

Hyperoptic's response to Designing the broadband Universal Service Obligation

Call for inputs June 2016

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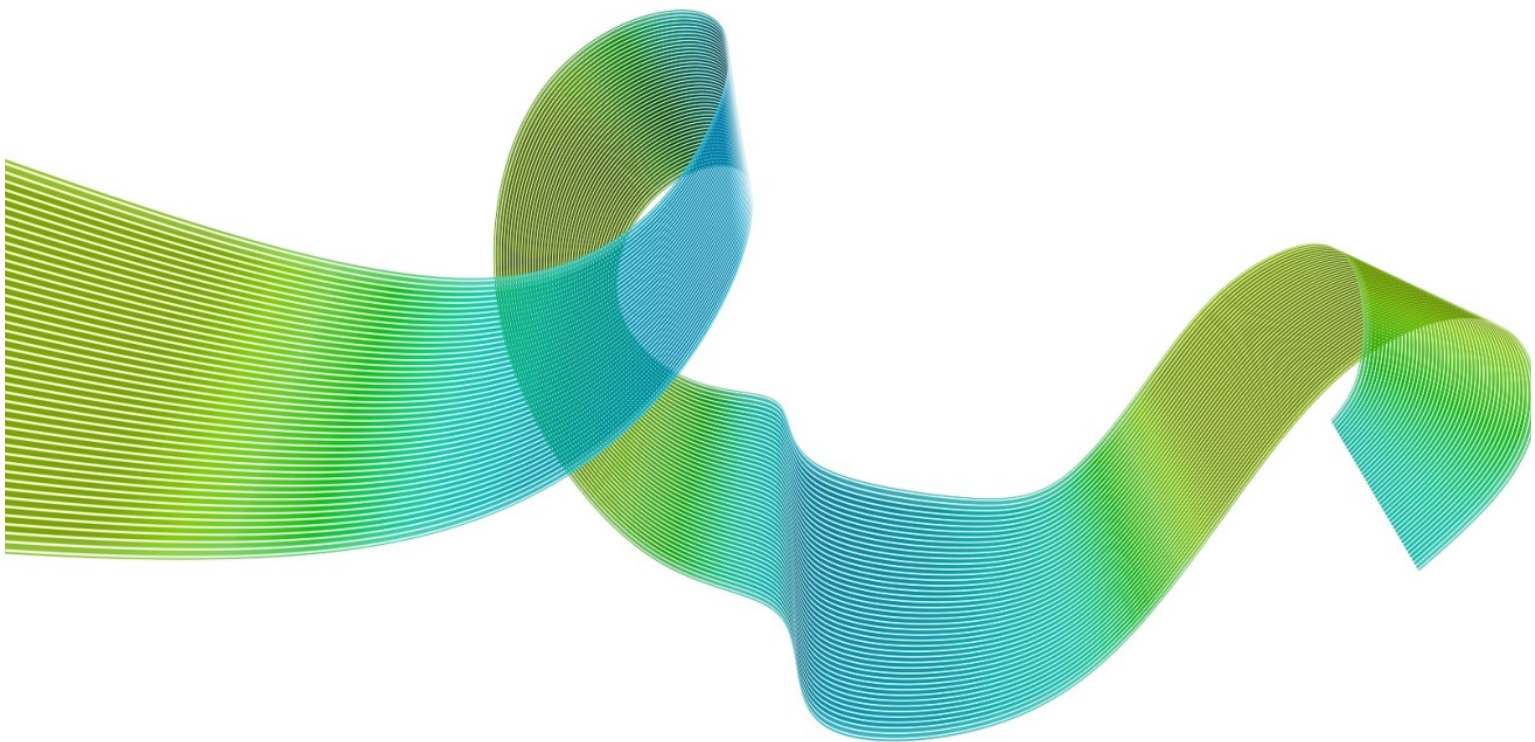


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Hyperoptic Introduction

Hyperoptic is a Code Power operator founded in 2011 by Dana Tobak and Boris Ivanovic. Hyperoptic is the largest provider of 1 Gb residential broadband in the UK and use a Fibre to the Building infrastructure currently operating across 12 cities with ambition to service significantly more. We are on track to delivering connectivity to 500,000 by 2019.

Previous to Hyperoptic, the co-founders had started and managed Be Broadband in 2005-6 prior to acquisition by O2. Be was the first to launch ADSL 2+ in the UK, offer Annex M for an increased upload speed, and outstanding customer service. Prior to Be, Boris Ivanovic ran Sweden's Bostream from 2000-2004, offering LLU, Wholesale, and FTTB

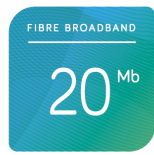
Hyperoptic was founded to bring the UK's broadband infrastructure to the next level, offering 1 Gb services and raising the level of expectations on the role of connectivity in British households. Customers get the wired speeds they expect and we have over 98% customer satisfaction rating consistently on our quarterly surveys.

