

Next Generation Access

Executive Summary



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Foreword

A year ago, the Broadband Stakeholder Group issued its Pipe Dreams report on the prospects for next generation broadband in the UK. In making the point that investment is unlikely to materialise in the absence of demand, it made a formal recommendation demand should be monitored.

It said, "...close attention should be paid to the actual growth in demand for bandwidth by households and businesses..." and "...this information should be made publicly available to help inform decision making by stakeholders across the value chain. This should be coordinated by Ofcom."

In response to that challenge, CMA worked with Ofcom and Openreach to arrive at a set of questions that could be put to CMA's members. The aim was to identify demand from enterprise users for next generation broadband in the access network.

The survey was carried out in February this year and the results offer not only a useful insight into how UKplc regards current and future availability of access technologies, but they also suggest a positive and growing demand.

Glenn Powell
Chief Executive
CMA

Objectives & methodology

The study was conceived in partnership with Ofcom and Openreach who worked with CMA to develop the questionnaire. This research project was designed to provide evidence of the demand for broadband among the business community and to understand enterprise attitudes towards future broadband requirements by providing views on:-

- current infrastructure, technologies and levels of broadband access
- current business services and issues with existing access
- awareness and understanding of next generation access
- the minimum bandwidth that should be provided by next generation access
- the extent to which 'next generation access might enable productivity gains across the enterprise and create new agility in business communications
- the 'role of' and 'need for' fibre as part of a high performance telecommunications infrastructure in every part of the country

CMA supplied a randomly generated sample from its database of members and Recom Research interviewed a total of 152 respondents in a succession of twelve minute telephone interviews conducted during February 2008. The data analysis and presentations to sponsors were then carried out by CMCONNECT during 2008.

About CMA

CMA, Communications Management Association, is the UK's premier independent membership body for professionals and organisations focused on exploiting communications and networks for business advantage. In 2007 CMA joined the BCS Group to strengthen both organisations. This move will enable the BCS to have a stronger offering in the field of communications and for CMA to have access to new resources and a wider community of IT professionals.

CMA has been supporting professionals and organisations within the communications and networks industry both in the private and public sectors for 50 years. Through our research & analysis, specialist forums, publications and events we provide the assistance, information, training and representation so essential in an ever changing business environment.

Our goal is to ensure that CMA's members, who spend £13 billion in the communications market annually, are the best informed professionals in the industry.

CMA is the definitive voice of the enterprise end user to government and regulatory authorities. We work directly with Ofcom in the UK and are represented internationally through our membership of INTUG.

CMA provides valuable contacts and introductions to new areas of business. In this unique networking environment both end-users and suppliers benefit from extensive debate and knowledge exchange. CMA brings people together - making beneficial connections that last.

To join as a member, associate or partner visit www.thecma.com or call +44 (0) 1372 361234

Summary

As a result of the deployment of a new generation of networks unprecedented changes are taking place in the telecoms industry worldwide. These new networks bring to the fore the issue of next generation access (NGA) and the levels of broadband that will be provided to businesses and consumers. At the same time the Internet continues to enhance the revolution happening in our working, social and domestic lives. In fact this is happening to such an extent that it is now taken for granted that it will become a central component in all our futures.

The need for access to “real” broadband continues to be increasingly important for UK businesses and so interest remains high within the CMA membership with regard to the long-term evolution of the UK’s broadband infrastructure, and the prospects of achieving a national broadband strategy. Indeed for the past 5 years CMA has consistently advocated the creation of a national broadband strategy that would result in universal access to “real” broadband.

On the 18th September 2007 the Rt Hon Stephen Timms MP, the then Minister of State for Competitiveness, said *“before too long, the wider economy is going to need high speed broadband. The high speed broadband networks being deployed elsewhere for multi-channel TV will increasingly be used in other commercial applications. The growing number of people working at home will require high speed connections to support them....all these trends are pushing up the bandwidths which are going to be required across the economy.”*

He continued *“services and applications coming onto the market will only be properly exploited and enjoyed if the bandwidth exists to deliver them to the end user....the infrastructure must be capable of delivering high speed broadband to all.”*

This study’s aim was to identify demand from enterprise users for next generation broadband in the access network and it has established a wide range of data which provides an overall context to current and future expectations of UK businesses.

