THE VOICE OF BUSINESS

Ofcom's policy approach to next-generation access

CBI consultation response

Introduction

The CBI welcomes the opportunity to respond to Ofcom's consultation on its policy for regulating next-generation access (NGA) networks. The development of next generation networks (NGNs) and NGA will offer significant opportunities for UK businesses to increase competitiveness and build value in their supply chains and with their customers. If got right, the regulatory framework could provide a major stimulant for investment in development of a potentially vast array of new network-based services, and enable the UK to gain and keep a leading position in the global knowledge economy.

The CBI also recognises that the question of the best policy and regulatory framework for NGA is fraught with different interests and implications for competitive positioning on the supply side. There is much to gain in the medium to long term; there is also much that can be lost in the short to medium term if decisions are poorly made. The many potential beneficiaries of increased service provision means that policy formulation is and will be subject to quite intense pressures on the demand side as well as on the supply side.

As a result, our consultation response cannot be viewed as simply representative of all the particular business interests in NGA (which are highly diverse), or even of all CBI members. Instead, it is an analysis of the general interests of UK business in the development of an advanced, competitive and innovative communications market within the context of an increasingly competitive and globalised economy. It advances the arguments we made in our submission to Ofcom's Strategic Review of Telecommunications in 2005, research we have done in 2005 and 2006 on business and consumer use of ICTs and the Internet,[1] and consultations we have had with our membership on next generation broadband and the reform of the European Telecoms Framework.

[1] See CBI, *eValue Matters*, 2005 and *CBI/Google Survey of Internet Trends for Business and Consumers*, 2006.

Jeremy Beale – Head of eBusiness Group – Deputy Director General's office
DL: +44 20 7395 8131 **E:** jeremy.beale@cbi.org.uk

CBI Centre Point 103 New Oxford Street LondonWC1A 1DU
T: +44 (0)20 7379 7400 **F:** +44 (0)20 7240 1578 **W:** www.cbi.org.uk
Director-General: Richard Lambert President: Martin Broughton

The general business perspective

Broadband communications are useful for businesses for improving focus on three inter-related sets of interactions with employees, supply chain partners, and customers. What they are really interested in are the services and content that they or others can provide over broadband infrastructures for enhancing these inter-actions rather than the capacity of individual pipes per se. At one level, information and communication technologies (ICTs) are in general useful for helping them engage more efficiently and effectively with employees, supply chain partners and customers. Our 2005 survey of UK businesses clearly demonstrated this: seventy one percent of companies noted broadband had improved relationships with their employees, sixty six percent with their customers and sixty two with their supply chain partners.

At a more advanced level, the Internet has now become the key means for developing content and services on broadband platforms. The CBI's 2006 survey showed that UK businesses were spending over £10 billion per year on internet-based systems and technologies and the expected increase in this spend was over fifty percent in the next three years. This is because of the Internet's ability to facilitate the collection of specific customer information that can then be used to develop and deliver highly customised goods and services, utilising the variable capacity that broadband provides. The same survey showed eighty percent of businesses found such investment had extended their customer reach and over seventy percent found it had improved their ability to engage their customers.

Ever increasing customisation of goods and services – in terms of providing higher value goods and services to customers where and when they want them - is an imperative for UK business. Customisation is driven by intensifying competition from both lower-cost overseas suppliers and increased levels of general competition – resulting from online service provision and/or general trade liberalisation – and the subsequent need to gain greater "stickiness" with customers. Forty eight percent of businesses in 2006 believed that adapting to their customers' internet behaviour would be crucial to their success. Improved, higher-specification and increasingly *integrated* communications with supply chain partners and mobile employees is, in turn, necessary to achieve this heightened customer-delivery capability – and is facilitated by the heightened interactivity of broadband infrastructures. In 2006, seventy two percent of businesses had internet systems allowing mobile working and fifty two percent provided broadband for home-working.

UK companies overwhelmingly see the current period as one of "experimentation" with internet-based service provision, and have little specific idea of what they need (and need to do) to make it a success with customers. Seventy percent of businesses in our 2006 survey believed their company still had a lot to learn about reaching their customers online and only twenty three percent felt they made better use of internet-based systems than their competitors. So it would be inappropriate to characterise current business demand for across-the-board high bandwidth as critical.

