropshire Council, like all Local Bodies, has no direct responsibility for mobile phone signal issues.
- The mobile telecommunications market remains commercially driven by 4 key Mobile Network Operators (MNO's):
  - EE (includes the brands of Orange and T-Mobile)
  - Vodafone
  - 3UK
  - O2 (owned by Telefonica)
- Sharing Infrastructure and assets has developed within the MNO marketplace over the past 3-5 years. In some cases this has impacted coverage where MNO's have rationalised their assets to improve their business models:
  - Mobile Broadband Network Limited (MBNL) is the joint venture management company created by 3UK and T-Mobile (now EE).
  - MBNL is responsible for establishing and managing a new consolidated network of base station sites. Network consolidation involves T-Mobile and 3UK combining their base station sites, hardware and infrastructure to operate a single network
  - O2 and Vodafone established a joint team called Cornerstone in 2009 to share their combined UK masts.
- MNO's provide a number of signal variants nationally. In the main these include 2G, 3G, 4G technologies:
  - "G" stands for Generation, as in the next generation of wireless technologies. Each generation is supposedly faster, more secure and more reliable:
    - 2G – The second generation of cell phone transmission. Offers voice and simple text messaging and remains the necessary dependant for most users.
    - 3G – This generation set the standards for wireless technology. Provides web browsing, email, 3G should be capable of handling around 2 Megabits per second.
    - 4G – The speed and standards of this technology of wireless needs to be at least 100 Megabits per second and up to 1 Gigabit per second to pass as 4G. 4G is simply a little faster than 3G.

## 2G Coverage in Shropshire

- Geographic coverage of mobile signal in Shropshire is within the overall UK average, but premises coverage is far lower than average. A paper prepared by Ofcom in June 2014 reflects the current and latest reported position (Appendix 1).
- Compared to other LAs, Shropshire is in the lowest third quartile for coverage. The main reason is the population density and challenging geography in Shropshire.
- In 2014 Ofcom signed an agreement with all four MNO's that required:
  - a combined investment of £5bn into a national programme to improve mobile infrastructure by 2017;
  - guaranteed voice and text coverage from each operator across 90 per cent of the UK geographic area by 2017, halving the areas currently blighted by patchy coverage as a result of partial 'not-spots';
  - full coverage from all four mobile operators is expected to increase from 69 per cent to 85 per cent of all geographic areas by 2017, this will include Shropshire. Ofcom are due to report on the latest collected data before the end of this year;
  - provide reliable signal strength for voice for each type of mobile service (whether 2G/3G/4G) – currently many consumers frequently lose signal or cannot get signal long enough to make a call;
  - O2 to provide 4G indoor coverage to 98% of the population by December 2017;
- The licencing arrangement that the MNO's have with Ofcom is legally binding and will be enforceable through monitoring.

## Government Intervention – Mobile Infrastructure Project (MIP)

- There are areas of the UK where no mobile coverage is likely to be provided by any MNO for the foreseeable future, even with the infrastructure improvements agreed with Ofcom. These are defined as 'not spots'.
- 'Not spots' is where there is a limited commercial case for market-driven private investment by MNO's to improve coverage.
- In 2012 Ofcom reported 80,484 premises were in complete not spots nationally.
- A budget of £150m was allocated by HM Treasury to manage a national project MIP to address some of these not spots based upon value for money.
- BDUK (Broadband Delivery UK) a department within the Department of Culture, Media and Sport was allocated the task to manage the project at a national level. The "thresholds" of value were based upon the number of people or premises covered by potential new sites. Where there is no business case (high cost, limited premises served) no site would be considered for construction.
- Following a national and competitive procurement exercise, Arqiva were appointed as the main BDUK contractor in the summer 2013. Arqiva are responsible for acquiring sites, building the necessary infrastructure, and managing the presence of all 4 MNO's equipment on each mast location in the identified 'not spot areas'.
- The original timescale for the project was to extend coverage as far as reasonably possible by the end of 2015.
- In 2013 BDUK reported to Shropshire that 9 provisional sites had been identified where initial 'radio' and 'land' surveys would commence during 2014.
- In September 2015 BDUK confirmed to Shropshire Council that they would no longer be pursuing any of these 9 sites in Shropshire. The main reason for this decision was the impending closure of the project.

