



Department
for Culture
Media & Sport

A NEW BROADBAND UNIVERSAL SERVICE OBLIGATION CONSULTATION

23 March 2016

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Ministerial foreword



In November, the Prime Minister announced a step change in our ambition for broadband services. Reflecting that many now see broadband as an essential service much like electricity and water, he set out the Government's intention to put broadband on a more equal footing to these services, and give people the legal right to request a connection at a minimum speed no matter where they live - or indeed work - through the implementation of a new broadband Universal Service Obligation (USO).

We are maintaining momentum on our commitment to implement the USO in this Parliament. This consultation sets out the roadmap that we propose to follow for delivering that commitment. The first step, should we legislate, will be to set out our intention in primary legislation.

This Government has a clear digital agenda, and our ambition is for world-class digital connectivity at ultrafast speeds. As the country continues to take great strides towards ever-better connectivity, a broadband USO will help ensure that no-one is left behind - a digital safety net for all.

Although the market has been successful in delivering superfast connectivity to the majority, this has been supported by public funding, and even with this support there are still pockets of the country where decent connectivity is an aspiration rather than a reality.

Digital inclusion is a priority for this Government. We want to give everyone the opportunity to be able to have access to the enormous benefits that can be gained from getting online.

For individuals, this is about not missing out on chances to find employment, saving money on household bills, and being able to maintain contact with distant friends and relatives. It is about helping our children to do their homework and making sure that families can access a greater range of services, including public services, which are increasingly becoming 'digital by default'. It is also about getting people in rural areas across the four nations of the UK online - enabling them to access services, work, shop and communicate without the need to travel. The benefits of greater connectivity are shared throughout communities, including by supporting small businesses to get online, compete and grow.

While this consultation sets out the first important step in delivering our commitment to universal broadband access, there will be further opportunities to engage as we develop and define this in more detail, with a further consultation to follow.

A handwritten signature in blue ink, appearing to read 'Ed Vaizey', written in a cursive style.

The Hon Ed Vaizey MP
Minister of State for Culture and the Digital Economy

Consultation scope and how to respond

This consultation seeks your views on the Government's proposed approach to introducing a new broadband Universal Service Obligation (USO).

The geographical scope of this consultation is the UK.

This is a public consultation. We particularly seek views from the electronic communications industry (network operators, and internet service providers), and both business and residential consumers, as well as representative organisations.

The consultation period will run for 4 weeks from 23 March to 18 April.

Please email your response to broadbandusoconsultation@culture.gov.uk.

Responses or material sent to any other email addresses will not be taken into consideration.

If you cannot reply via email, please respond by post to:

Broadband USO Consultation
Digital Economy Unit
Department for Culture, Media & Sport
100 Parliament Street, London
SW1A 2BQ

When responding, please state whether you are responding as an individual or as a member of an organisation. If the latter, please state the organisation on whose behalf you are responding. If responding on behalf of a larger organisation, please make it clear what the organisation represents and, where applicable, how the views of members were assembled.

For enquiries about the consultation (handling) process only please email enquiries@culture.gov.uk, heading your communication 'Broadband USO Consultation'.

This consultation is intended to be an entirely written exercise. The consultation is available in text format on the Department's website: www.culture.gov.uk. Please contact the Digital Economy Unit on 020 7211 6000 if you require any other format, e.g. braille, large font or audio.

Copies of the responses will be published after the closing date on the Department's website: www.culture.gov.uk

Information provided in response to this consultation, including personal information, may be published or disclosed in accordance with the access to information regimes (primarily

the Freedom of Information Act 2000 (FOIA), the Data Protection Act 1998 (DPA) and the Environmental Information Regulations 2004). If you want the information that you provide to be treated as confidential, please be aware that, under the FOIA, there is a statutory Code of Practice with which public authorities must comply and which deals, amongst other things, with obligations of confidence. In view of this it would be helpful if you could explain to us why you regard the information you have provided as confidential. If we receive a request for disclosure of the information we will take full account of your explanation, but we cannot give an assurance that confidentiality can be maintained in all circumstances. An automatic confidentiality disclaimer generated by your IT system will not, of itself, be regarded as binding on the Department.