As a start-up, Hyperoptic focused on retrofitting existing residential developments; however, since expanding the sales, installation and customer support teams, Hyperoptic now services new developments and business units (leased lines, shared leased lines, and serviced apartments). We are a firm supporter of Digital Inclusion and do not discriminate on the demographics of building residents. In fact, we have strong relationships with over 10 Housing Associations and ensure that their residents have the same opportunity to access superfast broadband as other residential buildings.

We are committed to the cause of the final 5% and, in fact, 50% of our portfolio would otherwise have been in a fibre 'white space' at the time of our installation.

Products and Pricing

Hyperoptic offers three Broadband products available with or without a phone line, on either a monthly or annual contract. Here is the product information for our annual contract taken with a phone service.



20Mb Fibre Broadband

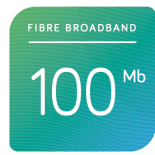
£9 a month

IDEAL FOR



PACKAGE DETAIL

20Mb download and 1Mb upload speed
Phone service required at £16 a month
Includes free evening and weekend calls
Free set-up worth £240
Broadband-only service available



100Mb Fibre Broadband

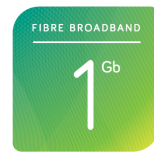
£22 a month

IDEAL FOR



PACKAGE DETAIL

100Mb download and upload speed
Phone service required at £16 a month
Includes free evening and weekend calls
Free set-up worth £240
Broadband-only service available



1Gb Fibre Broadband

£47 a month

IDEAL FOR



PACKAGE DETAIL

1Gb download and upload speed
Phone service required at £16 a month
Includes free evening and weekend calls
Free set-up worth £240
Broadband-only service available

USO Relevance

Hyperoptic is both concerned and excited by the opportunity of the USO policy.

Firstly, it is important that our investment in our current network is not undermined by funding offered to another network operator to service an already served promise with not only 10 Meg but actually 1 Gig.

However, as long as Hyperoptic is able to offer service to underserved homes and able to compete for any funds to do so (including by pooling demand), this can be a benefit to the country to bring clarity to the most efficient way to service these urban not spots.

Indeed, if non-financial blockages to providing services to otherwise commercially viable homes (wayleaves for example), are able to be unblocked by the policies with the help of the USO then all are served efficiently.

Response Summary

Topic	Response
Specification and Scope of the USO	<p>Specification of the USO should be for minimum provision necessary to allow for a connected life but not consider gaming or file sharing as a right.</p> <p>However, if there are multiple solutions to connect an impoverished home the future-proofness of any solution should be considered when choosing the USP to deliver services.</p> <p>Network operators with a range of technologies should be enrolled as USPs or bidders for provision.</p>
Demand for the USO	Demand for USO services should be filtered against current provision by any OfCom certified Network Operator to ensure no overbuild of existing networks.
Cost, proportionality and efficiency of the USO	To ensure cost efficiency a reverse auction process that considers both pooled demand and area rollouts on a cost/home basis should be implemented.
The universal service provider or providers	OfCom should certify providers that meet certain criteria to be eligible to satisfy USO services; however this should not preclude designating a USP of last resort that would be required to bid on all requests or those with no other bidders.
Funding of the USO and potential market distortions;	To minimise any market distortions, current network operators that service a home should not be overbuilt by and USO funded alternative. In addition, if there is a non-financial blockage for a commercial operator to provide service (such as a wayleave) there needs to be a legal recourse to overcome that challenge before offering money to a competing and less efficient operator.
Review of the USO	USPs should be able to be vetted on application this will ensure that efficient technologies are able to be employed as they evolve. By valuing solutions that are future proof aspect (i.e. capable of reaching over 30 meg) over solutions that cannot, any impact of future applications and raising the USO floor will be minimised.

Response Questions

Specification and scope of the USO

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

The specification and scope should consider the usage of the product and how that changes over time. If the argument is that basic connectivity allows citizens to better engage with government services and save time and money through online shopping and life management applications then a minimum service is acceptable. Gaming and content downloading for example are key applications of high speed internet but is it the governments role to legally allow access?

Having said that when services such as medical consultations, remote monitoring, and interactive education become part of the strategy for the NHS and primary and continuing education, then those factors become more meaningful.

The most important measure is understanding the technical capability of a connection (potential connection speed) versus how other factors such as cross talk and contention impact a consumers experience. Are we saying that it should be 10 meg at any time or during off-peak time and how will this be measured?

10 megs is achievable by a multitude of technologies, DSL, DOCSIS, Satellite, FTTx, and Fixed Wireless. That allows for a range of solutions that is appropriate to ensure cost management.

How should we ensure the USO is affordable?

As the strategy is noted, differing technologies are expected to form a part of the solution, it is important to recognise that each of those technologies have different cost structures (Capex vs Opex) and as such it would be impossible to mandate a universal pricing model. However there could be a maximum install and on-going cost to be measured on a total yearly cost relative to the standard mixed pricing across the main providers (main being determined by including representatives from each of the main technologies).