Businesses need to be able to adopt broadband more evenly across their national operations and with higher (or more clearly specified) levels of quality of service (including backhaul); though, again, where and as they need it for communicating with their employees, supply

chain partners and customers – i.e. at times on fixed lines, at other times on mobiles.[2] In this regard, greater uniformity of public network provision is valuable in order to gain efficiencies across internal and supply chain operations, rather than having to pay for different access technologies or invest in different internal interface standards.[3]

Having said this, it is also clear that some businesses are, through the investments they have made in customer relations management technologies, beginning to identify quite precisely where customers are prepared to pay for higher value online services, and therefore where NGA could be valued. As a result, it would be fair to say that, for a growing number of businesses, the need for NGAs in order to increase their international competitiveness will intensify quite rapidly during the next few years.[4] It would be wrong, however, to characterise this growing demand as only amongst SMEs – for the reasons noted in the previous paragraphs, leased lines are inadequate for reaping the economies of integrated operations for large business and SMEs alike.

The demand-side context of regulatory and investment drivers

Since Ofcom was created as an integrated regulator nearly five years ago, intense competition in communications markets has increased investment in broadband, with the UK now at a positive stage in terms of broadband speed, pricing and availability. But whilst competition has done a lot for the UK, what seems to be lacking so far is meaningful identification and understanding of demand-side developments other than for consumers, and the regulatory implications of these developments. The consultation document thus focuses almost exclusively on supply-side or consumer-demand issues.

The range of businesses reshaping their operating processes (business process re-engineering, customer relations management, total quality management, etc.) through investment in an array of different communications services is extensive. The CBI's 2005 survey showed that at the front of the pack are companies within the retail, financial services and hospitality sectors. The often more advanced needs of business users have traditionally often driven successful regulatory reform and are potentially more diverse, and the drivers more identifiable, than those of residential consumers. Such dynamic services' demand will be a crucial driver of investment in NGA, particularly as IP-based infrastructures increasingly differentiate the service from the transport level, allowing potential market entry by multiple providers of varying services with differing marginal costs on a single platform. It will be vital that, going forward, Ofcom use its extensive research-gathering capabilities to analyse the requirements and drivers of business users in relation to NGA.

As noted, it is still currently unclear what business models will be successful in this new environment. However, getting a fuller and more precise understanding of demand-side expectations and usage of NGA by businesses and their customers would enable a better

[2] In other words, that the benefit of NGAs would be "ensuring that the best peak speeds of current generation access consistently available on a sustained basis to the majority of customers through the use of a range of different technologies." Consultation document, p. 13.
[3] As argued in the CBI's 2003 report on 'Broadband for Business –The Value Proposition in Retail and Marketing'
[4] This supports the conclusion of the Broadband Stakeholders Group's *Pipe Dreams?*, 2007 report.

modelling of different regulatory impact scenarios on NGA investment. As suggested below, this would allow greater analysis of how, through regulatory reform, NGA might help foster the timely and efficient provision of new services and new opportunities for innovation and investment by demand-side players.

1) **When do you consider it timely and efficient for next-generation access investment to take place?**

Generally, the timing of investment decisions should be a matter for market players to decide when they believe there is a clear commercial case for doing so. There is risk involved in making such a judgement, but risk is an essential part of doing business efficiently. However, it should be kept in mind that different businesses and business models can make different calculations of risk, depending upon whether they see the investment as an infrastructure, service or market-growing one.

For a regulator, this should mean identifying and removing artificial barriers to effective demand. The key question is whether a regulatory framework is in place that adequately rewards businesses that take risks appropriate to emerging market demand, taking into account the analysis provided above of the challenges facing businesses globally. We agree with Ofcom that, at the moment, it is hard to argue that market failure exists in demand for increased bandwidths. While the creation of Openreach as a shared point of access for copper-wire connections to the home has almost certainly changed the dynamic of BT's decisions over investment in NGA, Virgin Media's announcement of 50Mbps trials of its network should provide a competitive spur for BT (or others) to invest in fibre and other NGA technologies more extensively in the near future, either through Openreach or from further back in the network.

