Delivering super-fast broadband in the UK **BSG Comments**	**BSG** Broadband Stakeholder Group

Foreword

NGA is at a critical juncture. Over the last year a growing consensus has emerged about the importance and significance of the shift to next generation broadband networks. In September the Caio report stated that "broadband will become an essential digital utility for the country; and an extensive upgrade to the access infrastructure will be necessary." Meanwhile, in the course of the last year both Virgin Media and BT announced their intention to begin deploying next generation access networks, if market and regulatory conditions allow. However, the financial crisis and the rapidly deepening economic downturn mean that, if it is to happen at all, any NGA investment will now take place in far more challenging environment.

It is not yet clear what the direct and indirect effects of the financial crisis and the recession will be on the communications sector and the broadband market in particular. However, as we look forward to a post recession world, it is hard to conclude that the quality and capability of the country's communications infrastructure will not be an important factor as we forge a route back to economic recovery.

Introduction

BSG welcomes this Ofcom consultation document as a key milestone in moving forward the regulatory debate on Next Generation Access (NGA). As mentioned above a number of companies have made announcements in the course of the last year about their intention to start deploying next generation broadband infrastructure.

However, these investments, if they go ahead, will have to be made in extremely challenging economic conditions. The approach taken by Ofcom must recognise these wider economic realities and provide flexibility to operators to experiment in the short term whilst also providing sufficient certainty to ensure that long term investment decisions are not undermined. This will not be an easy task, but

explaining clearly how this can be achieved must be a key objective for Ofcom's forthcoming statement.

What will super-fast broadband mean for consumers and businesses?
Broadband adoption is now approaching 70 per cent of households and as we enter a recession many believe that consumers have come to regard broadband as a non-discretionary item in the household budget. Meanwhile, the government's recent Home Access Scheme for school children recognised that broadband access is now essential to ensure equality of opportunity in education. All of which supports Francesco Caio's conclusion that suggests that broadband is close to becoming an essential digital utility in a modern knowledge economy.

Without the benefit of hindsight it is extremely difficult to predict what the real implications of super-fast broadband will be for consumers and businesses. The BSG report on the Economic and Social Value of Next Generation Broadband provides a framework for understanding how costs and benefits might accrue across the economy and society from next generation broadband deployment. At the micro level, it is likely that consumers and business will benefit in a number of diverse ways. These are categorised in our report as efficiency, expansion and transformation gains.

At a macro level (taking account of the private, wider economic and wider social benefits) we believe that it is likely that the cost-benefit case for next generation broadband will be positive, however, strong network effects mean that the extent of coverage and take-up will have a significant impact on the scale of the benefits that are realised.

There remains however, considerable uncertainty about the extent to which broadband service providers will be able to realise the potential private and public value of next generation broadband through increased revenues. Next generation broadband remains therefore a high risk investment at the best of times.

Ofcom's vision and the role of regulation
We broadly agree with the vision set out in the consultation document. Rather than a single entity deploying a monolithic network across the whole of the UK, it is likely

that next generation broadband will be delivered by a variety of different entities, using different technologies to deploy different networks in different areas.

Potential investors will look for clarity from Ofcom about how these networks will be regulated. Investors will look for certainty about the regulatory framework in the long term while requiring flexibility to enable them to innovate and experiment in the short term.

In this complex environment where new issues will continue to emerge it is appropriate that Ofcom should continue to play a facilitating role by enabling multi-lateral and bilateral discussions to take place between stakeholders where appropriate.

Competition

We agree with the objective to encourage competition at the deepest level that is effective and sustainable. What this means in practice will vary depending on the economics and commercial circumstances at any given location. In some areas passive remedies such as duct access or sub loop unbundling may prove attractive for competitive operators however, in other locations active products may be the only commercially attractive option. As yet it is difficult to predict the extent to which either active of passive remedies will be taken up by competitive providers.

