

SUPERFAST BROADBAND FOR OUR VILLAGES

cf Winstred Parish Council:

From:

<http://www.winstred100.org/superfast-broadband.html#contact>



Background

Like many rural communities, we have had to rely on old copper and aluminium networks of telegraph wires for internet connection. The capacity of these wires is not sufficient for us all to have the speed of internet connection we desire and because our villages are spread over a wide area, those people

furthest from the telephone exchange often cannot receive any signal at all. (Distance degrades the signal strength).

It is unlikely that this will change. That our telephone exchange will be upgraded and our many miles of village roads will be dug up to replace our copper wire network with fast fibre optic cable now used for fast urban internet connection. It is just not economic for Internet Providers to invest in our villages. We do not have enough houses per mile of cable laid to make it worth their while. There are some plans to connect villages with optic fibre paid for by government grants but there is no certainty of this and the limits on speed will probably be circa 12Mbs, not Superfast.

In our villages we are going to get a Superfast Internet connection. This ranges to 64Mbs which typically is only available in the UK's super connected cities. It is capable of running Skype, TV, feature films etc. Our new internet connection to homes will be wireless rather than cable. Around the world wireless is a proven method of connection. Our network will use hardware manufactured by Motorola and will be paid for by a £60,000 grant from Abberton Reservoir Community Fund, which was secured by our villages Parish Council.

About 40 villages in East Anglia already have this technology. Locally this includes West Bergholt, Aldham and Eight Ash Green, which is supplied by Aldham based County Broadband, who are Colchester Borough Councils chosen partner. Our internet supply will be come into our villages via a receiver on the top of Peldon Church tower, households will receive the signal via an aerial probably positioned on their TV antenna. Many of these aerials will also relay the signal to neighbours, so forming the network. Our villages have been carefully surveyed and the network planned to ensure maximum coverage.

How wireless connection works.

Connection, which includes fitting the aerial and the full connection to your computer, costs £99. In certain instances this cost may increase. For example, where there is no antenna or chimney to fix the aerial to. A fixed price would be confirmed in advance.



This is a community network, so public places such as schools and churches can receive a powerful signal free of charge. To support 'digital inclusion' in our communities, private households can also receive a limited signal free of charge.



Subscription for internet access can be paid on a monthly or annual basis and the cost will depend on the connection speed you choose and the amount of Data you decide you require and download. (An example of Data being uploaded is a photograph being placed on Facebook.

An example of data being downloaded is music being purchased from iTunes). The grid below gives you examples of different packages and guidance as to their suitability for different users.

1



The cable from the Client Radio plugs directly into your computer. This is ideal if you use one computer in the same place all the time

Your new internet connection can either be connected directly to your computer.

2



The cable from the Client Radio plugs into a compatible 'router' either supplied by us, or already owned by you (this could be a wireless router such as the example here)

Alternatively, if you wanted the convenience of wireless signal within your home, then the new signal would be connected to a 'router', a small box which will allow all devices in your home (including computers, iPads, smart phones, televisions etc) to connect wirelessly. If you do not currently have a router County Broadband can supply and install this for just £49. An existing router or computer in you home must be compatible with a standard RJ45 network connection illustrated.



Required connection socket on your computer or router



RJ45 plug used to connect your computer or router to the Client Radio

It is planned that a live feed will commence in Autumn of 2013 which will be demonstrated at an open event at Peldon Village Hall. Thereafter arrangements will be made to visit the properties of interested parties, survey them and make arrangements for connections. Connections will commence in January 2014.

Costs and choosing your package.

Lots of internet providers liberally use the term 'up to' within their advertising and literature. Often customers end up complaining that 'up to' means 'less than', that they did not understand the limitations of 'Data up/download' and that they find their contract does not allow them to vary terms and make improvements later.

Whilst there will always be an element of variability of signal strength, generally the wireless connection in our villages will

be more constant. Being remote doesn't mean a weak signal - as long as your aerial is in line of sight of the wireless broadcast, it makes no difference whether you are ten metres or ten kilometres away. The most misunderstood aspect of Data up/download with almost all internet providers is that there is a limit and if it looks like you are going to exceed it, the provider starts to restrict your speed and slows down your internet connection. The great thing about County Broadband is that they are friendly, contactable and local. If you decide your connection is not as fast as you would like, you can upgrade your contract immediately. Similarly if your Data up/downloads are starting to exceed your limit, then you can find out and increase the limit with one simple phone call.

The grid below shows the seven subscription packages suitable for domestic use. The green section shows the cost and speed* and provides a summary of the type of household who would benefit most from each one. The orange section shows the data you can up/download in an understandable manner. All domestic packages operate on a 50:1 contention rate. Commercial packages are also available - please ask for details, Country Broadband can be contacted on 08456865000, 01376 779001 or nfo@countybroadband.co.uk .

(*Upload and download speed is 'each way'. For example 16Mbps is '16Mbps upload' and '16Mbps download'. Therefore a 'total aggregated' speed of 32Mbps. This is quite a unique feature. Most often the 'upload speed' provided is considerably smaller than the 'download speed', with the increased popularity of social media, Skype etc upload and download are now equally important).

Service Name	Community Inclusion	NGA Home Basic	NGA Home Evolve	NGA Home Standard	NGA Home Standardplus	NGA Home Prime	NGA Home Elite
Download & Upload Speed	500 Kbps (0.5 Mbps)	4 Mbps	8 Mbps	16 Mbps	16 Mbps	24 Mbps	32 Mbps
Aggregated Service Speed	1 Mbps	8 Mbps	16 Mbps	32 Mbps	32 Mbps	48 Mbps	64 Mbps
Monthly Subscription	FREE	£9.99	£16.99	£19.99	£24.99	£29.99	£34.99
Description	This service is provided as part of our Community & Social Responsibility policy to support Digital Inclusion. It is a limited service designed to ensure citizens in your community are not digitally excluded.	This service is designed for those people who rarely use the internet for anything other than collecting mail or watching the occasional video clip	This service supports internet surfing and live video streaming from services such as iPlayer.	This is our recommended minimum service level for the average household.	As above, but with higher Data Plan. This is our recommended service for more internet dependent households (multiple users with multiple devices frequently accessing the internet).	This service offers very fast connection speeds and comprehensive data plan.	This is the premier package we offer for home users. It comes with our highest domestic connection speed and an ample data plan.
Data Plan	500 MB	1 GB	10 GB	20 GB	50 GB	50 GB	100 GB
Number of web pages	1638	3277	32,768	65,536	163,840	163,840	327,680
Hours of iPlayer viewable in Low Definition	2hrs 8mins	4hrs 16mins	42hrs 40mins	85hrs 20mins	213hrs 20mins	213hrs 20mins	426hrs 20mins
Hours of iPlayer viewable in Standard Definition	49mins	1hr 38mins	16hrs 18mins	32hrs 36mins	81hrs 32mins	81hrs 32mins	163hrs
Hours of iPlayer viewable in High Definition	3min	5mins	9hrs 5mins	18hrs 10mins	45hrs 27mins	45hrs 27mins	90hrs 50mins
Number of iTunes Albums	¼	1.5	14.5	29	73	73	146