The large majority of businesses represented in this study currently use fibre (85%) and copper (76%) local access infrastructures where Ethernet (47%) and xDSL (59%) respectively were the main access technologies used. Here typical bandwidths employed for copper ranged from under 2 Mbps to well over 10 Mbps, however only one in five respondents said their businesses used bandwidths in excess of 10 Mbps over the copper infrastructure. For the fibre infrastructure bandwidths utilised were considerably higher and more than 1 in 2 businesses used bandwidths in excess of 10 Mbps over the fibre infrastructure, while 1 in 5 used bandwidths in excess of 100 Mbps. Unsurprisingly the main provider of access was BT and by some considerable margin.

The main services businesses employed over these infrastructures and access were core business applications (examples given included SAP, CRM and ERP: 74%) with Internet, Voice and Email the significant others (36%, 37% and 33%).

Businesses were also asked to provide information as to whether they were unable to receive the level of access that they required (in terms of infrastructure, technology or services/applications) due to geographical location and a large proportion (41%) stated that they were unable to receive the level of access they required; these businesses also cited examples of locations where this was the case.

Next generation access is a relatively ‘new’ terminology for businesses and although Ofcom, various service providers, analysts etc have all provided some definition, there was a consistently strong level of awareness of the terminology: 7 in 10 respondents were aware of ‘next generation access’ and of those 72% had at least a good understanding of the term.

Rather than providing a gratuitous assessment of future needs in terms of an upper bandwidth threshold for next generation access to deliver to, this study focus instead on the minimum bandwidth companies thought should be provided by next generation access irrespective of the local access infrastructure and technology available. A further refinement was provided by a distinction for intra business traffic generated through own company systems across sites or remote locations (CORE) and inter business traffic including customer trading, suppliers and contractors (NON-CORE). For CORE 73% of business thought that at least 2 Mbps should be the minimum, while almost 6 in 10 (57%) said it should be at least 10 Mbps. To put these results in context almost 1 in 3 (31%) of

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organisations said that the minimum should be 100 Mbps or more.

Business also said that they would use a wide range of services over next generation access with core business services and video seen as key. Voice services remained central in business use of future services just as for current infrastructure and access. Business benefits of next generation access were cited as improved bandwidth/speed/quality (38%), improved applications (28%) and that business would be more efficient (24%).

The main challenges for telecoms providers when it comes to providing next generation access were considered to be legacy infrastructure & the last mile (34%) and reliability and quality (20%). Businesses also considered that fibre would be the best infrastructure to provide next generation access to their company's sites (74%).

The final part of this picture of UK business perceptions looked at whether or not companies would be willing to pay more for next generation access business connectivity services while taking into account how much their organisation currently spends annually on business connectivity services within the UK. More than 1 in 5 were prepared to pay more for these services. However, forty-four per cent of businesses were not prepared to pay more and these were typically very large organisations which already used high bandwidth services.

Overall the study provides a clear sense of business expectations and requirements of next

generation access and shows that customers have a good level of awareness and understanding. The results highlight especially the bandwidths businesses think are the minimum required for next generation access and provide a window onto the needs of businesses with an overall context of current and future expectations.