The Department will process the information you have provided in accordance with the Data Protection Act, and in the majority of cases, this will mean that your personal information will not be disclosed to third parties.

This consultation follows the Government's Consultation Principles 2016 which is available at:

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/492132/20160111_Consultation_principles_final.pdf

Section 1: What is the issue and why does it matter?

State of the broadband market

The UK's broadband market has evolved rapidly. In 2004, only around half of UK households had internet connections, and the majority of these were narrowband connections; mobile broadband was a newly emerging technology. Now broadband internet connections are used by 78 per cent of UK premises, and nearly one in three of these are at superfast speeds of 30 Megabits per second (Mbps) or higher¹. By June 2015, 83 per cent of premises were able to access superfast broadband,² and around 46 per cent of premises already had ultrafast services (download speeds of 100Mbps or higher) available to them. 4G mobile broadband services are spreading rapidly. 46 per cent of UK premises receive coverage from all four mobile operators, and this is set to increase to 98 per cent by the end of 2017³.

The majority of the UK's fixed broadband infrastructure is owned and operated by two suppliers - BT Openreach and Virgin Media. Both are looking to extend their coverage between now and 2020.

Openreach has the largest fibre broadband network, covering 83 per cent of UK premises (more than 24m premises), including urban and rural areas; Openreach has also committed to delivering ultrafast speeds to 10 million homes and businesses by the end of 2020 and to the majority of the UK within a decade⁴.

Virgin Media, the second largest broadband operator in the UK, has announced plans to expand its current network footprint of around 45 per cent of the UK (12.6 million premises) to cover 60 per cent of the UK (17 million premises) by 2020⁵. It currently has more of a presence in urban than in rural areas. Virgin Media offers an ultrafast broadband cable service of up to 200Mbps for residential customers, and up to 300Mbps for business customers⁶.

Where the commercial case for investment can be made, such as in highly-populated urban areas, smaller infrastructure providers, such as CityFibre and Hyperoptic, are also expanding

¹ [Ofcom Connected Nations 2015](#), p 3

² [Ofcom 'Making connections work for everyone. Initial conclusions from the strategic review of digital communications'](#), p 16

³ [Ofcom 'Making connections work for everyone. Initial conclusions from the strategic review of digital communications'](#), p 4

⁴ <http://www.homeandwork.openreach.co.uk/Our-responsibilities/>, (accessed 04 March, 2016)

⁵ Virgin Media press release, 13 February 2015, <http://about.virginmedia.com/press-release/9467/virgin-media-and-liberty-global-announce-largest-investment-in-uks-internet-infrastructure-for-more-than-a-decade>, (accessed 04 March, 2016)

⁶ <http://www.v3.co.uk/v3-uk/news/2443174/virgin-media-business-offers-200mbps-and-300mbps-services-for-smbs>, (accessed 04 March, 2016)

their coverage. There is also an increasing number of operators offering broadband connectivity to rural areas, such as Gigaclear, and a growth in the range of technology options being offered in both rural and urban areas. The Government is consulting industry on a new broadband investment fund, specifically to support the deployment of new broadband networks⁷.

Government intervention to date

Even with high levels of superfast broadband coverage across the UK, there are areas that have not been reached by commercial investment alone. These generally, though not exclusively, tend to be rural or remote areas, where the costs of installing infrastructure are significantly higher than in urban and suburban areas and often outweigh the potential revenues, making the case for commercial investment weak.

The Government estimated that the commercial roll-out of superfast broadband would only cover 75 per cent of UK homes and businesses; Government interventions have since aimed to tackle this market failure. This support has largely been provided through the Superfast Broadband Programme, led by Broadband Delivery UK (BDUK) within the Department of Culture Media and Sport (DCMS). Phase 1 of the programme aimed to take superfast broadband coverage of at least 24Mbps from 75 per cent of the UK to 90 per cent of UK homes and businesses by early 2016. It is being delivered through 44 local broadband projects, led by local authorities and the Devolved Administrations, which are all currently in delivery. Phase 2 of the programme aims to extend superfast coverage to 95 per cent of the UK by December 2017, and this is being delivered through 47 local projects.

