

## BSG submission to Business and Enterprise Select Committee

### Inquiry in to broadband speed

October 2009



#### Introduction

The BSG welcomes the opportunity to input to the Committee's inquiry in to broadband speed.

The BSG is the UK government's leading advisory group on broadband. It was established as a cross-sector government advisory group in 2001 to help the UK lead the G7 in broadband penetration and connectivity. It provides a neutral forum for collaboration between organisations across the converging broadband value-chain with the ultimate aim of helping to create a strong and competitive UK knowledge economy. Further information about the BSG can be found at: [www.broadbanduk.org](http://www.broadbanduk.org)

#### **Is the target for universal access to broadband at a speed of 2Mbps by 2012 ambitious enough?**

BSG supports the concept of a 2 Mbps universal service commitment, however, it is important to be clear on its objective, which is to achieve the universal availability of a minimum level of connectivity in a relatively short time. The BSG's chairman Kip Meek first proposed the idea of establishing a Universal Broadband Commitment in a speech in October 2008,<sup>1</sup> and the BSG has supported the government's efforts to develop this policy since then.

At a time when 17.3m UK homes and small businesses<sup>2</sup> are making regular and extensive use of broadband it is appropriate to ensure that all households and small businesses, regardless of where they are located, have access to a minimum level of broadband connectivity that enables functional use of today's generation of internet services.

In establishing what the minimum level of service should be a balance has to be struck between the capability required and the cost of delivering that capability. In the BSG's view setting the USC at 2Mbps strikes that balance between cost and capability. Although it is lower than the average broadband speed available today (4.1 Mbps<sup>3</sup>) it will provide a level of connectivity that enables functional use of the type of basic online services that many would view as essential, and can be delivered at a reasonable and proportionate cost. The higher the specification for the USC is set the more costly it will be to deliver.

It is extremely important to recognise that the USC is intended as a floor, not a ceiling. In some instances, where there are clusters of broadband not spots, it may be cost effective to implement next generation broadband solutions to meet the USC, with the result that consumers will get significantly faster broadband speeds than the 2Mbps target. However this will not be possible in all instances as the technology solutions available in each case will vary: the BSG believes that a mix of technologies, including fixed wireless and satellite will be required to deliver the USC.

Further measures will be required to meet longer term ambitions to deliver universal availability of next generation broadband and these are discussed in more detail below. However, given the high level of broadband adoption and use that we see today it is appropriate that short term action is taken

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<sup>1</sup> BSG Chairman Kip Meek speech to BSG Autumn Reception, 14 November 2008, [www.broadbanduk.org/content/view/350/7/](http://www.broadbanduk.org/content/view/350/7/)

<sup>2</sup> Ofcom, [http://www.ofcom.org.uk/research/cm/tables/q4\\_2008/](http://www.ofcom.org.uk/research/cm/tables/q4_2008/)

<sup>3</sup> p8, 'UK Broadband Speeds 2009', Ofcom, July 2009

now to ensure the universal availability of basic broadband. The 2 Mbps USC is an appropriate and proportionate response to that challenge.

### **Is the government right to propose a levy on copper lines to fund next generation access?**

The transition to next generation broadband is now underway in the UK. Virgin Media's 50Mbps service is now available to approximately 48% of homes, and Virgin Media expects to make higher speed services available in these areas in the future using DOCSIS 3.0 technology. BT has now started its deployment of fibre to the cabinet (FTTC) and currently plans to make its 40Mbps service available to 40% of UK homes by 2012. We are still in the early stages of next generation broadband deployment both in the UK and in other markets, however, and take-up is still relatively low. This is likely to increase over the next few years, driven in part by the emergence of new online services and applications, although the pace of take-up is uncertain.

In 2008, the BSG published a detailed study on the costs of deploying fibre based next generation broadband in the UK.<sup>4</sup> This study provided a detailed analysis of the way in which deployment costs vary in different areas and highlighted the way in which costs rapidly increase outside higher density areas.

