

ICBAN Response to OFCOM's Call for Inputs – Designing the Broadband Universal Service Obligation

Thank you for the opportunity to respond to the Broadband USO Call for Inputs. Irish Central Border Area Network Ltd. (ICBAN) has been charged by its three local authority members in Northern Ireland to help seek answers and solutions to the gaps in service left by an over reliance on a fibre to the cabinet solution (FTTC) deployed and subsidised in Northern Ireland. We are a local authority development organisation which works in the cross-border areas of Northern Ireland and Ireland. The three local authorities member Councils from Northern Ireland are: Armagh City, Banbridge and Craigavon Borough Council; Fermanagh and Omagh District Council; and Mid-Ulster District Council, which are all located on the border with the Republic of Ireland.

Located in the border Region of Northern Ireland /Ireland the area has a very low population density, so a FTTC without the effective ability to order extensions to the service is limiting.

In our recent response to the DCMS consultation, the following points were made;

- 1) Defining a USO is highly problematic given the terminologies 'speed' and 'broadband' are not helpful in defining what is a wholesaler data transport service. The USO will not describe an end user experience like browsing or streaming but instead how applications should work. These include home owners network and equipment attached to it, how and where information is stored on the internet and how internet services are configured to work and the resources needed for this.
- 2) 'Speed', even access speed should not form the legal basis to define a connection to a data transport service. 10Mbps is no more than a sentiment relating to our current experience and expectation of how the copper access network behaves. The mode of expression is tied to the current distance limitations caused by the attenuation characteristics of the copper medium. It also assumes G.Fast might be relevant to rural areas where this is unlikely to be case. Signal attenuation (distance), low customer densities and power costs have dictated against BT deploying active equipment deep in the access network. For legislative purposes, the terminology around 'speed' needs to be dropped and replaced with the term 'throughput'.
- 3) The BDUK activity, if supported with the appropriate levels of transparency and continued scrutiny, still has as much as £1bn plus BT's capital contribution to delivering fibre bundles deep into rural areas and extending FTTdp.
- 4) The current fibre upgrade costs are significantly less than that outlined by the BSG/Analysys Mason report of 2009. A figure of £29bn is still quoted by BT as fundamental to their decision making. This is at odds with emerging experience and best practice. The number is not even discounted to reflect the comprehensive FTTC costs which the UK Government has provided generously towards.

ICBAN's response to Ofcom's Call for Inputs expands on these points.

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

1.1 10Mbps 'speed' reflects a sentiment that this represents an overall acceptable user experience for a typical household. In that respects it is not different from the sentiment of 2Mbps for the Universal Service Commitment which was thought to be sufficient for a single homemaker to work from home. The former suggests the homemaker can now continue homeworking while any family members do what they wish to do online also.

1.2 The 10Mbps, like the 2 Mbps before it, is shorthand for something else. The requirement is to support sufficient connectivity (quality and quantity) to do as one needs at any time. 10Mbps is the new minimum to answer an instinctive question about 'how fast?' As all connectivity occurs at near the speed of light, the issue is about throughput.

1.3 10Mbps services are not quite the service for some and rural folk are seeking the same services, prices and choice experienced by users in towns and cities. While DCMS have pointed to the need for technical neutrality this has the consequence of avoiding some of the variations that matter to customers such as peak hour performance, delay, etc.

1.4 It is helpful to begin with by understanding what is Broadband. That may best be answered by stating firstly what this isn't. 'Broadband' is not a connectivity service, it is not access to the public internet and it is not the resources needed to maintain a suitably stable and working connection to the public internet. Broadband refers to the broad range of high frequencies used to form a connection. The more frequencies you have access to, the more data can be carried. To restate, this is not 'speed' but instead is 'throughput'.

1.5 A pre-condition of the USO points to the need to define a service and how it is accessed.

1.6 The USO for the telephone service combines a description of a service called 'telephony' and an obligation to provide a means of access to that service, through a 'telephone line'.

1.7 Regarding the geographic areas of coverage, Ofcom might wish to include a licence condition to reference the service and the coverage area. Does Ofcom impose wholesale access conditions? Does it impose price thresholds, or specify some international benchmarking for the wholesale prices?

1.8 Satellite providers can describe an access product of 10Mbps or more.

1.9 Fixed Wireless operators can describe the same for the areas they wish to register.

1.10 It is important to consider that requirements in stating a minimum can go out of date very quickly. The growth of on-demand TV means peak hour bandwidth allocations are likely to exceed any allowance set out in a generic requirement. Nevertheless writing a minimum requirement creates a useful set of thresholds to benchmark against should be updated and corrected as more is learned.

1.11 What sort of product do we write the USO around?

1.12 Currently telephone service is made technically possible through the provision of a Metal Path Facility or a copper connection. To improve service, you either move closer to the

exchange or exchange equipment is put in cabinets and brought closer to the customer. The latter describes the Fibre to the Cabinet programme, where improvements in service are achieved by putting electronics closer to customers which shortens the distance of the metal path and increases the amount of the usable frequencies available. In some cases, the metal path is replaced in its entirety by a fibre path and the constriction on throughput is effectively removed. This is called Fibre to the Premises.