Key Findings

- Use of local access infrastructure...
 - 85% use fibre local access infrastructure
 - 76% use copper local access infrastructure
- Main access technology...
 - xDSL over Copper, 59%
 - Ethernet over Fibre, 47%
- Typical bandwidths for copper...
 - 42% have up to 2 Mbps
 - 34% have at least 10 Mbps
- Typical bandwidths for fibre...
 - 68% have at least 10 Mbps
 - 42% have at least 100 Mbps
- Main services used...
 - Core business applications e.g. SAP, CRM, ERP etc, 74%
 - Internet, Voice and Email were the significant others (36%, 37% and 33%)
- 41% were unable to receive the level of access that they required (in terms of infrastructure, technology or services/applications) due to geographical location
- 73% were aware of the term Next Generation Access and of those 72% had at least a good understanding of the term
- The minimum bandwidth which should be provided by Next Generation Access (irrespective of the local access infrastructure and technology) for CORE business...
 - 73% want at least 2 Mbps
 - 57% want at least 10 Mbps
 - 31% want at least 100 Mbps
- Main services Next Generation Access (NGA) would be used for...
 - Core business applications e.g. SAP, CRM, ERP etc, 51%
 - Video, 45%
- Business benefits considered to be...
 - Improved bandwidth/speed/quality, 38%
 - Improved applications, 28%
 - Business more efficient, 24%
- Main challenges considered to be...
 - Legacy infrastructure & the last mile, 34%
 - Reliability and quality, 20%
- Fibre considered the best infrastructure to provide Next Generation Access (NGA) to company sites, 74%
- 25% were prepared to pay more for Next Generation Access (NGA)... but 44% were not prepared to pay any more

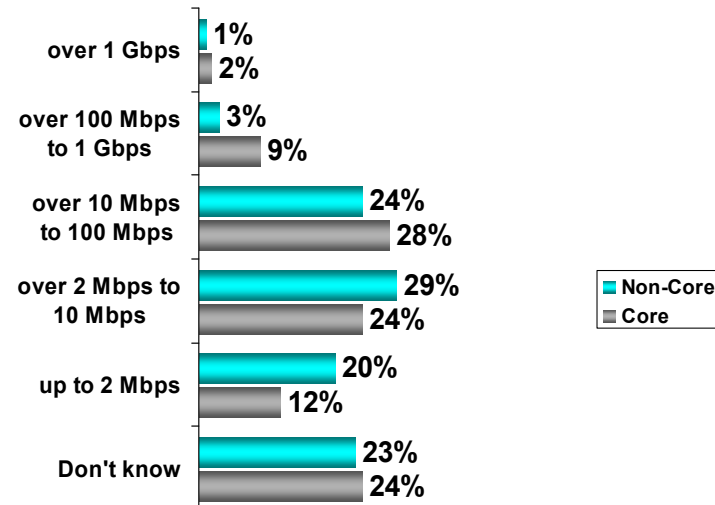
Next generation access

Minimum bandwidth which should be provided by Next Generation Access

Question:

Irrespective of the local access infrastructure and technology available, what bandwidth does your company think should be the minimum provided by Next Generation Access?

For CORE (intra business traffic generated through own company systems across sites or remote locations) and NON-CORE (inter business traffic including customer trading, suppliers and contractors).

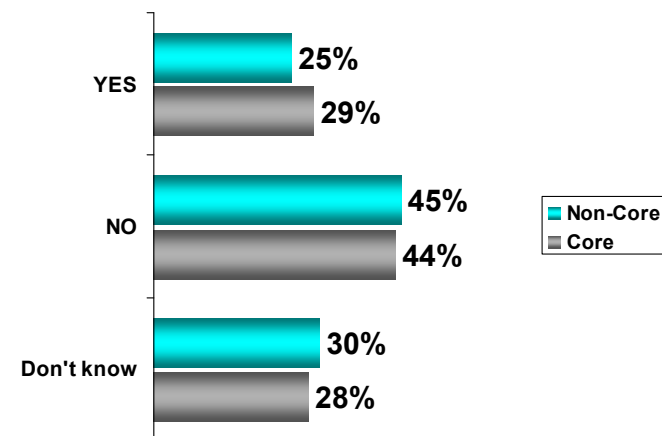


Willingness to pay for Next Generation Access

Question:

Thinking about how much your organisation spends annually on business connectivity services within the UK across all sites please estimate how much extra, in percentage terms, you would be willing to pay for Next Generation Access business connectivity services?

For CORE (intra business traffic generated through own company systems across sites or remote locations) and NON-CORE (inter business traffic including customer trading, suppliers and contractors).





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