Moors web Community Broadband Response to the Designing the broadband universal service obligation - Call for inputs

Additional comments:

Response to Ofcom - call for inputs

This response is from Moorsweb Community Broadband, 'Moorsweb'. We provide a wireless broadband service available to almost all of the residents in an area of approximately 200 sqkms of the North York Moors. By any definition our subscribers are amongst the hardest-to-reach in the country. We have recently been afforded NGA status following an Open Market Review conducted by SFNY. On their published maps, our principal coverage area is shown as 'grey' throughout, meaning that all our subscribers could receive a high quality 30Mbps service if they wished.

We believe that our experience is directly relevant to the operation of a USO. In view of the length of the 'call for inputs', we have responded principally to those points where we have a direct experience or interest.

Any USO does, of course, need to be technologically neutral. Nevertheless, it needs also to be set in the light of current realities. Some of the relevant ones are as follows:

- 1) Putting fibre in the ground in rural areas has proven to be prohibitively expensive.
- 2) FTTC relies on a copper wire delivery to the home. This means that very many homes which are more than 1.2kms from a fibre enabled cabinet still have a significantly limited broadband speed.
- 3) The cost of connecting a potential subscriber is largely the cost of setting up a new infrastructure, e.g. putting fibre in the ground or building a wireless tower. For these systems broadband speed for some may well be critically dependent on how much is invested and how thinly populated the area is. i.e. the fibre has to go further or there have to be more towers in thinly populated places.
- 4) For house-to-house wireless (which may be point-to-point wireless or point-to-multipoint wireless), such as that used by Moorsweb, the relationship between investment and achievable broadband speed is not proportional. Generally, if a service can be provided, it can be provided at superfast speeds with higher speed only having a limited impact on the set-up costs.

Specification and scope

- 1.7 We believe that 10Mbps is a suitable starting level for a broadband USO. It allows householders to access most of the currently available internet service types. Any level that, for example, limited access to streamed HD video would be excluding those affected from a major aspect of today's on-line culture.
- 1.8 Low latency and jitter are clearly key to a high quality broadband connection and should be specified at levels that enable VOIP connections to operate. It would be unrealistic to set standards that might be required by on-line gamers and those whose activities where time

delay is hyper critical.

- 1.9 We believe that wireless is the only current technology capable of delivering a USO economically. House-to-house wireless is particularly appropriate because neither capital cost nor achievable speed are significantly dependent on distance.
- 1.10 The retail electricity industry illustrates the benefit of simple uniform pricing and, equally, the need to avoid predatory pricing in utility services. Consistent and simple pricing structures should be required of those who provide USO connections.
- 1.11 A social tariff is likely to confuse the issue of designing a USO with a much more general matter. If social tariffs are to be considered they should be considered separately and throughout the broadband industry.

Demand for the USO

- 1.12 Poor rural broadband is an issue which affects some areas in all nations in the UK. The solution and its implementation should be dealt with as an area issue so that all people with the same degree of problem are dealt with according to that problem and not according to the country they happen to inhabit.
- 1.13 Most people want a good broadband service. 10Mbps is good and may be more than some aspire to. If two people in a household can simultaneously watch on-line catch-up TV, 10Mbps may be adequate. Rural demography may well be different from urban or semi-rural demography with a higher proportion of one or two person households. A household with children is likely, because of simultaneous usage, to have a significantly higher speed demand than one without. Moorsweb's experience is that, whilst overall demand and usage are growing very fast, the take-up of superfast, i.e.>30Mbps, services in the North York Moors is relatively low (below 20%), almost certainly because of rural demography.
- 1.14 We have no doubt that the demand for the universal service will be substantial. In fact, we believe it is doubtful that making the universal service 'demand driven', rather than achieved through roll-out, will reduce costs. To the extent that services are installed piecemeal, costs will rise. For this reason, we believe communities should be encouraged to pool their service demand. Once a critical demand level is reached the installation should be as near universal as possible.

For these reasons, it is also important to keep the bureaucracy surrounding a USO to an absolute minimum. This, of course, means, inter alia, keeping the system as simple as possible.

Cost, proportionality and efficiency of the USO

1.15 There is little doubt that house-to-house wireless is the cheapest option in very low population density areas. Moorsweb can connect any subscriber, with line-of-sight to another, for under £200. There are many providers capable of running house-to-house wireless networks. However they need communities to band together to get schemes up and running. If community access to USO required them to both pool resources and to make their roof tops available for onward transmission of wireless to others, then costs could be dramatically reduced.

1.17 Moorsweb is a not-for-profit enterprise. If it were designated a USP it would seek only recovery of excess installation costs. The question raises the importance of the distinction between the broadband service provision and the network provision and installation. The practical implication of this for a wireless network needs more thought not least because of different technologies in operation.

However, clearly the costs of installation fall on the network provider. It would be a confusion to try and identify broadband service components in an attempt to reduce the network subsidy provision.

- 1.18 In rural areas there are many reasons why a request for USO might be made more expensive by the actions or circumstances of the person requesting it. An extensive estate might be able to get a service to one part but not another. A property owner might not wish to remove trees. The 'reasonable request' must also be accompanied by a need to take reasonable action to mitigate costs. On a large estate, the obligation might be fulfilled by provision to the edge of the estate.
- 1.21 We are told that the average subsidy in phase 2 of the national broadband roll-out is in the region of £1,000 per premises passed. This subsidy is clearly higher if assessed on a 'per premises connected' basis and may be higher still because of inadequate 'last mile' conditions not accounted for by BT. This suggests an absolute minimum threshold for the government contribution to USO costs.
- 1.23 There will be many different circumstances of hardest-to-reach customers. These include many individual isolated cases, as well as pockets of properties beyond 1.2kms from an enabled cabinet and the wider deeply rural areas. Based on our and NYCC's work in North Yorkshire it seems highly likely that the number of premises that cannot receive 10Mbps is greater than current government estimates.

If house-to-house wireless is the most effective and economic answer then there is no need to modify technical specifications to enable greater cost efficiency. The cost is in achieving the connection. Pooled community requests for service are likely to be the most efficient way of minimising installation costs.

1.24 Within the Moorsweb service area, there are isolated properties which cannot currently receive our service. Openreach, or any outsider, could not possibly provide an economic service to such a property. Generally we could do so at some capital cost. Mostly, that cost will be within the bounds of a USO subsidy but if it were not, it would be a direct burden on the rest of our subscribers if Moorsweb were to bear it.

The universal service provider or providers

- 1.25 It would be wrong, in current circumstances, to designate a single national provider for the USO. The existing effective incumbent, Openreach, is monopolistic and committed to a single technology, fibre. To be a national USP, it needs to be fully independent and fully technology neutral.
- 1.27 We believe that it is important to separate the obligation to provide the USO from the funding process. Only through that means will providers be willing to come forward to act as

USPs.

Funding of the USO and potential market distortions

1.28 Small not-for-profit community internet service providers such as Moorsweb may well be suitable USPs in their area. It would, though , be wrong to burden the existing subscribers with any excess costs of USO connections. Equally it would be impractical for such organisations to offer open access as a quid pro quo for the provision of external funding.

Review of the USO

1.31 Regular review is likely to be important. The review arrangements can only be decided after the main structure of the USO is determined.