- To date only 7 MIP sites are currently live nationally with 12 in the build stage.
- Following the confirmed decision by BDUK Shropshire Council wrote to all MP's asking them to raise the issue with the Minister.
- BDUK were asked to attend this Committee but unfortunately were unable to attend. They have since offered to attend a follow up meeting if requested.

### **Shropshire Council Influence**

- Connecting Shropshire have maintained a 'gatekeeping role' on the issue of mobile phone signals in Shropshire. This has involved:
  - Receiving updates on the MIP project;
  - Meeting MNO's , Ofcom and Department Media Culture and Sport to understand the mobile market and wider commercial development;
  - Coordinated lobbying on behalf of the authority, MP's and Business Board to MNO's, BDUK and DCMS
  - Coordinated Briefing sessions with the MNO's, Ofcom, BDUK and wider Stakeholders (MP's, Councillors, Parish and Town Councils, Planners). The last meeting held in Shirehall was 3<sup>rd</sup> June, 2014. A further meeting is now scheduled with all providers, Ofcom and our MP's on 8<sup>th</sup> January 2015.
- MNO's need to seek planning approval for new masts in accordance with planning policy. Shropshire Council have engaged at all opportunities with the market to support and expedite the necessary process.
  - A significantly high proportion of all planning applications for telecommunications applications are approved. Planning have not been able to collate the full statistical data to date but commented that "most applications are approved either as submitted or with amendment over siting or design".
  - Shropshire Council recently submitted a paper to the Department for Communities and Local Government on 'How the Planning System in England Can Support the Delivery of Mobile Connectivity' (See Appendix 2).
- Connecting Shropshire have recently contributed to a number of related government inquiries that have enabled us to articulate the key importance of mobile connectivity in rural areas such as Shropshire:
  - DCMS Committee Inquiry into "Establishing world-class connectivity throughout the UK"
  - BIS Select Committee Inquiry into the "Digital Economy"
  - BIS Select Committee Inquiry into "the Government's Productivity Plan"
- Connecting Shropshire have continued to ask all MNO's for evidence of their intended commercial deployment plans. To date the quality of information shared has been limited to map projections. No formal information data sets have been provided and there is reluctance to cooperate owing to commercial confidentiality.
- There remain opportunities to undertake further due diligence in order to clearly understand the mobile phone coverage in Shropshire for MNO's, independent of the providers. This insight could be used to demonstrate to the MNO's where their deployment plans are failing and may be more effective than relying upon Ofcom's high level reports. Options could include:
  - Commission a technical assessment across Shropshire – costs would be between £40k - £50k.
  - Use a community initiative to capture data about mobile phone coverage in Shropshire using a 'crowd sourcing application'. This would be less reliable but may capture the public's enthusiasm for holding the providers to account. The public

would download an application onto their phones that monitors voice/data coverage.

### **Summary**

- Shropshire Council is not able to intervene in the market but should continue to use its lobbying influence to improve the issue of poor mobile phone signals.
  - All MNO's have accepted a request to update members and MP's on 8<sup>th</sup> January 2015. Ofcom are also due to attend.
  - A new national Ofcom coverage data report will be published on the Ofcom website later in the year. I have asked if Shropshire could be used as a 'trialist' to assess the information in more detail.
- Connecting Shropshire will continue to work closely with MNO's to seek datasets/maps of commercial plans, under confidentiality agreements.
- Request that BDUK attend a follow up meeting to explain the longer term issues of addressing 'not spot' areas that are unlikely to be served by current MNO commercial plans.
- Continue to work with MP's on lobbying Government for improvement to mobile phones coverage in Shropshire.
- Assess formal options to gather an independent review of mobile phone coverage in Shropshire.