

TACKLING THE BROADBAND JUNGLE

Graham Jarvis picks his way through the various Broadband packages on offer

As part of its Digital Britain agenda, the British Government is developing a Universal Service Commitment to broadband technologies. That's because one in ten households don't yet enjoy a 2Mb per second connection to the internet, and there are a number of people whom are still not connected to any kind of broadband digital service as a result of a lack of knowledge and skills or because they can't afford it. The programme addresses a number of issues, including affordability and the need to increase broadband uptake and accessibility.

The Government is therefore spending, for example, £300m on its Home Access scheme. Its purpose is to enable low income families to gain access to digital services with broadband technologies. This forms part of its steps towards the goal of 2MB per second universal access by 2012. The issue of accessibility will be aided by the market as a result of an increase in the availability of low-cost devices, new schemes for recycling PCs and the new pre-pay mobile broadband packages that offer a laptop as part of the deal.

'Digital Participation'

Most but not all of the over 60s are not as computer literate as their younger counterparts. So there is also a commitment to provide training for adults of all ages to raise the level of what is being dubbed as 'Digital Participation'.

The aim is to create "the right network today and the right network tomorrow", while improving the availability of

the technology. To achieve this, and bring in the next generation of

Unified Communications preferred

"I use TalkTalk. They are good, it's pretty fast and painless to use. I'd always like it faster of course... I'd always be keen to get all my communications from one provider, - so I have mobile included in the package too. As an iPhone user I've kind of precluded that option".

Ian Hendry, Co-founder and Director of Entelegen & WeCanDo.BIZ

broadband technologies and digital services, the existing copper and wireless networks that exist today will need upgrading.

New Government tax

More controversially the Government wants to create the Next Generation Fund, which may not be welcomed by most broadband users as their connectivity costs are more than enough already. The fund will mean that a 50 pence 'tax' will be levied upon all outdated fixed copper telephone lines, over which

most Asynchronous Digital Subscriber Line (ADSL) broadband connections run.

The Broadband operators will be able to access the Fund on a tender basis, and it will be available as a subsidy to enable those households and small businesses that aren't yet connected to join those that currently have access; thus extending the reach of e-commerce and access to public services.

Furthermore, an upgraded network that uses fibre optic cable technologies would be both faster and more efficient. One of the problems with ADSL is that it is often dependent on the local exchange, or what's called 'local loop unbundling'. This can lead to varying internet connection speeds. Fibre optic cable technologies, like the reliable packages that are offered by Virgin Media, don't tend to suffer from this problem so much. Nevertheless, generally speaking, just because you have a broadband package that offers 2Mb per second access,

doesn't always mean you will be connecting at this rate.

Dr. Lawrence Roberts, one of the founding fathers of the original internet, ARPANet, raised this issue last October at the British Institute of Technology and E-commerce's World Hi-Tech Forum: Focus India. He called for "equal access for equal pay." This means that you might pay for the same broadband internet package, but this doesn't mean you'll always be connecting to the web at the same rate as someone with comparable connectivity.

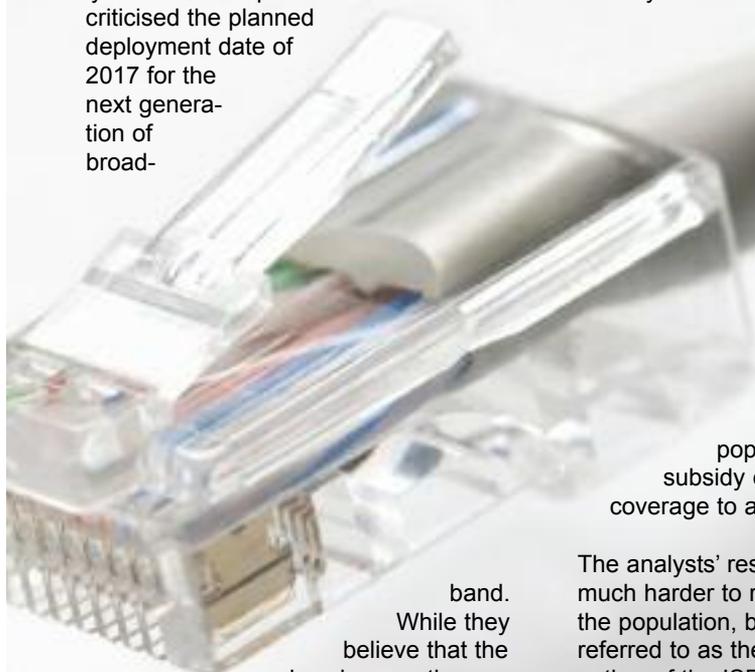
There are a number of factors that are involved, including number of users online at any given time - whether they are accessing the internet or a local area net-

work (LAN) at home or at work. Peer-to-Peer (P2P) Networks, for example, are the most affected by this issue. So the Government and others around the world should perhaps tackle this problem too.

