

Broadband Provision in Church Broughton Compared with the National Average & Government Targets.

Introduction

Work on the Community Plan showed that Broadband was an important issue. This particular item was allocated to the Work & Communications Working Group and forms one of its terms of reference.

To review the issues raised in the consultation, including the following:

- ✓ To bring to the attention of the relevant authorities the necessity for all villagers to have access to high speed broadband which meets the national standards for upload and download speeds, and to confirm that they comply.

This report has been produced by the working group and is intended to fulfill this requirement. It should be noted however that there is no national standard for broadband speed in this context. In view of this UK averages, UK government and European Commission target speeds have been used.

The village specific data contained in this report comes from the community consultations and individuals who have come forward with issues in various forums, over the last 9 months.

Broadband Provision in the Village

Broadband is delivered to the village in two main ways, although mobile broadband will also be mentioned as there are major enhancements planned for this area;

High Speed Fibre Broadband (54%)

In the village this is made up of fibre optic lines up to our local street cabinet, which then connect to individual homes via copper phone lines. Our cabinet is situated outside The Spinney on Boggy Lane. Properties within about 200m of this can receive around 75Mbps download, 0.7km from the box will allow 38Mbps and out to 1.6Km 20Mbps. Very few people in the village have opted for the maximum speed available. We have been advised that there is considerable expansion available in the cabinet, so if you need this service then it should be available, typically on a 2 week lead time, but do shop around for the best deal.

Standard Broadband (ADSL) (39%)

ADSL broadband is a connection provided over home telephone lines. It relies on copper cable from the exchange and in the case of the village this restricts the speed to between 0.4Mbps to 2Mbps download. Price differences between ADSL and fibre broadband can be quite small if you shop around.

Mobile Broadband

A small number of people in the village use mobile broadband services. This can achieve around 2 Mbps in the village using 3G but coverage is not good. We are advised that 4G is coming to our area within the next 6 months and this could provide up to 18.7Mbps. Use of mobile broadband for large amounts of data can be quite expensive.

What do the Speeds Mean in the Real World?

This is a complex subject and there are dedicated applications which will work out requirements for a specific household. As a general rule, you need about 5Mbps to stream a single HD movie in real time with no glitches. A family with 2 children and 2 adults, all using the net for work and play, can easily use up 20 – 30Mbps.

Personal Perception in the Village and the National Average

The biggest surprise in compiling this report was the difference between personal perception of the services being received. On the one hand 30% of the people on standard broadband (0.4 – 2Mbps) were happy but some who are on 75Mbps were not happy when comparing it with 300Mbps in London. Only 56% of fibre users were happy with the speed of this service. Looking at the national average shows an interesting picture.

Based on Ofcom's 2016 Report:

Rural broadband national average (for the UK) speeds are 13.7Mbps download and 1.6Mbps upload.

In comparison most of the village has access to 75Mbps download and 16Mbps upload and the rest 38Mbps, 7Mbps. Even if we compare our service with the national suburban numbers we still come out on top:

Suburban broadband national average (for the UK) speeds are 30.7Mbps download and 3.1Mbps upload.

There is a large gap between the number of people who are happy and the number that you would expect to be happy. Further investigation showed some possible explanations but if you are not happy and you want to know what you can do about it - then look at Ofcom's [Voluntary Broadband Speeds Code of Practice](#). This broadly requires member ISPs to provide reliable estimates of connection performance and to also help resolve related problems when they arise. Furthermore the code requires ISPs to give new customers a Minimum Guaranteed Access Line Speed (MGALS), which reflects the access line speeds achieved by the slowest 10% of the provider's broadband subscribers. Crucially, if the ISP cannot resolve your problem and the performance has fallen below the provider's MGALS level, then the code allows you to leave your contract penalty free and switch to another provider, although this won't necessarily resolve the underlying problem.

Reasons for Dissatisfaction with the Broadband Service in the Village

Number one is nothing to do with the technical side at all - it is the cost.

Comparing broadband costs is quite complex. There is the speed, the amount of data included and then various options covering phone calls. In addition, the eight or so providers that cover the village, do not, in many cases, offer 'like for like' packages. From what we can deduce, there is a huge variation between what different villagers are paying for similar packages, even within the same provider. In some cases this is as much as 50% difference, or up to £360 difference over an 18 month contract!

