

Designing the Broadband Universal Service Obligation

UK Broadband's Response to Ofcom's Call for Inputs

Executive Summary

UK Broadband supports the goal of universally available good quality broadband access and we welcome Ofcom's call for inputs. Through our award winning brand, Relish, we have striven to deliver sensibly, fairly priced broadband to the market. Our wireless service is not dependent on the location of street cabinets and we are not reliant on old copper circuits to deliver broadband to today's demanding users.

Relish has brought fast broadband to a number of areas where it was previously unavailable and will continue to do so. Much of this network expansion can be achieved without government intervention (as we have demonstrated in London), but we do acknowledge that there will be areas where some intervention may be required. That said, we think it is premature to consider the detailed design and implementation a new broadband USO when it is not yet clear the number of premises which will remain without a quality broadband connection once the current wave of privately and publicly-funded network builds have been completed.

DCMS estimates that 1 million homes will remain under-served, of which 100,000 will be in rural locations. This implies that 900,000 will be in urban or suburban locations. We think that it is very unlikely that, by 2020, commercial deployments, technological advances and network upgrades will leave anything but a very small number of urban and suburban premises unserved by 10 Mbit/s. Whilst we recognise that there are many urban not-spots today, we think that by 2020 it will be the remote, rural locations that represent the most intractable problems.

Provided that an entry-level tariff is offered, there is no policy justification for a resident who is able to get a 10 Mbit/s service from either a commercially deployed network or a BDUK-subsidised network receiving further public funds for a USO service.

To avoid the risk of competitive distortions, Government should wait not only for all BDUK procurements to complete, but also for the 4G licence coverage obligations to be fulfilled, as 4G may well be a sensible solution in some locations which are hard to reach with fixed line networks. We therefore recommend that detailed analysis of funding requirements be delayed until the second half of 2017, at the earliest.

Whether or not the UK is still a member of the EU when any implementing secondary legislation is introduced, UKB's view is that any USO should provide a safety net only, for the provision of "functional internet access" and should not be used in order to achieve other public policy goals around economic growth or access to content.

How should the minimum technical performance of the USO be specified?

10 Mbit/s is an appropriate headline speed for a "safety net" broadband service. A set of technical parameters could be drawn up in a similar way to those applied by BDUK to ensure compliance with State Aid rules on deployment of broadband networks.

Suppliers who are contracted, under BDUK's national broadband scheme, to deliver headline speeds of 24/30 Mbit/s are required to comply with a detailed set of technical requirements which include:

- a) delivering a network which is <u>capable</u> of providing speeds in excess of 30 Mbps download; and
- b) designing the network in anticipation of providing at least 15 Mbps download speed to end-users for 90% of the time in busy hour.

The technical requirements thus fall short of a requirement to ensure 30 Mbit/s to all users 100% of the time. We think that similar metrics could be applied to the BB USO.

The purpose of the BB USO should be to provide a safety net, a minimum level of service for functional use of the internet. We therefore do not think that any minimum specifications in terms of upload, latency, jitter or contention are necessary or appropriate, as these are not currently required under broadband advertising rules.

The obligation to deliver should of course be technology neutral, so that not only fixed wireless, satellite and copper technologies can be used, but also mobile services that are capable of providing the minimum specified service. Mobile signals could be boosted with the addition of additional customer premises equipment in certain locations.

Cost Evidence

Every location will have its own set of circumstances, so it is impossible to provide generic cost estimates at this stage. Once the next phase of BDUK procurements is complete, it will be possible to extrapolate based on the average cost per home connected in those projects.

No funding should be offered to a USO provider or an end user until:

- i) the coverage obligations in the Telefonica UK 4G mobile licence have been fulfilled¹; and
- ii) all of the BDUK projects have been completed and/or it is clear which premises will or will not be covered by those deployments. We expect these projects to run until at least December 2017 and possibly beyond.

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¹ Under the terms of its 4G licence, Telefonica UK Ltd is obliged to offer coverage to 98% of the population (indoors) by the end of 2017

Ofcom states that its Connected Nations report identified 2.4m premises which are unable to receive speeds of more than 10 Mbit/s. Based on the quantity, quality and granularity of data gathered by Ofcom to date, the Connection Nations report may not accurately reflect coverage of all commercial providers in the UK other than BT and Virgin, particularly wireless operators. We therefore doubt whether this is an accurate assessment. We note, however, that Ofcom is making continued efforts to improve the quality and granularity of the data it gathers in preparation of future Connected Nations reports.

