## **BSG Reception** Thursday 13 November 2008

Good evening, ladies and gentlemen. Thank you for coming. And thank you, Stephen, for introducing me. For those of you contemplating sneaking out at the back now that the Minister for Communications has spoken, I should say that Stephen is very happy to participate in any questions at the end, although, who knows, he may, for once, be circumspect.

I have been chair of the BSG since April 2007 and in that period I have never stopped being circumspect. While Stephen's ex-boss has (until recently) made much of the virtues of prudence, ploughing my own much more modest furrow, I've chosen circumspection. The BSG has, for several years, had to negotiate between the evangelists of next generation access – 'build it and they will come' – and those whose commercial interests are potentially put at risk by either premature investment or ill-considered interventions by government or Ofcom. Hence, to date, circumspection has been our watchword.

But you can overdo it. Antony Walker who, as many of you will know, does the work round here with his two colleagues – we are not a large

organisation – Antony counselled me that in this speech I should explain what the BSG is for, where we've got to and what we need to do next. I'll do what you suggest, Antony, but first I want to talk about next generation access in the UK. And specifically I am keen to ditch circumspection, at least temporarily, and give my view of the reasons for optimism about next generation access (NGA), the areas of greatest challenge to market-based delivery of NGA and the role of government and its agents in addressing these.

The first thing to say is that we have an environment in the UK where sensible progress on investment in high speed broadband can take place. This is manifested in a growing and widespread conviction that it matters to society and competitiveness – witness Gordon Brown's article in Sunday's Observer, Stephen's appointment and his brief and the whole debate around NGA's value and costs, much of which has been stimulated and evidenced by the BSG. We now have an informed, constructive and inclusive debate in the UK. This is not a universal phenomenon – early government intervention in at least one country I'm familiar with has not resulted in a steady progression towards NGA but a bad-tempered process which might slow NGA deployment, not expedite it.

In this relatively constructive environment, there is growing evidence that normal market mechanisms are working to induce investment. Until this time last year, fibre deployment in the UK was essentially limited to BT's Ebbsfleet project and Digital Region. Then in November 2007 we had the announcement from Virgin that it was upgrading to 50 megabits per second with a £500 million investment. Some community broadband projects are beginning to get some traction. And mobile broadband is really taking off – with the dongle revolution, it has put on 0.7 million subscribers in the last six months. Mobile broadband is not NGA - it offers headline speeds of up to seven upstream and one and a half downstream – but, because it is highly differentiated versus fixed line, it stimulates NGA investment. The result of all this activity is that BT announced in July that, subject to regulatory commitments, it would invest £1.5 billion rolling out fibre to the cabinet to 40% of the UK population. We're not Hong Kong or Singapore – but this level of intent seemed inconceivable a year ago.

Where might we go from here? There seems to be a broad consensus now that it is possible to identify the basic architecture of a next generation access market. A patchwork quilt of different forms of delivery with interconnection points at different points of the value chain. So - Openreach at the heart of fibre provision in the UK with a

predominantly fibre-to-the-cabinet infrastructure. So - Virgin providing substantial competition to Openreach. So - Carphone, Sky and other LLU operators also competing with BT and, predominantly, employing active interconnect with Openreach. Satellite playing a role, particularly in delivering NGA to rural and remote areas. Mobile and other wireless services being very important, both in rural areas and also elsewhere, as the technology evolves and as spectrum is progressively made available. Community-based broadband operators delivering fibre, often to the home, but in all cases with standard interfaces, such that national service providers can interconnect with them. Long term aspirations to migrate to FTTH, facilitated by various initiatives to make civils less of a barrier – in particular, the coordination of street digging between utilities and duct sharing where possible.

This is a rosy vision of the future. Its most attractive ingredients are that it is delivered by the market and, because it's not monolithic, because it's a patchwork, competition is hard wired into it. But it won't happen automatically and there are a number of issues which I believe could challenge this rosy view. So what I would like to do next is highlight five issues that I believe are of real concern.

My first concern is spectrum availability. As I've said already, mobile broadband is developing well in the UK and new wireless services generally have a twin role in delivering NGA – prompting investment from fixed line competition and a principal's role in actually delivering much higher speed access to customers. What could stop wireless playing this twin role? Theoretically, some road block in the technology's evolution but that is not a UK issue and we should surely let the Nokia's and Motorola's worry about this, not us. The thing we **should** worry about however is whether sufficient extra spectrum is made available to permit high numbers of customers to use high speed wireless services. As many in the room know, there are a number of blocks of spectrum currently scheduled for auctioning by Ofcom -2.6gigs, the DDR and the spectrum used previously for second generation mobile services. The process for selling off each of these blocks is threatened by myriad issues – judicial challenge, underpinned by intractable issues of fairness and equity and Ofcom, powerful as it is, does not have the authority to impose its own solution. This is on Stephen's agenda for his report on Digital Britain. It is of real importance and his objectives, if I may be so bold, should be two-fold on this issue – first, expediting the release of spectrum and second, having a view to competition and innovation when crafting whatever solution seems best. Insofar as Ofcom cannot deliver the best

outcome, government needs to work out what outcome it wants and, if necessary, legislate to achieve it.