The research found that fibre deployment costs will be relatively constant across areas with higher population densities. This implies that, if a commercial case for deployment exists at all, then the market should, in time, be able to deliver to approximately two thirds of the UK population. Beyond that point, the costs of deployment to the final third of UK premises will be significantly higher, making commercial deployment progressively more difficult. However, deployment costs may fall over time and the business case for investment in more rural areas could prove to be more positive, if demand proves to be stronger than is currently predicted. Moreover, wireless and satellite technology could have a significant role to play in providing higher quality connectivity. BSG is currently considering undertaking further research on the costs and capabilities of wireless and satellite networks in the near future.

While it is possible to conclude that due to the high costs involved, the market is unlikely to deliver universal access to next generation broadband without some form of additional support, and it is not possible to predict with certainty at this stage exactly how far the market is likely to deploy in practice. This is not a situation that is unique to the UK, but a reality that is facing policy makers and regulators around the world.

This raises three questions for policy makers:

1. Does this matter? Are there likely to be any negative consequences from a growing divergence between the capability of broadband services available in urban areas and those available in rural areas, in either the short or long term?
2. If it does matter, what action should government take and when should it take it?
3. If public funding is required, what mechanism should be used to make that funding available?

Most BSG members agree that disparities in the quality of broadband services available in urban and rural areas will have negative implications in the long term, as shown by the general consensus that it is important to make 2Mbps broadband available to all UK households. However, views vary on when it will be necessary to take action in respect of higher speed broadband and NGA, what form that action should take, and how it should be funded.

Those sceptical about the need for immediate action argue that:

- the UK like most other countries is still at a relatively early stage in the deployment of next generation broadband and that the likely extent of market-led deployment is still unknown;
- therefore, there is a high risk of public money crowding out private investment with the consequence that (a) public money is wasted investing in areas that private investment would have provided and (b) NGA roll-out will be delayed

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<sup>4</sup> 'The costs of deploying fibre-based next-generation broadband infrastructure', Analysys Mason for the BSG, September 2008

- expenditure of £1 billion to upgrade the network would be a poor use of public money especially given that the services and applications likely to be enabled by next generation broadband are still largely undefined, and therefore cannot yet be considered essential;
- and as a result intervention at this stage would be premature.

They also argue that the levy itself would be a regressive and unfair tax and act as a disincentive to broadband take-up for those consumers for whom the choice of whether or not to subscribe to a broadband service is a marginal decision. There is also a concern that government would not be able to sufficiently ring-fence the fund created by the levy given the pressures on the public finances.

Those in favour of intervention on the other hand argue that:

- it is clear that commercial deployment won't extend into rural areas and that recent analysis of the high capital costs of deployment make it possible to identify what the likely extent of market-led deployment will be;
- there is growing international consensus on the social and economic benefits likely to accrue from next generation broadband deployment;
- any potential economic inefficiencies associated with intervening now would be outweighed by the benefits of achieving timely ubiquitous availability;
- given the very long lead times required for policy development and scheme implementation it is better to plan now while there is still time, rather than to act in haste later when the problem becomes more manifest;
- action is required now to ensure timely provision rather than waiting until those living and working in these areas become seriously disadvantaged.

Whilst many of those in favour of intervention believe it would be better to fund that intervention through direct taxation, the levy is regarded as a novel but proportionate mechanism to address this issue that reflects the wider pressures on public expenditure.

### **Will the government's plans for next generation access work?**

Should the levy be introduced and the Final Third Project go ahead, careful thought will be required as to how it is implemented.

The government has proposed establishing a Network Design and Procurement Group (NDPG) to oversee the implementation of the Final Third Fund. While it is appropriate that this detailed implementation work be done at arm's length from government, it is important that the NDPG should not be developing policy, which must remain the role of government. It is also important that this new body draws on the full range of relevant stakeholder experience in this area as it develops its thinking. The approach of the NDPG should not leave the final 10% of UK homes unaddressed and digitally excluded.