But Ofcom needs to keep in mind that competition and investment decisions for providers of communications services – particularly with an IP environment are increasingly driven by considerations of global demand. Along with other business sectors, modern communications firms also have to develop higher value services to deliver in the face of declining revenues from simple voice and data services.

Global considerations are exacerbated in an NGN environment, where the relatively flat, de-centralised structure of traffic loading and switching compared to the traditionally hierarchical structure of PSTNs means that maximum efficiency and returns are measured on a more global rather than national basis, aggregated from potentially smaller, but higher value, pockets of service demand within national markets.

These considerations will affect differently-positioned actors' calculations of the overall rate of return in relation to NGA investment. In this regard, Ofcom's analysis is surprisingly focused solely on domestic UK drivers and demand models, despite the fact that BT has stated that it considers its NGN investment to be in a *global* network.

Whilst investment solely by private sector infrastructure providers may currently be the norm, other models may better and more dynamically drive UK-wide NGA going forward, in the short to medium-term at least. We agree that, in the absence of any single proven commercial

model, moving towards a UK NGA is likely to begin as a series of incremental steps, each separately justifiable in its own right, which in time will, if applications emerge and value flows through to the access investor, build to a meaningful momentum. The South Yorkshire Digital Region (SYDR) project has demonstrated one possible form of investment model for the roll-out of next-generation access infrastructure, while Ebbsfleet provides another.

But regional partnerships between various demand-side and supply-side players (in purely private sector or in public-private finance models) to build-out NGA networks could be explored. Such demand-side partners might not only have to be of the media-content types often mentioned: the analysis above suggests that a range of other demand-side actors might see value in joint investment with infrastructure providers in NGA in geographic areas where they were able to identify online value-adding possibilities. Analysis by Ofcom (perhaps in cooperation with the OFT, as discussed below) of how these islands of investment could occur within an overall national framework that ensured national inter-connectivity and inter-operability would be essential.

Within this context (and as discussed in more detail below), action might be required to overcome the creation of a new digital divide in areas where sparse rural populations or challenging geographical conditions make it economically inefficient for traditional investment to occur. Facilitating the emergence of varied investment models through regulatory reform (as discussed in the following section) would seem to mitigate against this; but Ofcom could usefully examine whether new demand side business models might facilitate collaborative investments by providers on a regional basis that could then act as a spur for broader-based national investment. Such models could go some way to managing concern (or confusion) over the extent to which NGAs might be rolled-out in a piecemeal style across the UK, with certain areas or regions possibly falling permanently behind others in terms of infrastructure development.

2) Do you agree with the principles outlined for regulating next-generation access?

The CBI supports Ofcom's regulatory principles of risk-based, contestable infrastructure provision, based on equality of inputs and regulation of real economic bottlenecks for all NGA developments. As Ofcom notes, the important question is the manner and timing in which these principles are applied. It is important that, if differing NGA roll-outs occur, there should be a base-level of regulation applicable to any roll-out; but it might also be of value to allow for incremental, geographically diverse competition and multi-investor models to occur in the near to medium term through some degree of geographically differentiated application of these regulatory principles.

Within Ofcom's responsibility to support market development, it would be necessary within such a situation to provide guidance as to the level and nature of competition it believes is needed to sustain emerging NGA markets – and to establish time-specific benchmarks that would lead it to either impose, or forbear from imposing, *ex ante* regulation. This should be easier to do for joint demand-supply side investment models than purely supply side ones, as demand side participants would be able to exit more easily within a shorter time scale from

the venture than would infrastructure providers.[5] But it would provide greater certainty for investors and provide both BT and its competitors with incentives to innovate in terms of corporate structure, operation, and service delivery. Such market-oriented guidance may enable Ofcom to provide investors and operators with an acceptable mix of commercial risk and regulatory certainty while remaining within the rules of the EU telecoms regulatory framework.

Adapting geographically diverse application of regulatory principles in relation to joint demand-supply side investment models might lessen the risk of challenges under EU laws compared to purely supply-side or public-private models. But it does raise the issue of vertical integration. To avoid challenges on such grounds, Ofcom would quite possibly need to proactively engaging with the Office of Fair Trading, as Ofcom's remit gives it the right to do. But by taking a market-oriented rather than company-specific approach, third party providers might be able to play an increasing important collaborative role in building overall competition, compared with a purely infrastructure provider driven NGA market.