In the meantime, at the beginning of July 2009 ISP Review reported that the analysts at Point Topic have criticised the planned deployment date of 2017 for the next generation of broad-

To date British Telecom (BT) has only committed to achieving 40% next generation broadband coverage by 2012 though, although Point Topic believes that this will actually occur towards the end of 2013. This is very much seen as a potential blip, but any

notice a significant increase in upload speeds and bandwidths. BT claims that it will be a unique selling point of the service, and it will enable businesses to develop networked offices and move towards more collaborative working practices – including



band. While they believe that the levy is more than enough to support its roll-out to 90% of the UK population, they feel that the target date is “rather slack”, believing that it should be brought forward to 2015.

shortcomings will eventually be sorted out. The analyst firm believes that market demand is going to be strong enough to bring it to 73% of the UK population, and that “a cross-subsidy of £70m could extend coverage to another 19%.”

The analysts’ research says that it will be much harder to reach the remaining 8% of the population, but the levy, which is referred to as the “Carter Tax” by the author of the ISP Review article, should raise about £170m a year and enable the operators and the Government to extend access to these people. Behind this is an assumption that 60% of today’s broadband users will be happy to pay an extra £1.50 per month (including VAT) to gain the benefits of this new broadband network and connectivity, rather than remain with the present day broadband packages and network technologies. The benefits include the delivery of 40Mb per second to each user within a service area of 1.6 sq. kilometres at a cost of £50,000 with a regulated rate of return of 8%. This means that it only needs 300 customers per square kilometre to become a viable commercial project.

Zen Internet: no wild horses

“I use Zen Internet. Wild horses would not drag me away. The reliability is near perfect and on the odd occasion I have had a problem (normally my hardware), they’ve been ‘Johnny on the Spot’ with the answer.

Call their technical services and you get a native English Speaker, who is actually deciding which words to use as they speak, and knows more than you do about computers. It’s refreshing. They could double their price and I’d still stick with them. Their billing is always correct too.”

Greg Grimer, Voices in Business

BT is reliable, but is AOL?

“I changed to BT when I totally fell out with AOL (who I think sub-contract from BT anyway).

I fell out with AOL as they had, and still could have, restrictions on which ports you can use for email. I think the default Outlook port is Port 25, but AOL said this could not be used. As a result I could not use their broadband for company emails. They told me to get the company to change the ports.

For me BT has never been a problem and if I ask a question their techie people know what they are talking about.

My only complaint is that their billing is far too complex. I pay in advance for some things, whilst some calls are in arrears, then I get credits. The bill is normally about 5 pages long and all I do is use my broadband and use the available phone line after 6 pm or at weekends which should be free.”

Roy Dewell, UK Business Manager, Netways

Computing magazine said on 9th July 2009 that British Telecom has already begun some ‘fibre-to-the-cabinet’ (FTTC) trials, suggesting that they “herald an era of innovation.” David Bailey, who wrote the article, says the trial will involve more than 15,000 premises and include more than 100 fibre-enabled ‘street cabinets’. The telecoms operator and unified communications provider, which includes broadband, is expected to cost the company £1.5bn on 10 million homes by 2012.

Increased upload speeds

In comparison to the existing copper-based networks, users of this network will

web and video conferencing, and flexible working. This kind of broadband technology will also remove the constraints that are faced by users wanting to remotely back-up their files and provide more network resilience. It is also predicted that businesses will create an upsurge in demand for software-as-a-service offerings and cloud-based computing services.

Antony Walker, the chief executive of the Broadband Stakeholders Group, comments that this creates “a new platform for innovation and all businesses will be able to do things differently, which will change their relationship with their customers and open up new services and markets.” He believes there will still be winners and losers in the mix, but on the whole he feels that this represents an opportunity for companies to improve themselves and become more competitive. Those that don’t keep up with the new technology will struggle.

The broadband packages of today

On the whole the future sounds promising for the creation of Digital Britain. Returning to the present and you will find that there are three types of broadband package today: fixed line (whether cable or ADSL with operators such as BT and TalkTalk), mobile (with O2, Vodafone and Orange for

example) and wireless (Wi-Fi and WiMAX).

At this juncture it's worth noting that there is a difference between wireless and mobile broadband. Mobile broadband is only available where there is a mobile phone signal to connect to the operator's network at any time and place, while a wireless network provides users with the freedom to move around a building or within the immediate environment with their laptop or mobile device without having a physical connection to the network via a cable and a wall socket.