The central idea of the government's approach is that the final third fund should be available to provide a top up subsidy to support deployment in rural areas. The NDPG will have to determine which areas will qualify for the subsidy; what scale of subsidy will be provided in any given area; and how these procurements are presented to the market. In each case it will be necessary to ensure that the potential for market distortions is minimised, a technology neutral approach is adopted, value for money is ensured and that intervention achieves the best long-term outcome for the UK's communications infrastructure. It will also be necessary to consider the role for alternative wireless or satellite solutions in providing service to those homes where the cost of fibre deployment is prohibitive.

This will not be a straight forward process and the scheme design process will need to be extremely thorough to ensure the right approach is developed. The NDPG's proposals should be consulted upon in detail before any procurement is undertaken. Time should be taken to get this right.

As explained above views differ as to whether the proposed levy is the right mechanism to fund next generation broadband deployment in rural areas. However, we do believe that public funding will be required at some stage if next generation broadband services are to be universally available. If and

when such an intervention is made, and regardless of the funding mechanism chosen, the government must at that stage ensure that it clearly explains to citizens its rationale for intervention and the benefits they are likely to derive in the long term.

The BSG also advocates addressing both the demand and supply sides of this challenge. The government has recognised the importance of this through its Digital Participation agenda for current generation broadband. It will be important that similar activities and focus are provided to developing the demand side for next generation broadband in areas where the Final Third Project will be supporting the delivery of superfast broadband services.

The Digital Britain Report also set out the government's proposals to bring forward the release of spectrum that would provide improved mobile broadband capacity. The BSG supports this objective, and of the work of the government's Independent Technical Arbiter, as they seek to find a solution. Mobile broadband, particularly the next generation of mobile broadband, will be an important competitive driver in the market for fixed line services. Furthermore, increased wireless capacity will be an important complement to next generation broadband in the future.

The government has also committed to reviewing the regulations regarding the overhead deployment of communications cables. According to the BSG's analysis, removing the restrictions facing the deployment of overhead cables could provide some benefit in terms of cheaper deployment to investors.<sup>5</sup> The government's task will be to assess the demand for this from operators, and to balance any possible benefits with the dis-benefits associated with overhead cabling. BSG consider that this is worth exploring, and will support the government's efforts to explore this further.

In the Digital Britain Report the government committed to providing investors with greater clarity regarding the non-domestic rating of fibre assets. This was initially undertaken through a seminar facilitated by the BSG.<sup>6</sup> As a result of this seminar, the BSG is now working with the Valuation Office Agency (VOA) to provide greater certainty regarding the treatment of fibre assets with the development of a range of deployment scenarios that the VOA will provide an indicative approach to. The government supports this work, which should provide investors with greater clarity as to their liabilities under the rating system.

The government is also supporting the COTS Project (Commercial, Operational and Technical Standards for Independent Local Open Access Networks), a BSG-led and facilitated project that is seeking to develop a harmonised approach to support the delivery of broadband services regardless of the ownership or operation of the underlying infrastructure.<sup>7</sup> The outcome of this project should enable new entrants to the market to provide next generation broadband, particularly in areas the market would otherwise not serve, and provide consumers with an equivalent choice of services to those available elsewhere.

An area where the BSG feels there is need for more work to be undertaken, and which was not discussed in the Digital Britain Report, is access to passive infrastructure. Although there is still considerable uncertainty about the potential impact that passive infrastructure sharing might have in practice the BSG believes further work is required to examine the underlying technical, operational and commercial issues to identify whether the sharing of passive infrastructure such as ducts could play a significant role in increasing the scale, pace and reach of next generation broadband in the UK. The BSG is undertaking further work with industry stakeholders to examine this, building on the work undertaken for Ofcom by Analysys Mason that set out some of the barriers to the use of duct access.<sup>8</sup>