Current coverage of superfast broadband is almost at 90 per cent and to date approximately 3.7 million homes and businesses have superfast broadband available to them through the BDUK Superfast Broadband Programme⁸. This is up from 45 per cent in 2010⁹, although the Government recognises that these percentages are UK averages and coverage can vary in certain areas.

The superfast broadband contracts also include a commitment to ensure universal availability of speeds of at least 2Mbps for every home and business in the UK - this is known as the Universal Service Commitment (USC). In Budget 2015, the Government announced that premises with speeds below 2Mbps with no alternative solution available would be given the option of a government-subsidised satellite solution which can give them access to speeds above this level, including the option of superfast speeds. The USC

⁷ [Spending Review and Autumn Statement 2015](#), p 55

⁸

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/501113/Broadband_Performance_Indicator_-_December_2015.pdf

⁹ <https://www.gov.uk/government/news/progress-on-broadband-transformation-roll-out-passes-halfway-mark>

scheme was subsequently introduced in December 2015¹⁰, with fixed wireless services also now available in some areas.

BDUK has also conducted a series of Market Test Pilots to assess the viability of using alternative technologies and approaches to provide superfast speeds to hard to reach areas, the learnings from which help us understand more about ways in which coverage can be increased further still¹¹.

BDUK progress summary

Superfast broadband of at least 24Mbps is available to nearly 90 per cent of homes and businesses in the UK – up from 45 per cent in 2010.

Nearly 3.7 million homes and businesses have superfast broadband available for the first time as a result of the Superfast Broadband Programme.

On track to give 95 per cent of the UK superfast connectivity by the end 2017.

All homes and businesses can now access basic broadband at speeds of 2Mbps.

Alongside BDUK's deployment, we expect the footprint of commercial roll-out of high speed broadband, particularly in cities, to continue to expand, as higher population densities in urban areas generally offer a better return on investment.

The Government is also removing regulatory barriers to support industry investment. For example, in 2013 planning requirements were changed to make the deployment of fixed broadband infrastructure quicker and cheaper¹². We are now considering making those changes permanent. Later this year, we will be implementing the EU Directive to reduce the cost of broadband roll-out¹³ through sharing of infrastructure between telecoms operators and operators of other infrastructure networks¹⁴. We will also be reforming the

¹⁰ <https://www.gov.uk/government/news/satellite-dishes-to-boost-broadband-speeds-in-most-remote-areas-of-uk>
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https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/497369/BDUK_Market_Test_Pilots_-_Emerging_Findings_Feb_2016.pdf

¹² Implemented by changes to the [Town & Country Planning \(General Permitted Development\) Order 2013](#) and the [Electronic Communications Code \(Conditions & Restrictions\) \(Amendment\) Regulations 2013](#)

¹³ [Consultation on implementation of the EU Broadband Cost Reduction Directive](#)

¹⁴ Article 8 of this Directive is being implemented through amendments to the Building Regulations in each Devolved Administration within the UK'. New Regulations will ensure that all new buildings, and buildings undergoing major renovation works, have the necessary in-building physical infrastructure to enable connections to superfast broadband.

Electronic Communications Code to update rules on installation and maintenance of communications infrastructure on private land.

The expected USO footprint

In 2015, Ofcom reported that approximately 2.4 million (8 per cent) of premises in the UK were unable to receive broadband speeds above 10Mbps¹⁵. We currently estimate that, even with BDUK's existing intervention and continued commercial roll-out, up to 1 million UK premises will not be able to access speeds of 10Mbps or higher by the end of 2017. While these premises will be spread throughout the UK, and include homes and businesses in cities as well as very remote locations, we expect they will be predominantly in rural areas with more than half a million of these premises forecast to be in rural locations, and more than 100,000 in remote rural locations.

These will include individual premises within a broadband provider's existing footprint that cannot access speeds of 10Mbps or higher because of specific issues with network infrastructure. There will also be clusters of premises surrounded by infrastructure that has been upgraded to support higher speed broadband but which have not been upgraded due to, for example, low numbers of customers or access issues. We also expect there to be larger areas of premises next to existing broadband networks, which, for example, are not served by infrastructure capable of providing access to higher speeds because of the relatively high cost of extending infrastructure to support these locations.