The Digital Britain programme will lead to the liberalisation of the 'mobile spectrum', which will in effect enhance the level of 3G coverage and accelerate next generation mobile services. The hope is that these services will stimulate mobile commerce and the use of our mobile devices to make payments for goods and services while on the move.

worked mainly from the same location, I've no need for Wi-Fi or for a mobile broadband connection. In the future this might change as a greater uptake of mobile broadband and an increase in Wi-Fi hotspots. The latter can be found in cafés, restaurants, pubs and in other public locations.

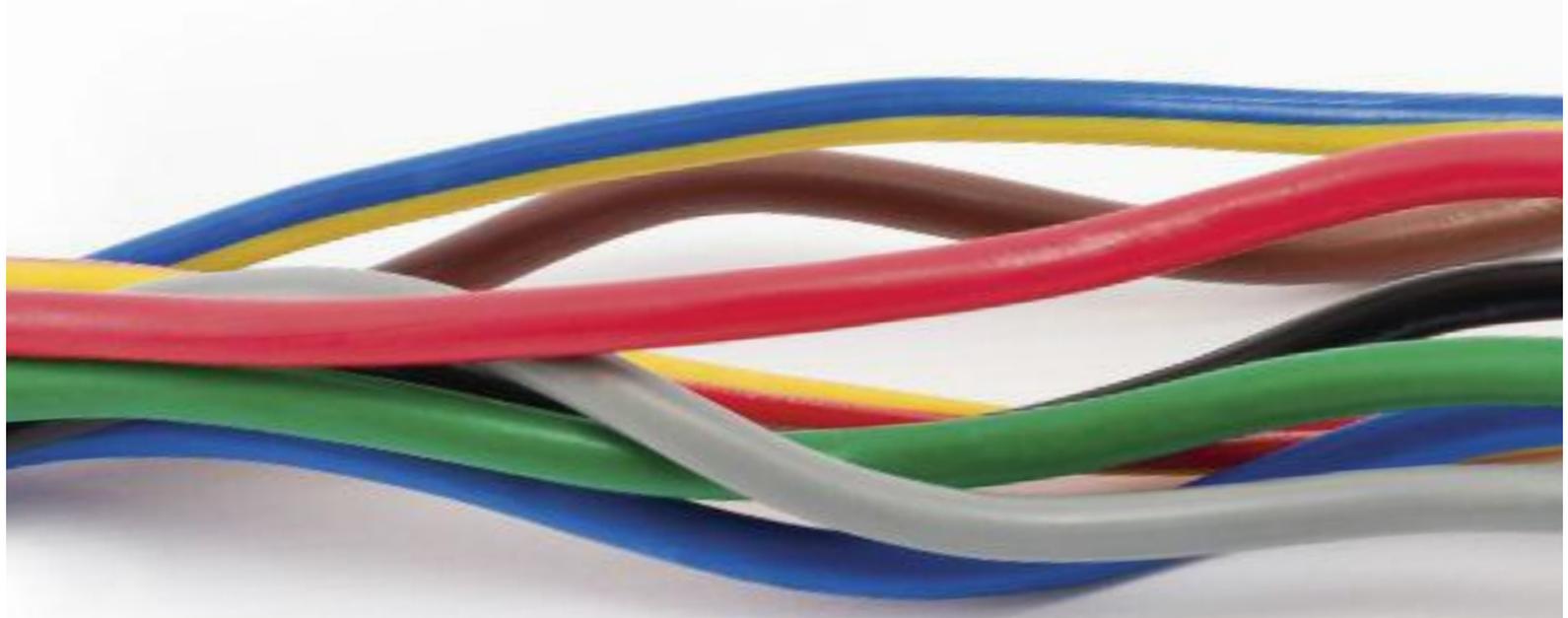
However, an industry watchdog has notice that there are a number of mobile broadband 'not spots' in rural areas. The Government has therefore made it become a significant cause for meeting its 2012 aims. Broadband Choices magazine cites a Commission for Rural Communities report which states that rural areas in Britain could risk "playing digital catch-up unless action is taken to bridge the gap." The report, 'Mind the gap – Digital England, a New Perspective', calls for more community-based broadband schemes and alternative investment models for faster broadband in rural areas.

Anyway, more generally, O2 now allows its mobile broadband customers to connect

£14.69 a month, and customers are charged £5 a month for the initial four months. The pay-as-you go equivalent costs from £2 per day.