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<sup>5</sup> pp 61-62, 'The costs of deploying fibre-based next-generation broadband infrastructure', BSG

<sup>6</sup> BSG Workshop with the VOA, 20 April 2009, [www.broadbanduk.org/content/view/369/50/](http://www.broadbanduk.org/content/view/369/50/)

<sup>7</sup> For further information please see [www.broadbanduk.org/cots](http://www.broadbanduk.org/cots)

<sup>8</sup> 'Telecoms infrastructure access – sample survey of duct access', Analysys Mason for Ofcom, March 2009

## **Are companies providing the speed of access that they promise to consumers?**

Broadband is a difficult service to market. Due to the nature of the underlying technology, it is technically difficult for ISPs to provide complete assurance about the quality of any particular line and the broadband speeds that can be delivered over that line. Some ISPs have marketed their products on the basis of 'up to' speeds. Although this caveat is understood and accepted as reasonable by many consumers, it has led to growing dissatisfaction on the part of some consumers whose lines are performing at a level considerably below the advertised up to speed.

Broadband speeds are impacted by a range of factors that are not under the control of an ISP; these include: cross-talk on lines; electrical interference; in-home wiring; and PC specification. There is an even greater range of factors that impact on mobile broadband speeds. However, there are factors that are within the control of service providers, such as contention ratios and traffic management policies.

The key to resolving this issue is to ensure that ISPs strive to provide clear and accurate information to consumers so that they are fully informed and have an accurate expectation of the service they are paying for. The Ofcom Voluntary Code of Practice on Broadband Speeds is extremely useful in this regard, as is the Mobile Operators Good Practice Guidelines.<sup>9</sup> However, given the complexities of the underlying technology this is likely to remain a difficult issue. Continued oversight from Ofcom is required to ensure that the industry is doing all it can to provide accurate information to consumers.

## **To what extent does current regulation strike the right balance between ensuring fair competition and encouraging investment in next generation networks?**

Competition and investment are by no means contradictory objectives. The UK communications sector has witnessed large scale investment from a wide range of market players since it was first deregulated in the 1980s. Competition has been and will remain in the future the critical stimulus that drives long-term investment in new communications infrastructure and services.

That is not to say however, that there are not occasions where the interests of competition and investment diverge. There are instances where short-term competition concerns compete with longer-term investment needs and in these instances careful trade-offs have to be made.

In practice Ofcom has had to balance the needs of investment and competition since its inception. Ofcom has always argued that a requirement to ensure efficient and timely investment was implicit in its existing duty to ensure a wide range of electronic communications services is available throughout the UK and in the requirement to further the interests of the citizen (which were generally interpreted as being more long-term) as well as the consumer (whose interests can be regarded as more short term).

Ofcom undertook a lengthy process of reviews and consultations before producing its statement on superfast broadband in March 2009. Much of that consultation process was focused on striking the right balance between investment and competition to achieve an overarching aim for "consumers and citizens to benefit from timely investment, competition and widespread availability."<sup>10</sup> Whilst views will differ between commercial players as to whether Ofcom has got that balance exactly right, the response to the statement in general was positive.

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<sup>9</sup> 'Voluntary Code of Practice: Broadband Speeds', Ofcom, June 2008; 'Principles of Good Practice for selling and promoting Mobile Broadband', Mobile Broadband Group, June 2009

<sup>10</sup> 'Delivering superfast broadband in the UK', Ofcom Statement, March 2009

## **About the BSG**

The BSG is the UK government's leading advisory group on broadband. It provides a neutral forum for organisations across the converging broadband value chain to discuss and resolve key policy, regulatory and commercial issues, with the ultimate aim of helping to create a strong and competitive UK knowledge economy.

The BSG's diverse network includes telecoms operators, manufacturers, investors, ISPs, broadcasters, new media companies, mobile operators, content producers and rights holders, as well as government departments, Ofcom, Regional Development Agencies, devolved administrations and others.

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