As should be clear by now, we agree with Ofcom that "it is appropriate to put in place a regulatory policy that allows experimentation and innovation in different types of competition, initially through trials, and later through commercial deployments." As suggested above, Ofcom needs to consider the possibility (and practicality) of differentiated regulation across geographic regions or even specific roll-outs. We were pleased to see such principles being considered in the recently launched consultation on wholesale broadband access regulation and would urge Ofcom to consider similar principles in relation to the context of NGA regulation where much more granularity in terms of regional differentiation might be useful, at least at this stage of development. Such an approach would fit well with the HM Treasury review of sub-national economic development and regeneration that devolves greater responsibilities to regions and localities.

3) How should Ofcom reflect risk in regulated access terms?

Ofcom provides a good understanding of the nature of supply-side investment risk and the implications for it of regulatory intervention. Along with Ofcom, the CBI believes that the return on investments should reflect the risk faced in building NGA networks and services. What is required is a better understanding of what risks actually exist for different forms of investment. As we discussed above, to do that we particularly need a better understanding of business demand.

Beyond that, more discussion is needed around the regulation of future products delivered by NGA. IP-based platforms will allow for new forms of competition to emerge as a range of services can be delivered via one converged network. In our submission to Ofcom's consultation on Phase II of the Strategic Telecoms Review, we suggested that partial regulatory forbearance (regulated access to duct sharing but un-regulated competition of services on the fibre within them) may be useful to consider as a means of stimulating investment in NGA networks. Ofcom has raised two approaches in this regard: a cost of

[5] One might think of the various early shareholders in Mercury Communications in this regard.

capital consideration based on a mandated upstream price based on a project-specific cost of capital that includes estimates of risk (i.e. higher returns than for other SMP products); and anchor product pricing, with pricing freedom for non-anchor products but equivalence of input on all products. The latter would involve offering one or more products on the NGA network that replicate existing offerings to end users in terms of price and service as the "anchor" product(s). The key issue that would need to be considered in relation to these concepts within the context of an overall strategy of differentiated geographic regulation, would be which NGA services would have SMP (and the nature and extent of SMP) within any one particular geography, particularly vis-a-vis any anchor product.

There are a number of other regulatory barriers that Ofcom could begin looking at temporarily lifting or more generally removing to support private sector investment in NGA. These could include allowing operators access to rights of way at reasonable prices, and for new entrants, possibly no charge at all. Also important is the way current and new entrants access existing ducts and poles of both network operators and utility companies and municipalities. The sharing of access to the inside wiring of apartment buildings and homes will be crucial in promoting infrastructure-based competition, as will facilitating access to street cabinets and collocation in street cabinets. Regulators need to work with municipalities to find solutions to avoid excessive duplication of street cabinets and restrictions to investing in street cabinets by new entrants.

As Ofcom notes, though, there are limitations within the UK to what can realistically be expected by way of relieving risk through duct-sharing and other means. It is possible that creative thinking in regard to wireless provision of NGA in certain geographical areas may enhance this situation to some extent. But a more comprehensive approach as outlined above would probably still be necessary to achieve anything on any significant scale.

4) **Do you agree with the need for both passive and active access remedies to promote competition?**

The analysis presented in this submission indicates that the CBI agrees that Ofcom should probably resort to the use of both passive and active access remedies. At present, it is difficult to specify particular remedies until a clearer idea exists of the form(s) in which NGA will be rolled-out, particularly in terms of their geographical range and the technology chosen, as both are likely to impact the mix of active or passive remedies that may be required, and their time-specification.

5) **Do you consider there to be a role of direct regulatory or public policy intervention to create artificial incentives for earlier investment in next-generation access?**

As indicated above, the CBI does not support the creation of artificial incentives for investment in next-generation access, but the removal of artificial barriers to investment in a more differentiated manner than in the current PSTN environment. What is needed is a evolving re-assessment of where the UK is in terms of investment in and roll-out of NGA to support such decisions.