

## **Ofcom: Designing the broadband universal service obligations**

### **Welsh Government response**

#### **Specification and scope of the USO**

The rationale behind a 10Mbps USO in that it meets the needs of a typical household seems, on the face of it, sensible as are proposals that this should grow over time as usage grows. However, it does seem somewhat unambitious compared to the aspirations for superfast broadband at 24Mbps in England and 30Mbps in Wales. It also does not meet European ambitions of 30Mbps to all by 2020.

Robust research forecasting future internet speed demand is lacking, however, the Broadband Stakeholder Group published a study in November 2013 that provides a forecast for future domestic demand based on analysing different profile of usage. The report stresses that it provides a forecast and that changing some of factors involved could change the results. The study indicates that the median household will require bandwidth of 19 Mbps by 2023, whilst the top 1% of high usage households will have demand of 35-39 Mbps.

Other research suggests much higher requirements. Research by the University of Technology in Eindhoven published in 2014 suggested the demand for bandwidth is expected to grow exponentially with sufficient subscription speeds for the average user are forecast to be approximately 165 Mbps (downstream) and 20 Mbps (upstream) by 2020. It should be noted that the research was commissioned by cable operators. Given that in the latest Ofcom Connected Nations report 10Mbps is sufficient to meet current demand 165Mbps does seem high.

The Broadband Stakeholder Group provides some useful information on speed demand for businesses. The median downstream demand for small business premises rises from 5 Mbps in 2015 to 8.1 Mbps in 2025. At the upper end, 95th percentile demand rises from 12.9 Mbps to 41.1 Mbps. However, 20 per cent of small business premises will have a demand of at least 32 Mbps.

Setting the USO at a higher level would also seem to be the most sustainable approach in that it would reduce the need for further interventions that may be required as the speed of the USO increases over time. By way of example, consultation with industry during the development of the Access Broadband Cymru scheme in Wales determined that a reasonable cost for deploying a wireless solution capable of 10 – 20 Mbps is in the region of £400 per premises. For speed in excess of 30Mbps this would double to £800 per premises. The extra costs are needed to cover higher gain antennas and the density of radio sites required to provide a reliable retail service. It is a similar picture for satellite. From a value for money point of view it would be hard to justify spending £400 now only to need to reinvest in the same locations a few years later.

For fibre the picture is likely to be different as many of costs for deploying 10Mbps, for example civil engineering and backhaul, would be common for deploying 30Mbps. In terms of fibre, this makes the case for a greater investment up front more compelling because as speeds increase the cost of deployment drops disproportionately more quickly.

As currently proposed, there is a clear disconnect between the USO, which exists to provide a connectivity safety net for premises not reached commercially nor addressed through public funded interventions, and the policy goals and ambitions of the Government of the day. If Government policy advocates broadband availability at a set level of speed and performance, then the USO should act as one of the enabling tools that helps achieve that goal rather than, as currently proposed, be set adrift from and independent of the pursuit of that policy goal. Maintaining this disconnect will only serve to erode the relevance of the USO and will do very little, if anything at all, to satisfy the demands of those consumers on the edge of the population curve who will continue to clamour for the right of parity with the wider population. Setting the USO at 10Mbps appears divisive therefore, rather than constructive and value adding.

Welsh Government believes there is a strong case for introducing a USO at 30Mbps.

### **Demand for USO**

As stated in the consultation document poor rural availability disproportionately affects Wales and accordingly it is in rural areas where demand for the USO is likely to be highest. We estimate that around 55,000 premises in Wales will go unserved by superfast broadband once the Superfast Cymru and commercial deployments are completed in 2017. We have not undertaken an analysis of how many of these will be sub 10Mbps but given the largely rural nature of these premises it is safe to assume that a significant proportion will be currently receiving less than 10Mbps.

### **Cost, proportionality and efficiency of the USO**

Any costs that would fall to the end user would also need to be carefully balanced. There is a danger that if the same methodology is followed as per the current telephony USO, in that costs over a threshold figure fall to the end user, it would disproportionately disadvantage those in rural communities and more than likely the very homes and businesses that the USO is designed to tackle.

This is a function of the cost of deployment which increases with distance and isolation. This is particularly true of fibre based solutions where for greater distance greater amounts of fibre needs to be deployed and more civil engineering undertaken. However, it would also be true of wireless solutions where more and a greater density of radio sites is required.

Consideration should therefore be given to introducing a geographically differentiated threshold figure which is higher in defined rural and very rural areas, or a sliding scale based on an indicator of rurality.

### **The universal service provider or providers**

It is vital that the USP provides services on a wholesale basis in a way that means that consumers, to as great an extent as possible, are able to benefit from price and service competition in the retail market. This may determine which industry players are able to provide the right technological solutions in the right place at the right cost.

Similarly technological neutrality is important to allow the most cost effective and appropriate solution to be employed. This is particularly important in rural areas where the cost of deploying fixed lines solutions such as fibre may be prohibitively expensive.

On the question of one or more USPs the Welsh Government does not hold an opinion on whether it should be one USP or a number of USPs. However, this may well be determined by the ability of any one supplier to deliver the range of technological options needed to serve homes and businesses in locations as diverse as the mountains of Snowdonia or the Brecon Beacons and the rolling countryside of mid Wales and remote coastal communities.

### **Funding of the USO and potential market distortions**

The view of the Welsh Government is that it should be funded by a levy on industry rather than through taxation. The eventual network will be an asset for the USP and therefore there will be an opportunity for the USP to recover costs through the wholesale and retail markets. An industry levy would mean that costlier areas to deploy to would be subsidised from more populous areas where deployment costs are lower.

In many rural areas of Wales there is no market to distort indeed in many areas there has been demonstrable market failure. In those areas that will not be reached by Superfast Cymru many premises will not be able to receive a service even approaching 10Mbps.

### **Review of the USO**

The commentary on future speeds above suggests that the speed requirements of both homes and businesses will grow quickly between now and 2023. In addition the inexorable growth of new technology, new applications and rich content mean that this increasing demand for ever greater speed will continue.

The need for a review in the short to medium term could be negated if the initial USO was set at a level which is ambitious and sustainable as set out above.

However, if the decision were taken to introduce the USO as suggested at 10Mbps or at sub superfast speeds Welsh Government would agree that this would need to be reviewed regularly. This would suggest that the level of USO needs to be reviewed often if homes and businesses are not to be left behind quickly. However, as highlighted in the consultation document this needs to be balanced against the investment cycle of the USPs specific USO network investments.

Consideration could be given to setting out a roadmap of speed improvements over a ten year time period, for example, an initial USO of 10Mbps increasing to 17Mbps in the first five years and to 30Mbps in the next ten years.

To ensure the ongoing validity of the speed levels in the roadmap a fundamental review of speed demand every three to five years could be undertaken which would also set new ten year levels. This approach would allow the USPs some certainty over likely increases in USO speed in the medium term but also a mechanism to review and adjust the level of USO as the level of future demand continues to evolve.