Fibre broadband came to the village (thanks to EU money) about 18 months ago. Most people entered into an 18 month contract, which should be up for renewal soon. The committee would encourage you to shop around and negotiate, as there are some very good deals which will not be offered to you if you do not actively seek them out.

Free Routers

Most broadband suppliers provide a free single band router with a Fibre Broadband package. Many of these are of low quality and power output and not suited to the older houses in the village. A good quality dual band router can make a big difference to the Broadband performance in the home. If your walls are thick stone then there are a number of booster options costing around £20 up; but look at a good router first.

Old Hardware

Connecting 1st generation wifi devices to modern router technology will greatly reduce speed and reliability. Speeds will typically drop to around 7Mbps and any utility which is run on such a device will indicate that the broadband speed is 7Mbps. Connection of a reasonably up to date device – say a 3 year old laptop, will often show the real speed of 40Mbps. This has misled many villagers into thinking that they are paying for 38Mbps and getting 7Mbps.

House Wiring

The telephone wiring in most houses in the village was not installed with high speed data transfer in mind!. Wiring from the 1960's up to the late 1990's may work very badly and cause many issues. It can take up to a day for a fitter to fix this issue but it is time and money well spent.

Different Providers

We discovered several instances of next door neighbours with different providers and different routers having very different experiences with high speed internet.

Fibre to the Cabinet

We found no evidence that the basic provision of high speed broadband to the cabinet was anything other than reliable, and as fast as expected. All the issues we investigated turned out to be from the cabinet to the device. A regular speed check based on a 38Mbps contract, constantly showed speeds of 37.8 – 43.2Mbps.

House Sales & Pricing.

This may seem like an odd addition but it has been mentioned to us several times. According to an Imperial College Business School study, property prices increase on average by about 3 per cent when fast internet access is available. The researchers analyzed over one million properties across England, as part of the study!

Most web sites like Rightmove list properties in the village as having a max broadband speed of 1Mbps with no access to fibre broadband at all. It appears to be next to impossible to get this data updated on an ad hoc basis. With this in mind we recommend that any villager planning on selling up should put the actual achievable broadband speed in the advert.

Conclusion

The terms of reference for this report are:

- ✓ To bring to the attention of the relevant authorities the necessity for all villagers to have access to high speed broadband which meets the national standards for upload and download speeds, and to confirm that they comply.

Based on the evidence available to the committee, the village broadband service is well above the national average for a village of our type and puts many suburban areas to shame. The broadband service should be viewed as a village asset and could be used as a significant reason for small companies and professional people to move into our area.

National UK Government Targets:

“The Government’s aim is to provide superfast broadband (speeds of 24Mbps) for at least 95% of UK premises and universal access to basic broadband (speeds of at least 2Mbps) by the end of 2017, early 2018.”

The village is already ahead of the government target for 2017/2018. There is development currently underway to increase the effectiveness of the type of equipment deployed in the village. This should allow an increase from 75Mbps to 100Mbps and from 38Mbps to 50Mbps. This should be available within the next few years, so it is probable that the village broadband service will remain above both national averages and UK government targets for some time to come.

European Commission Targets;

The European Commission has set a target that by 2020 every European citizen shall have access to at least 30Mbps of internet connections and at least 50 per cent of households should subscribe to connections above 100Mbps. It has been assumed that this target no will no longer apply to the UK by 2020, but the village would probably pass this test by 2020 anyway.

Computer Literacy.

The terms of reference for this report concentrate on broadband speeds. In the report's preparation it became obvious that the villagers have a very wide range of computer literacy. If the level of computer literacy could be improved then the “internet experience” could be revolutionized for many members of our community. The Committee is unsure of its relevance to this, as it is a national problem and there are already many courses available, relatively locally, aimed at helping. It would be possible to arrange a lecture at the School on how to get the best from your broadband but it is not known how popular or effective such an event would be.

Final Position

In view of the above findings, the Work & Communications Working Group does not plan on doing any more work on broadband provision within the village for the foreseeable future. The committee would however be interested to hear from anyone living outside the village, who would be prepared to expand the report to cover the surrounding area.