Alternative packages from Vodafone, Orange, T Mobile, 3, and Virgin Media cost from £120 to over £548 per year. Their connection speeds respectively range from at 3 Mb to 7Mb per second. As a monthly charge this equates to £10 to £39.15 per month. These figures were sourced from the mobile broadband cost calculator on Broadband Choices' website. There are, however, like with the fixed line and bundled broadband packages (where you gain access to TV, telephone, mobile, and internet services) a number of discounts available – both for the connectivity as well as for the mobile USB modems.

Three (3), according to ISP Review, has cut its 5GB mobile broadband service down to £15 per month with the USB modem costing £9.99. Its 'Ready to go' package now costs £39.00 with 3GB of pay-as-you go network access. O2 had a



A fixed-line package, like the one I use with Virgin Media, doesn't provide me with the same flexibility as where I work. However, you can buy wireless modems and routers to create your own private Wi-Fi network for a reasonable sum these days. All you do is connect it to your broadband internet provider, and then you can work wherever you like within your office or home. At the moment, as I

to the internet free of charge at 3,000 locations. Customers can now via Wi-Fi at all of BT Openzone's hotspots in the UK, including branches of Starbucks and 5,000 of them within the Cloud Network which is already included within its packages. According to the Times Online this coincides with an upgrade of O2's Connection Manager software. The operator's mobile broadband packages are priced from

similar deal before 29th June 2009. Three cut its roaming rates per MB as of 30th June 2009. So using a mobile dongle in Europe will now cost you £1.25 per megabit (MB), which the company claims is below the cap required by current European Union legislation. You might have also have seen billboards around the UK, advertising Vodafone's suspension its roaming rates for the summer. So the bat-

tle for roaming customers appears to be hotting up, as indeed it is in the business-to-business market for both O2 and Vodafone.

The Business-to-Business battle

Mobile News magazine reported on 13th July 2009 that Vodafone and O2 are stepping up the fight for the B2B market. Vodafone is overhauling its indirect channels, while O2 is relentlessly chasing the SME market to gain a share of the pie. Yes Telecom is benefitting from Vodafone's strategy, having been made a 'Gold Partner' and a bespoke commission programme has been established. This means that dealers will take a 50% share in ongoing revenue.

In contrast O2 has launched a unified communications solution which is targeted at the dealer market, called 'Fixed Line Anywhere', which allows businesses to run their office telephony communications over the O2 network while retaining a mobile and geographic number. This follows Vodafone's own unified communica-

between £132.87 with PlusNet to £567.73 with Zen Internet per year for the respective contract periods of 18 months and 1 month. There is an array of operators including: BT, Virgin Media, Madasafish, DirectSave Telecom, the Post Office, and Sky.

If you wanted to have a fixed line connection, you would pay anything from £73.40 per year with O2 (which is only available for its own customers) for a 8MB connection to over £518 per year with Virgin Media which offers in this case 50MB. For most users I would say that a 2MB connection is sufficient for most activities like file-sharing, making VOIP telephony calls and for playing music. I would, however, advise that you compare and contrast the low cost deals before sign up with them. Ideally you should go for unlimited downloads and uploads, otherwise a seemingly cheap package could turn out to be either quite expensive or prohibitive.

offer packages though from around £399 per month, giving you 10GB connectivity. So it's worth scouting around to gain the best package for your needs.

Discounts: It's all in a bundle

If you want to save a lot of money, gain access to some significant discounts, and know that you are not moving anywhere soon, then you should consider a bundled package. I say this because although I've not yet moved over the last nine years I've lived in Sutton, Surrey, I am reluctant to sign up to a contract that requires a 12-month minimum connection period. So like a third of the UK population, according to an IDG report I am reluctant to take on a bundle package until I move. The IDG report, 'A third of Brits not bundling broadband with TV or phone', suggests that bundling could save us up to £230 per year. If this is the case, then maybe I am mad, but I would swap everything over to Virgin Media if the contract terms were more flexible. They seem to have the most comprehensive package in my area, costing £148 per year. My broadband

tions solution, 'Vodafone One' for the corporate end of the market. In spite this Vodafone recently lost a significant share of the market to O2, and this is perhaps the reason for the shake-up.

Consumer Wi-Fi package

Putting this aside, you will find that most consumer-orientated Wi-Fi packages often come with a wireless modem - costing

Sometimes it's best to go with the more expensive providers like Virgin Media to gain a little bit of surfing freedom and it currently tops the broadband speed chart - whether you are a consumer, a telecommuter, or a business user of some other description. Fixed-line business broadband packages tend to be more expensive. Service providers like Node4 can

package alone costs me £308.28 per year, so I could save up to 48% with the bundled package. I think the figures speak for themselves, and that's also why these packages remain a key battle ground for many of the broadband providers.