My second cause for concern relates to the growing allocation problems across the value chain. The BSG commissioned some work earlier this year – from Brian Williamson of Plum Consulting – on the incremental value of next generation access – which suggested that there was substantial value, much of it public, but much of it private too. However, the existence of private value does not induce investment unless there are business models which can allocate a proper return to investors. Imagine a commercial version of the BBC's i-Player. Let's give it a code name – say, Kangaroo. Imagine underlying demand for it is fantastically high, requiring BT and ISPs to invest heavily to maintain service levels. Imagine this investment in time effectively delivered next generation access. In this environment, Kangaroo would have benefitted from NGA but borne none of the risk.

I didn't mean to pick on Kangaroo here. And indeed there are problems with allocation flows in all directions. There are situations where content drives the value proposition for broadband service providers but rights holders fail to see any of the revenue and indeed situations where consumers themselves are consuming content without

any regard for copyright (a point to which I will return shortly). There are multiple dangers here, notably that advanced infrastructure does not get built despite there being a good economic case to build it and, on the other side, a fragile content industry in the UK might face further difficulties.

So, it's not about Kangaroo. I'm making a bigger point – broadband business models do not, at the moment, properly allocate risk and reward. The BSG first made this point publicly in Pipe Dreams, published in April 2007. There has been some innovation since, but this remains embryonic at best and won't solve the overall allocation problem. On the evidence to date – the spat around i-Player, for example – it looks difficult to contemplate the allocation issues will be solved any time soon.

But, as I said, government solving the problem is not the way forward – if all the benefits not captured by infrastructure investors were public benefits, it might be the way forward. But that is not the case, so government (or tax payers) footing the bill to create benefits for content creators and aggregators doesn't look right. Impasse.

But let's assume a **rational** world, for a second, where, in addition to it being rational, everyone has got more or less perfect information. In that environment, content creators and aggregators (with some help from government and other beneficiaries) would be prepared to contribute to the investment costs of NGA up to the additional present value created for them by such investment. And infrastructure players would invest as soon as this contribution made the economics work for them. And it is likely that, looking at the economy in its entirety, there is, or soon will be, a margin between these two numbers, permitting investment to proceed.

Two important thoughts emerge for me from this. The first is that business model innovation should be capable of win-win outcomes, rather than win-lose; and this should alter the fractious nature of the debate between players in different parts of the value chain.

On that note I would also like to mention the specific issue of combating illicit file sharing. The music industry has clearly borne the brunt of this phenomenon and rights holders are understandably eager to seek whatever means possible to stem the tide. This is clearly a polarised debate and it is not my intention to plant a BSG flag on either side of the argument. However, my concern is that the proposals currently on the table look at best like sticking plaster solutions to today's problems.

My fear is that they could prove wholly insufficient to cope with the scale of the challenge ahead.

There is no company around the BSG table that does not understand the value of intellectual property or the need to ensure that that value is not wasted in a digital economy. And that's why I believe that rather than settling for the options now being discussed we would be better served by returning to first principles to determine how we are going to address collectively one of the biggest challenges of a next generation broadband world. 'First principles' is a bit vague perhaps - so, to be specific, we need to check that proposed solutions work across a variety of types of content, we need to check that constraining the ISP's 'mere conduit' status doesn't have disproportionate unintended consequences and we need also to ask whether self or co-regulation has a good chance of delivering results. Although there is an evident need for urgency, we have to be thorough. Poor solutions now may force us to retro fit solutions after the superfast broadband pipes open and by then it may be too late.

My third concern is about the digital divide.

The first thing to say is that the digital divide is not just a future problem. The vast majority of households can get broadband but, as those of you who attend broadband conferences know, not everyone can, and people who cannot obtain broadband access feel materially disadvantaged. This provokes some questions which need answers. The broadband journey began with 512Kbps always on broadband. Should we define this as the minimal requirement for functional access to the internet? If so how should it be provided? Can we be technologically agnostic? What would it cost? How should it be funded?

But the future divide is potentially much more severe. When I described what the future might look like, I glossed over rural and remote areas by suggesting that satellite and mobile might solve the problem. But this will not be the case – they will have a role, but the uncomfortable fact is that, whatever the technology, the costs of serving consumers outside the big conurbations are much worse and, given the fragile economics of investing anywhere, there is the possibility that very significant parts of the UK population are left unserved for many years by high speed broadband. To put some numbers around the issue – the BSG report on the costs of NGA show that, if fibre is rolled out to the cabinet, the cost of doing so to the crowded 58% of the population would be £1.9billion and the un-

crowded remainder 42% would be £3.2 billion, almost two and a half times as much per household. For fibre to the home (using GPON) we see a similar story – the dense 68% of households will cost £9.9bn; the remaining 32% would cost £14.7bn, more than 3 times as much per household.

How to deal with this? As the old joke has it about making love to a hedgehog – very, very carefully. Three areas are worth thinking about – government subsidy, community-based projects and what I am terming a universal service commitment.