1.13 The inside out (exchange to premise) approach has worked so far for cabinets but the main variables of cost are power and the overheads BT is applying to plan and project manage the development of its network, so in the case of BT, the time may have come to begin building towards the new fibre assets in the ground, most of which in rural areas have been publicly subsidised.

1.14 The requirement to support communities gaining access to affordable backhaul over subsidised access has been ignored, while the requirement to support an affordable fibre on demand product has not been enforced. In the circumstances BT can price the latter as a private circuit. There are contractual provisions and state aid provisions which if enforced would act as a proxy for a USO access product based on fibre. It is worth Ofcom's time investigating the option of fibre on demand which includes FTTdp as a USO product. The existing cost or liability of £3,400 per provision of a new PSTN line is within the bounds of the possible, if the will is there to make it happen. If this was developed alongside other efforts to maximise and recycle BDUK expenditure then much of the USO could be met, if not be exceeded by 2020. BT's written evidence to the CMS Select Committee inquiry on Broadband made clear that,

"The remaining 1.1m premises to get the overall 5 million current planned total are expected to cost £1bn (or approximately £879 per premises) as we have completed the cheapest premises first. These remaining premises are planned to include a much large percentage of FTTP connections than the current build that will be reflected in the cost."

1.15 The sentiment is that a large percentage of FTTP will be provided in what is considered to be more difficult to reach areas. However, outside of the Select Committee setting BT relies more on its G.Fast strategy, which is yet to be proved to be viable for hard to reach areas. This is likely to be driven by decisions about resource allocation. More recent pronouncements by Clive Selley that new builds, business parks and town centres will benefit from FTTP should also be noted.

1.16 Due to resource issues it would be important to work through the changes Ofcom is planning for the provision of dark fibre, and a revised duct and pole access product. These are likely to be important contributions to third parties assisting in provisioning of a USO.

1.17 In summary for BT, the default position would be some additional subsidy to take electronics deeper into the network. The alternative would be to take the existing BDUK requirements for Fibre on Demand with the state aid requirements and push for this to be enforced and implemented using the £1bn of public funding left after funding phase 1 and phase 2 programmes.

2.0 Demand for the USO

2.1 There is proven demand in rural areas of Northern Ireland's border region for improved connectivity. The poorer the current service, the greater the demand.

2.2 We should consider the CEO of Openreach commitment to change BT's approach;

"Our approach has delivered affordable superfast services to the vast majority of the country in the fastest possible time. We want to build upon that by making ultrafast broadband available to most of the UK. We will do this using a mix of G.fast technology and Fibre-to-the-Premises (FTTP), with the latter focused mainly on new developments and small businesses in high streets and business parks."

2.3 Ofcom may find pent up demand from the SME sector where improvements to broadband have been withheld, so that private circuits could be sold as a substitute for fixing broadband. Demand here is likely to be high but curtailed by the need for existing contracts to run their term.

3.0 Cost, proportionality and efficiency of the USO

3.1 Affordability has been defined by BDUK and this could be used at the beginning of the process and adjusted if needed.

3.2 To assess the likely cost BT will need to map, as per the state aid measure, all public funded assets. It is essential that handover points, aggregation nodes, Tjj/Splitter locations are mapped so that spare fibre bundles can be seen.

3.3 The cost per customer could be bounded by the current PST limit of £3,400. However this may need to start at lower point or in a way that permits groups of customers to order a service together, so the cost of provision for a FTTdp can be divided between multiple benefitting customers.

3.3.1 A significant amount of FTTdp can be funded from existing BDUK underspends, BT capital and the return of clawback subsidies and proxy costs. With no active costs (power/electronics) and customers paying a connection charge, it is possible to introduce such a product and manage demand levels. It is important that the available funding is subject to a reconciliation process so the full amount available can be appreciated by all.

3.4 One significant factor is a possible shortage of BT resource. The BDUK constituted in more than 200 new live cabinets a week passing some 40,000 new customers a week. It is likely a discrete FTTdp manifold will support 3-8 customers in rural areas, so the resource implications do need consideration.

3.5 Ofcom will need to consider whether their plans for dark fibre access and a revised duct and pole product will aid those willing to offer a USO service in parts of the UK.

3.6 There are now many examples of entities in rural areas laying their own communication duct. There is no particular reason why customers cannot plan to bury their own

communications duct on private land thus removing the Extra Connection Charges. BT Duct and chambers can be ordered online and installed consistent with BT's practices. Some guidance is needed but the civils are not a complex task.

4.0 The universal service provider or providers;

4.1 Clearly BT, as the owner of Openreach, will feature.

4.2 We believe it is up to other operators to respond to the emerging shape of the requirement and offer to become USO providers and outline the conditions for them under which that might work.

5.0 Funding of the USO and potential market distortions

5.1 ICBAN is suggesting that using the BDUK technical requirements, the large underspends per area rollout, and BT capital accruals for BDUK, provide a framework and product definitions for which Ofcom can build and develop.

5.2 Furthermore, the state aid requirements outlined in SA33671, particularly those on affordability, the mapping of publicly funded assets and transparency of costs provide a strong set of candidates for secondary legislation.

5.3 The existing telephony arrangements for funding could be taken as a starting point with supporting arrangements to minimum orders supporting for instance an FTTdp installation.