¹⁵ Ofcom [Connected Nations 2015](#), p7

Section 2: Rationale

Digital inclusion is a priority for this Government. We want to give everyone the opportunity to be able to have access to the enormous benefits that can be gained from getting online - from increased contact with family and friends through to generating new business, as well as accessing local and public services. In November 2015, the Prime Minister announced the Government's intention to implement a new broadband USO, which would give people the right to request an affordable broadband connection, at a minimum speed, from a designated provider, up to a reasonable cost threshold.

People increasingly see having access to broadband in the same way as they see other basic utility services. They want to get connected no matter where they live or work. Introducing a broadband USO will ensure that broadband is available on demand in much the same way as electricity and water.

We know that a lack of access to broadband can result in sections of society being excluded from the social and economic opportunities provided by high-speed broadband. For individuals, this can mean missing out on chances to find employment or saving money on household bills. It can also make it far harder to maintain contact with distant friends and relatives. In addition to this, broadband connectivity can increase the number of leisure and education opportunities - whether through children using it for homework, or adults pursuing training opportunities - whilst reducing social isolation and exclusion from government services which are increasingly becoming 'digital by default'.

Improved connectivity will be of particular benefit to rural areas where broadband offers a means to access services, work, shop and communicate without the need for travel. Broadband connectivity also boosts rural economic growth and efficiency; businesses in rural areas make a substantial contribution to the national economy, with predominantly rural areas providing almost 20 per cent of England's employment opportunities¹⁶. Ensuring that rural communities and businesses can enjoy the benefits of faster broadband in the same way as their urban counterparts is critical to balancing the economy and levelling the economic playing field for businesses in rural areas. Poor rural availability has a particular impact on Scotland, Wales and Northern Ireland which are more rural than the UK as a whole.

The various interventions that Government has made to date, and the substantial commercial investment that has been made, have resulted in a fundamental shift in the extent of broadband coverage in the UK. Without further intervention however there will still be significant numbers of homes and businesses whose access to high-speed broadband will lag behind the majority. One-off interventions do not allow for speed increases and

¹⁶https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/443228/Statistical_Digest_of_Rural_England_2015_June_edition_v2.pdf

changes in consumer expectations over time, and so a further roll-out programme similar in design to those already undertaken by Government would not address the problem in a sustainable way in the long term.

We believe that, for those premises that will not have been reached by commercial investment or by the Government's interventions by the end of the current planned programmes, the time has come for a demand-led approach. Given the high costs of providing broadband access to premises in remote areas it is right that this is done on request, rather than rolling it out and waiting to see if people in those areas want to be connected. We know from the various interventions that the Government has made to date that it is unlikely that everyone will want to be connected, even if that option is made available to them, and so we do not believe that an additional broadband roll-out programme at this time is proportionate or would represent value for money.

The Government's ambition is for the minimum speed for a USO to be 10Mbps, which we will look to raise over time. Ofcom, the communications regulator, supports this view¹⁷. Evidence suggests that in 2016 the digital needs of a typical household can be met with download speeds of 10Mbps¹⁸. 10Mbps enables full participation in our digital society - watching video on demand, listening to internet radio or streamed music, using social media, accessing Government services, shopping online and working from home. At lower speeds, Ofcom statistics suggest that people's use of the internet is constrained.

As well as supporting individuals and households towards better connectivity, speeds of 10Mbps will also support small businesses, and help them make an even greater contribution to the economy. While there is a wide variation in the broadband needs of small businesses depending on their size and the sector they are in, 10Mbps meets the typical connectivity needs of many SMEs¹⁹. In September 2015 the Broadband Stakeholder Group (an independent advisory group) published a report on the current and future connectivity needs of small businesses which found that the median downstream demand for small businesses would rise from 5Mbps in 2015 to 8.1Mbps in 2025²⁰. More recently, on 24 February, the Business Secretary announced a review of business broadband which will look, amongst other things, at the speeds that businesses need both now and in the future.²¹

Our long-term vision, as set out by the last Government in the March 2015 Digital Communications Infrastructure Strategy, is for ultrafast services. Many homes and businesses choose to pay more for higher speed broadband - with Virgin Media now offering a 200Mbps service to many customers and operators such as Gigaclear offering 1