First government subsidy. Even prior to the credit crunch, the notion that government finances could sort out this issue looked fanciful. But it is also unfair – not to government, who need no protection, but to tax-payers.

As I said previously, the allocative issues are not so much between public and private sectors but between different parts of the private sector – so government subsidy involves tax-payers bearing costs which in an equitable world they would not.

Community projects – happening in South Yorkshire, in Bournemouth, in Belfast, in Salford, in Walsall and in many other parts of the country – are indeed *happening*. They deserve much greater attention and support and, in particular, work is needed to ensure they can play an economically efficient role in the patchwork quilt of fibre provision – as Caio specified, we need standard interfaces, so national service providers can work seamlessly with community providers. But, while they merit greater attention and support, these initiatives are located generally in small conurbations – they are only a partial solution to the upcoming divide between high speed broadband 'haves' and 'havenots'.

The third way to think about this is what I have termed the universal service commitment. 'Obligation' is the normal term used and I have changed it because, in telecoms, the obligation was laid on a single entity in return for monopoly privileges. This is not an appropriate model for superfast broadband, because monopoly is not the way forward and just as the benefits of NGA will be spread, so too should be its costs of implementation.

The question is - do we have the imagination and (to use a pre-Thatcherite term) the public spirit sufficient to solve a really difficult

problem in a way that benefits more or less everybody? An NGA USC would not have the same characteristics as the old British USO. Other USO's – in Brazil, for example – because they were introduced later and after competition had been established, are funds contributed to by many parties. Perhaps an NGA USC should share this characteristic. A USC raises many questions, not least issues of governance and accountability (if others are contributing how far will they be happy to leave Openreach to determine its own cost base for actually delivering on much of it?)

Without using this speech or event to speculate prematurely on detail, as I said, a period of imaginative and constructive debate on this issue seems like a good idea. And, again, Stephen's Digital Britain report is absolutely the right catalyst for such a debate.

The fourth and fifth concerns are related - funding challenges and the economy. I'm not going to dwell on these tonight, but in brief ... Even prior to the credit crunch, funding was a major issue. Let me focus on BT and Openreach for a while. BT will play a big role in implementing NGA in this country, notwithstanding the patchwork quilt. As BT has been pointing out for a long time, its funding flexibility is far from limitless – it has substantial amounts of debt, a big pre-existing capex programme and it has already raised money from its property portfolio.

It is genuinely constrained. As for BT, so the rest of the industry – squared. The take-away from this is that, when it comes to formulating policy, don't regard the financing as an unimportant mechanism to be considered, once the key decisions are made. We need to involve the institutions in formulating the way ahead.

Finally, the economy. No need to elaborate on its horrible state, but again some quick points. NGA will take time to deliver – whether it's Virgin's DOCSIS3, it's Openreach's fibre to the cabinet or the variety of community schemes, the fully operational services will come into effect in 2010 and 2012. Difficulties of the type we are experiencing now may not have the paralysing effect in the medium term that seems so likely now. I have just come back from the US where I was able to enjoy the infrastructure – roads, national and state parks, trails – which was created through FDR's leadership in the 1930's. In difficult times, we should maintain our commitment (that word again) to long term goals.

So, to recap, we can discern how NGA might be delivered and delivered primarily by the market. We know that it is likely to be valuable to us as a society and as an economy, but it is also obvious that there are big challenges – spectrum availability, allocation issues

across the value chain, a new digital divide, funding and the economy. What is needed to help overcome these challenges?

Three things: Firstly, it is time to commit to a vision. Clearly, when we emerge from this recession, we want to be an efficient, competitive, low carbon, knowledge economy. Do we seriously believe we can do that without investing in the next generation of communications infrastructure? Through Digital Britain we have a unique opportunity to put NGA at the heart of the UK's economic recovery plan.

Secondly, we need a commitment to leadership from all the major players. This means primarily government and Ofcom. In particular, we need to see BERR making quick progress on the recommendations made in the Caio review, not least the supply-side issues which only government can address such as planning and business rates. And of course Ofcom needs to keep pushing forward on the regulatory framework. But it also means bodies like the BSG – bodies capable of setting aside narrow interests and speaking for the industry.

Thirdly, we need a commitment to better coordination. When it comes to implementing universal service or interconnect standards across community broadband networks or a range of other issues, the industry

will need to be able to talk and make decisions. Again I believe it is incumbent upon the BSG to help make this happen.

Stephen has asked us all to engage "openly, constructively and analytically with the work of the Digital Britain Report". This speech is our opening salvo and I hope it **is** open, constructive and analytic. But one final reflection: it is now just over 18 months since the BSG published Pipe Dreams. In that time we have made progress on all of the report's recommendations but have resolved none. There is a lot to do in the months ahead but with the added impetus of Stephen's new role and the Digital Britain Report I hope we can nail the difficult issues I've identified tonight and make real progress.

Thank you very much.

## [Ends]

Now, as I said, we are happy to take questions. If you have a question however, please identify yourself before putting it to us.

## [Questions]

Thank you all for coming and thank you in particular to Stephen.