# BSG Report:
# *Demand for Superfast Broadband*

## Executive Summary

We publish this report as part of a broader objective of the Broadband Stakeholder Group (BSG) to raise the profile of demand side issues in broadband policy debates.

In recent years attention has rightly been paid to the supply of improved broadband networks and how networks that can support superfast broadband services can be financed, deployed and reach across the whole of the UK, not just those areas that are ripe for commercial investment.

These supply side issues are important and there is still some way to go in executing the government's ambition that the majority of the country will have access to superfast services by 2015. However the BSG is of the view that now is the time to focus further attention on issues concerning the demand for and use of these new services that this infrastructure will support.

Ultimately broadband is important, not only because of the potential benefits its usage can bring to both individuals and society but also the role it could play in supporting the central focus of the government: economic growth.

A necessary component for building understanding of use and benefit is consumer demand for and take-up of superfast broadband services[1] and this is the focus of our report. In this study we go beyond the headline take-up figures reported for superfast broadband across a number of markets to try and understand better the underlying demand and specifically, actual consumer willingness to pay for such services.

We believe this is an important metric as it sheds more light on what types of services consumers value and gives insight to the increased usage of broadband by consumers which is hoped will yield wider benefits. It is also of central importance to operators investing in and retailing superfast broadband services, providers of broadband-enabled services who may wish to develop new services that require superfast connectivity and policy makers who are keen to incentivise and encourage operators to invest in and offer superfast services.

This report brings together data regarding take-up of superfast services that will be a useful input to those interested in exploring comparative demand data for superfast broadband. The report also puts forward some analysis alongside this data regarding how the UK is faring against its international peers, demonstrating that initial consumer demand for superfast services in the UK gives good reason to be confident that the foundations are in place to build upon in the coming years.

In this report we put forward that:

[1] In this study we define superfast broadband as a service that goes beyond the capabilities of ADSL technology, i.e. over 24 Mbps. This definition excludes services delivered over NGA networks which are not superfast, but captures higher speed services on cable networks. Please refer to the glossary for a full explanation of terms used within this report.

- Within Europe, the UK is a solid mid table performer, gaining on European leaders such as the Netherlands, Denmark and Sweden and outperforming major peers such as France, Germany and Spain. Furthermore the UK's initial subscriber growth rate for superfast broadband compares well, and coupled with the pace of deployment of fibre networks by BT and the upgrades Virgin Media is making to its cable network provide a good foundation on which to build.

- Looking to the United States, despite the level of infrastructure investment, the percentage of consumers actually actively choosing superfast broadband services on these networks is comparatively low. This is possibly a consequence of operators competing more heavily for Pay TV customers on their fibre networks rather than focusing on driving demand for superfast broadband. We believe European markets offer more competitive superfast broadband services to customers and that there could be a potential opportunity for the UK to challenge the US in broadband enabled service innovation given that less than 3% of US homes currently subscribe to genuinely superfast broadband services.

- Looking east to Asia, the world leaders in next generation network deployment, it is no surprise that these markets also lead take-up for superfast broadband. That said however, our analysis demonstrates that the UK's initial growth curve for superfast broadband services compares favourably to that of Japan's when superfast services were first offered in that market. Our analysis also highlights some pricing challenges operators in the Far East have experienced in selling superfast broadband services. In making these points we are not criticising the trajectory that Asian markets have followed nor are we suggesting that the UK is likely to mirror their development. However this comparison shows that the UK has made a solid start on its next generation journey when you compare the figures to those of these broadband trailblazers.

Our analysis also explores the factors that may have an impact on take-up levels to give a view on the potential opportunities and challenges that lie ahead for the UK.

**Network quality**, including what speeds are available, is we believe one important factor. Anecdotal experience suggests that in areas where ADSL services are of poor quality then demand for superfast services will be higher. Conversely where ADSL services deliver a better quality and lower tier legacy cable services are also available it may be more challenging to persuade consumers onto an enhanced service if they fail to see what the tangible benefits would be of upgrading if they are broadly happy with the characteristics of their current service.

This links across to the issue of **price**. The data in this report reflects the underlying challenge for operators – how to price a superfast product so that a premium is charged that both offsets investment costs whilst enticing the consumer. This is no mean feat and it is no surprise that the figures show plentiful free or low costs upgrades to consumers across all markets. A key question we pose is what happens to demand after the free upgrades and early adopters. Looking at this issue now is crucial if we wish to see growth for superfast broadband demand in the UK that both supports investment and links to the increased usage and exploitation of superfast broadband networks.

**Service innovation** is also an important influence on demand. In a number of markets we have seen, entry to the Pay TV market through an IPTV service can act as both a strategic driver for an operator's deployment of superfast broadband and as a stimulator of consumer adoption of superfast broadband. In the UK, it is possible that developments in the IPTV market, both free to air and Pay TV, may bolster take-up with YouView, Sky's NowTV, and additional offerings from BT providing new compelling consumer products into the market. It is also apparent that at this time no market has established itself as a centre for the development of innovative services that require superfast broadband connectivity. Given the lack of genuine superfast broadband in the US, the usual market in which services are developed, this may provide an opportunity for the UK to develop a leadership role in this regard, if an innovative market and service ecosystem can be developed. This suggestion however should be tempered with the example of the Asian markets, where despite leading deployment and take-up of superfast broadband, subsequent service innovation has not occurred to the same degree.

In setting out these views we are of course starting a debate and not aiming to conclude one. We are at the beginning of a journey and it is difficult to accurately predict the bends in the road ahead and where we will eventually end up. Many forthcoming developments will impact on demand for superfast broadband in the UK. The results of the Broadband Delivery UK (BDUK) process will impact on the services available for consumers to take-up in the final third of the UK. The rollout of Long Term Evolution (LTE) services will provide alternatives to consumers and will add competitive pressure into the market. Regulatory developments will be important in building and sustaining competition in a superfast environment. Online service innovation will inevitably impact consumer decisions about what type of broadband they need in order to access the services they want. Consumer behaviour will ultimately drive the market and it is right that it should.

However in stripping away some of the myths and preconceptions about the performance of different markets this study urges policy makers to ensure that they set realistic expectations in respect of superfast broadband take-up. Superfast broadband has had a gradual development in all markets, even those world leaders in Asia. In this context there is no cause to believe that the UK is not currently performing solidly and indeed there are several elements of the UK's experience to date that give cause for confidence and optimism.

Furthermore we also hope that this study demonstrates the importance of focusing more attention on what services consumers are choosing to take-up and what they are using them to do. It is the use of exploitation and use of broadband networks that deliver economic and social benefits. In order to justify the investment in and attention given to broadband infrastructure over the last few years the challenge now is to focus on its use. It is here where national ambitions will succeed or fail and is, in the BSG's view, the most important metric in assessing the quality of broadband in the UK.