In addition to connection charging there should also be a consideration of any usage charges as we see in some fixed and satellite broadband packages.

Should there be a social tariff for broadband services?

This question is independent of the provision of USO and should be considered as a commercial and social good question separately.

Demand for the USO

What might the potential demand for the USO be?

As noted within the Call for Inputs the actual demand profile for the USO is hard to measure given the rollout plans of Openreach and altnets alike. 50% of Hyperoptic's current portfolio would otherwise be below the 10 meg floor (based on ADSL availability). A critical success factor for the USO will be

- an agreed definition of availability (and by whom) in order to ensure that the legal right is clearly laid out
- a database of all availability of services so that residents can check the availability of provision at their location prior to making a request for additional provision.
- A process and authority for verifying proper legal requests (i.e. where no provision is currently available or that provision is blocked by non-financial matters)

Availability of registered Internet Service Providers service capable of supporting 10 meg with a network capacity that does not limit bandwidth at peak times to below 10 meg should be sufficient to conform to the legal right. The legal right need not require a particular ISPs services but that there is any professional ISP service.

In addition, if an ISP capable of supplying a product to meet the legal requirement is willing and able to offer that service, but are being prevented by a third party (say a freeholder or other wayleave signatory); then the first course of action before 'offering' additional funding to another USP would be for the blocker stakeholder to be brought to tribunal with the state joining the ISP's case or with special consideration that the blocker is preventing the legal right of the residents.

Cost, proportionality and efficiency of the USO

Cost evidence

Costs to connect up an urban premise can be anywhere from £50 to £500 or more depending on multiple factors therefore precise cost evidence is difficult to provide.

For Capex, costs include providing connectivity to a networks core which are often a matter of distance and availability of existing ducts. In addition, and work to 'lead-in' to a particular property need to be considered and the rights to do so. In the case where there are more premises in an immediate area (either building or street) requiring connectivity it is likely that the cost to deploy per home will diminish as connectivity costs can be shared.

Opex are related to the connectivity method chosen and in the case of use of either dark fibre must also consider the Fibre Tax.

A reverse auction and subsequent voucher scheme can be used to ensure that the provider with the minimum cost basis should be appointed to fulfil the legal request and as part of that consideration the provider can offer to connect nearby homes if it brings the cost of provision down on a per home basis.

As residents are not forced to take up the service, an expected take up rate and revenue based on offered products should be used to calculate the offered net cost, with an opportunity to 'true-up' one year after the availability of service. As part of the awareness campaign for those premises not requesting service should be contact directly by the local council explaining that they will have the opportunity to take up service thanks to the government scheme.

Proportionality and definition of a 'reasonable request'

As suggested above, by allowing USPs to bid on requests and neighbouring premises there would need to be an awarding system which considers both the costs and the potential units to be awarded. Like the current USO, a maximum amount to be borne by the scheme should be enforced.

Ensuring efficiency

There needs to be a balance between coverage and total spend. There will not be a simple formula that can be used as the circumstances will widely differ between urban and rural areas not the mention the distance and means for connecting multiple properties. USPs are best situated to propose a scope for each project that makes sense and what technology will minimise costs. By implementing a competitive process, costs will be efficient.

The universal service provider or providers

How should the universal service provider be designated?

As there are many providers who are capable of providing service to poorly serviced premises and all should be allowed to bid on providing service. If no provider comes forward, then designating a provider of last resort could be a way of ensuring provision can be met.

Potential providers should be certified by OfCom and could consider the following criteria:

- Track record of delivering service as advertised
- Use of an appropriate technology to fulfil the requirement and that is future proofed supporting at least 30 Meg.
- Code Powers operator
- Financially sound
- Product price to be no more than the average cost of major suppliers for total cost of ownership over the contract period

Providers can supply areas of potential coverage (which can be updated on a regular basis), in which to receive notices regarding 'requests' for service

Funding of the USO and potential market distortions

How could any potential market distortions of competition be minimised?

Three main principles would need to be applied to minimise market distortions on existing networks:

- The USO cannot be used to overbuild an existing service by a designated USP certified by OfCom
- If a non-financial barrier exists in allowing a USP to deliver service (such as Wayleave provision), then OfCom should certify the USO obligation on the stakeholder and allow this information to drive a Code Powers process and/or provide a tribunal capable of ruling on such cases.
- USPs must be allowed to include a variety of technology providers to ensure that the least expensive provision is utilised to minimise economic distortion.

Review of the USO

When, and on what basis, should the USO be reviewed?

The ability to become a USP should be on application to OfCom. If OfCom receives complaints about USO provision it can also consider whether USP should be removed from any operator.

As long as a future proof technology is used then the USO floor can be reconsidered on a 3 yearly basis.