¹⁷ [Ofcom Digital Communications Review Statement](#)

¹⁸ [Ofcom Digital Communications Review Statement](#), p27

¹⁹ <http://www.cambridgeahead.co.uk/wp-content/uploads/2016/01/4pp-Bus-Bband-Capacity-Matrix-070116.pdf>

²⁰ The broadband requirements of small businesses in the UK

²¹ <https://www.gov.uk/government/news/business-secretary-announces-new-business-broadband-review>

Gigabit per second (Gbps). Ultrafast services enable streaming multiple high-definition videos and uploading/downloading very large files quickly. The broadband infrastructure required can be very expensive to install, particularly in those areas which do not currently receive 10Mbps. We have to encourage the market towards ubiquitous ultrafast services but balance the additional benefits of increasing speed against the costs today of providing the infrastructure. As technology advances, costs of deploying faster speed connections should drop, making faster connections more viable and more extensively available. As demand for, and investment in, ultrafast services grows, the broadband USO will provide a backstop to ensure that everyone has access to a decent level of broadband.

Section 3: What is a Universal Service Obligation (USO)?

Universal Service Obligations give people the legal right to request a service from a designated provider. This concept has its foundations in European law; the Universal Services Directive (USD) implemented in 2002, and revised in 2009²², provides the framework within which the current telephony USO and the future broadband USO must operate.

The rationale of a USO is to act as a 'safety net' where market forces alone do not deliver affordable access to basic services for people, particularly those in remote areas or those with low incomes or disabilities. USOs aim to ensure that a minimum set of communications services are available to everyone at a fixed location, upon reasonable request, and at an affordable price, irrespective of where they live, in order to prevent social exclusion.

Under the USD, Member States are required to ensure that all 'end-users' have access at a fixed location to voice and data communications, including 'functional internet access'. In 2002, the USD definition of functional internet access was restricted to narrowband or 'dial up' rates which could be achieved over a telephone line.

A USO connection is demand-led - that is provided on request rather than preemptively - and a designated Universal Service Provider, or providers, is obliged to provide a connection up to a reasonable cost threshold.

The USD provides for the net costs of a USO to be funded in three ways; via a cost-sharing mechanism financed by market players in the e-communication sector, by public funding - should Member States choose to do so - or through a combination of industry and public funding.

USOs must be technology neutral - that is, the technology that is be used to deliver them should not be prescribed. However, the USD requires services to be delivered in the most cost effective means possible. The Communications Act 2003 provided the powers to enable the creation of the UK's telephony USO, as required under the USD. The vires for Government to set the scope of what should be included in the current USO are set out in section 65, and the vires to enable Ofcom to then develop and implement the USO by placing specific conditions on designated Universal Service Providers are provided by section 67.

The telephony USO services currently include: special tariff schemes for low income customers; provision of a connection to a public communications network upon reasonable request, which includes providing functional internet access; reasonable geographic access to public call boxes; and directory enquiry services. Under its voice telephony USO BT is required to provide, on reasonable request, a range of basic telephone services; but it is not

²² https://ec.europa.eu/digital-agenda/sites/digital-agenda/files/Directive%202002%2022%20EC_0.pdf

without cost to the consumer. The consumer pays for the first £130 of the costs involved, while BT pays up to a threshold of £3,400. Any further costs are payable by the consumer.

Today, with access to fixed line telephony services near ubiquitous, the USO is less about extending the telephone network and more about bringing benefits to people on low incomes who have difficulty affording a telephony service, customers with disabilities who need particular services, and customers in rural areas for whom the cost of service might otherwise be prohibitively expensive.

Beyond this, the concept of universal service in telecoms has adapted over time as technology and people's use of it have evolved. What is deemed to be an essential service now is not the same as when the telephony USO was introduced. In 2003, the majority of those connected online were using dial-up internet access or narrowband. Since then, narrowband has been replaced by broadband as the means of accessing the internet.

In 2009, the USD was revised to give Member States flexibility to choose whether to include broadband connectivity as part of the USO according to their own national circumstances, if the wider coverage and take-up of broadband services warranted it, and provided it was done in a way that minimised market distortion.