In particular, it is too soon to predict the extent to which passive remedies will be taken up. In theory they offer important advantages to competitive providers as they offer increased scope for innovation and competitive differentiation. Although the costs and commercial practicalities remain relatively uncertain at this stage, the potential benefits are such that it is right for Ofcom to maintain passive remedies as an option alongside active remedies.

However, supporting both active and passive remedies in parallel will bring additional costs. Ofcom will therefore need to guard against the risk that maintaining one form of remedy undermines the other.

Transition from copper to fibre

Although we are only at a very early stage in the transition to next generation broadband it is clearly important to start to consider how the transition from fibre to copper will take place. As the take up of next generation broadband services gains pace there will be a point at which it no longer makes sense to run two parallel networks. However, the prospect of switching off the copper network raises many questions and it is important, for the sake of regulatory certainty, that these issues are considered sooner rather than later. The transition from copper to fibre will be a matter for public policy as well as regulatory policy.

Regulation and new business models

Across the value chain there is growing interest in the development of new two-sided business models, and there is no reason why such developments would necessarily be detrimental to either consumer welfare or the concept of a free and open internet. In particular, in markets where there is effective competition the potential for abusive behaviour should be constrained by the ability of customers to switch provider.

Clearly competition alone does not necessarily guarantee such a benign outcome. Operator practices and service terms and conditions need to be transparent to the end user; consumers need to be informed and empowered to switch provider if they are not happy with their service; and the regulator needs to be vigilant to potential abuses and empowered to implement timely remedies should the need arise.

The practical implementation of such a policy will become more complex as new services and commercial relationships emerge that include some form of price or service discrimination. Ofcom will need to ensure that service providers provide appropriate and sufficient information to enable consumers to make informed choices, including information on their traffic management practices. They will also need to ensure that consumers are able to switch providers effectively. Ofcom will also need to ensure that it has the information, capabilities and resources necessary to identify and assess potentially harmful or unjustified discrimination and to implement timely remedies. In all of this Ofcom can play an important role in ensuring consumer trust and confidence as the market evolves.

What role for the public sector

The BSG's report on the cost of deploying fibre based next generation broadband services concluded that deployment costs will be relatively constant across higher density areas. This implies that, if a broadly applicable commercial case for deployment exists, the market should be able to deliver to approximately two thirds of the UK population. However, the costs of deploying in more sparsely populated areas will be significantly higher, making the prospect of commercial deployment to the last third of UK households much more difficult.

The coverage maps contained in the report highlight the need for creative thinking about how to make rural areas more attractive to investment. As our earlier research on public sector intervention showed, there are many models for how this can be done that stop far short of large-scale subsidy, but do require the private sector to work closely with public bodies and local communities. In particular, demand stimulation initiatives, localised to the level of individual streets or cabinets could prove highly effective in extending the reach of these networks. Non-fixed line technologies will also be important for providing improved broadband access in rural areas.

There are now various projects being initiated to bring next generation broadband access to parts of the UK. These projects involve a number of partners from the public and private sector and are not being led by any one organisation. Many aspire to being open networks that will wish to encourage national service providers to offer services to customers over the networks.

These networks will have different technical and commercial characteristics. This has the advantage that different approaches can be tested, which in turn encourages innovation. However there is also a need to provide standards and mechanisms so that service providers are able to work with the individual networks without facing myriad different technical and commercial interfaces. In particular, there needs to be:

- A set of comparable access products offered to service providers with consistent pricing

- A uniform mechanism for provisioning, billing and error reporting

- Appropriate arrangements for interconnection and peering

This issue was raised in the Caio review and the BSG intends to work with Community Broadband Network to establish a process to address these issues. It will clearly be important to ensure that appropriate standardisation enables innovation rather than stifles it.

Ofcom's framework for action

The transition to next generation broadband raises many complex and difficult issues and we welcome Ofcom's proposed framework for action as a useful categorisation of those issues. It would be useful to determine where each of these issues sits on the critical path towards next generation broadband to determine how these issues should be prioritised to ensure they are addressed in a timely way.