Definition of "reasonable request"

Many homes are "off grid" for utilities such as gas and sewerage and would need to bear the cost of connection themselves. The telephony USO has a cost threshold of £3,400, above which the householder is responsible for the cost of connection. We agree that a similar threshold should be imposed in the case of a broadband USO, as it is not reasonable for either tax payers or broadband users to subsidise provision of service to very hard to reach locations. However, in order to propose an appropriate threshold level, more work needs to be done to identify the premises that will ultimately remain unserved and then analyse the cost of provision to those premises using the various technologies described above.

Ofcom could consider modifying the technical specification (5 Mbit/s rather than 10 Mbit/s, for example) for the hardest to reach premises, but only once all technical solutions, include 4G mobile, have been exhausted.

The Government are proposing a demand-led USO, rather than a top-down network rollout, as undertaken by the BDUK national broadband scheme thus far. However, this is problematic as the cost of provision will, naturally, depend on how many premises can be served by a single network deployment or extension. With a demand-led approach, it is unclear to what extent demand aggregation can be facilitated to reduce the cost of the initial connection.

We therefore think that, for groups of more than one property, a top-down roll-out approach would be a more efficient use of public funds than a demand-led USO. It may be more sensible to extend BDUK projects to cover the last few premises than to attempt to obtain coverage via a USO.

How should the Universal Service Provider by designated?

In some cases, provision of service over copper by BT may be the most sensible and economical option. In other cases, wireless or cellular technology may be viable. According to the *Guidelines for the application of State aid rules in relation to the rapid deployment of broadband networks*, third generation mobile networks (UMTS) and its successor (4G) qualify as basic broadband networks. There may also be some customers for whom only a satellite service is feasible.

Many customers connected to fibre-enabled BT cabinets, who are unable to get superfast broadband due to their distance from the cabinet, will be able to get a service somewhere between 10 and 24 Mbit/s and these customers need to be precisely

identified. These customers may be easier for BT to serve commercially than those customers who are not connected to a fibre-enabled cabinet.

Provided that an entry-level tariff is offered, there is no policy justification for a resident who is able to get a 10 Mbit/s service from either a commercially deployed network or a BDUK-subsidised network receiving further public funds for a USO service and this therefore should not be permitted.

At this stage, when it is too early to tell how many premises will remain not covered by broadband and how hard to reach they will be, Ofcom should keep an open mind about whether there might be more than one USP. Premises that are adjacent to networks run by operators other than BT (whether Virgin, a BDUK supplier, a mobile operator or another commercial operator) may be most sensibly connected by those providers through a network extension. But such cases are likely to be very localised, so it is hard to make predictions as to how many potential universal service providers might come forward at this stage. If Ofcom were to designate USPs for sub-national regions, those regions would likely have to be reasonably small or aligned to BDUK intervention areas.

Funding of the USO

We see little logical distinction between customers who receive a connection from a BB USO and those who receive a connection from a BDUK project. We therefore think that funding from central government would be more appropriate than industry funding which would inevitably be passed on to broadband customers, particularly in the case of shared networks serving more than one premise.

Whether or not the UK remains a member of the EU by the time secondary legislation is introduced, it is UKB's view that a BB USO should only be used to provide a basic "safety net" service. If the Government were to take the view that connections should be designed to provide more than this, then there is a greater case for central Government funding to support wider policy goals such as economic growth.

How could any potential market distortions of competition be minimised?

As set out above, market distortions can only be minimized by waiting until the extent of commercial and subsidized fixed, wireless and mobile network rollout is clear. There are a range of measures that should be considered before introducing a USO, including ensuring that gain share funds are used as efficiently as possible, continued commercial deployment, upgrades in existing technology (including copper, fixed and mobile wireless and satellite), demand aggregation schemes, vouchers such as those used in the USC scheme and even further subsidised supply-led procurements.

Conclusion

We think there is a limit to the extent to which Ofcom can make detailed recommendations to Government at this stage, when the extent of commercial and funded network deployment is not clear.

Given that the 4G coverage obligations and the BDUK schemes are due to be completed by the end of 2017, we suggest that further analysis be undertaken in the second half of

2017, or once all those network rollout plans have been established. This will also give time for privately funded operators to make further progress with their network extensions.

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