The European Commission subsequently issued guidance²³ which sets out that Member States could be asked to consider including broadband connections in the USO where the data rate in question is used at national level (i) by at least half of all households and (ii) by at least 80 per cent of all households with a broadband connection.

Since 2009, a number of Member States have decided to implement a broadband USO. To date Spain, Finland and Malta, Belgium and Croatia, have taken advantage of this flexibility and have imposed a broadband USO - Spain, Belgium and Croatia at 1Mbps, Finland at 2Mbps, and Malta at 4Mbps. A number of other Member States are considering doing so. The current EU telecoms framework is under review, the outcome of which will not be known for some time, and is unlikely to be implemented before the end of 2019. However, we are actively engaging in this Review, including to shape any changes to the universal service provisions.

²³ EU Commission report on the third review of the scope of the USO, p9

Section 4: Statement of intent

Although we have a broad legislative framework in place, and there is international precedent for a broadband USO, we do not have a detailed blueprint for a broadband USO here in the UK.

There are some fundamental differences between a telephony USO and a broadband USO. With a telephone connection, you either have a line which enables you to make a call or you do not. This makes a universal service provision clear. The provision of a broadband service is not as clear cut, as the user's experience is affected by a number of factors, some of which are within the service provider's control, while some are not. Broadband can also be delivered by a range of different technologies, rather than a single fixed line option, each with specific benefits and limitations, and the costs of deployment vary considerably.

There is a complex set of interrelated factors that will need to be considered in developing the USO, with the aim of making it affordable for every home and business in the UK - the need to ensure access to broadband of a minimum speed and quality to the maximum number of people and businesses, at the lowest cost, while at the same time ensuring that we build on existing service provision, without undermining competition. Detailed analysis of these issues is required before we can more fully understand the options for the design of the USO.

So, as first step, we want to clarify in primary legislation the Government's powers to implement a broadband USO.

Our proposal

In 2003, when the Communications Act was introduced, the internet was still in its relative infancy. Broadband services at that time typically delivered up to 512Kbps, a speed which was seen as adequate for most needs, and even large organisations, such as hospitals, used connections of only 2Mbps. The focus of the subsequent Electronic Communications (Universal Service) Order 2003 is a universal telephone service, and simply incorporates the Universal Service Directive language of "functional internet access" without the term being defined.

We intend to introduce a new enabling power in primary legislation which will give the Secretary of State an explicit power to introduce a broadband USO to provide for the functional internet access considered appropriate for today's needs. Secondary legislation would then be developed setting out the scope, including specific requirements and guidance for the design of the USO, which Ofcom will then be responsible for implementing.

We do not propose specifying a minimum speed, quality or other detailed criteria in primary legislation. Technologies and service capabilities continue to improve rapidly, and it is important that any specifications can be updated over time to take account of these

developments. Secondary legislation can be revised more easily, and is therefore a more appropriate means to specify the minimum level of service.

We are also considering an additional measure in primary legislation which would provide the Secretary of State with a power to require Ofcom to review the USO, as appropriate, to ensure that in future it continues to reflect connectivity needs, including whether the minimum speed needs to be updated. This will ensure that people and small businesses that rely on the USO do not fall behind as demand for faster broadband connections grows.

DCMS is commissioning Ofcom to undertake detailed analysis of the key factors that will help inform the design of the USO. We are asking Ofcom to report on its findings by the end of the year. It is our intention to consult on proposals for secondary legislation following that, and a regulatory impact assessment will accompany that consultation. This second consultation will cover the detail of the USO and will provide an opportunity to comment on the design of the USO and how it is to be implemented. Once the secondary legislation is in place, Ofcom will then carry out work on the detailed design and regulatory implementation.

The proposals on which we would welcome your views are designed to bring clarity to the existing legal framework, and provide for a legislative process to introduce, implement and review a broadband USO. Given that primary legislation will not of itself change the existing regulatory landscape, this consultation is not accompanied by an impact assessment.

Questions

Q1: Do you have any concerns about the approach that has been set out here?

Q2: We do not propose to specify speed in primary legislation. Should speed be specified in primary or secondary legislation?

Q3: In terms of giving the Secretary of State a power to direct Ofcom to review the USO, should Government have a continuing role in the USO, or should this be a matter for Ofcom?