

Response to Wholesale Local Access Market Review – Duct and Pole Access remedies June 2017

Version 1.0
15 June 2017

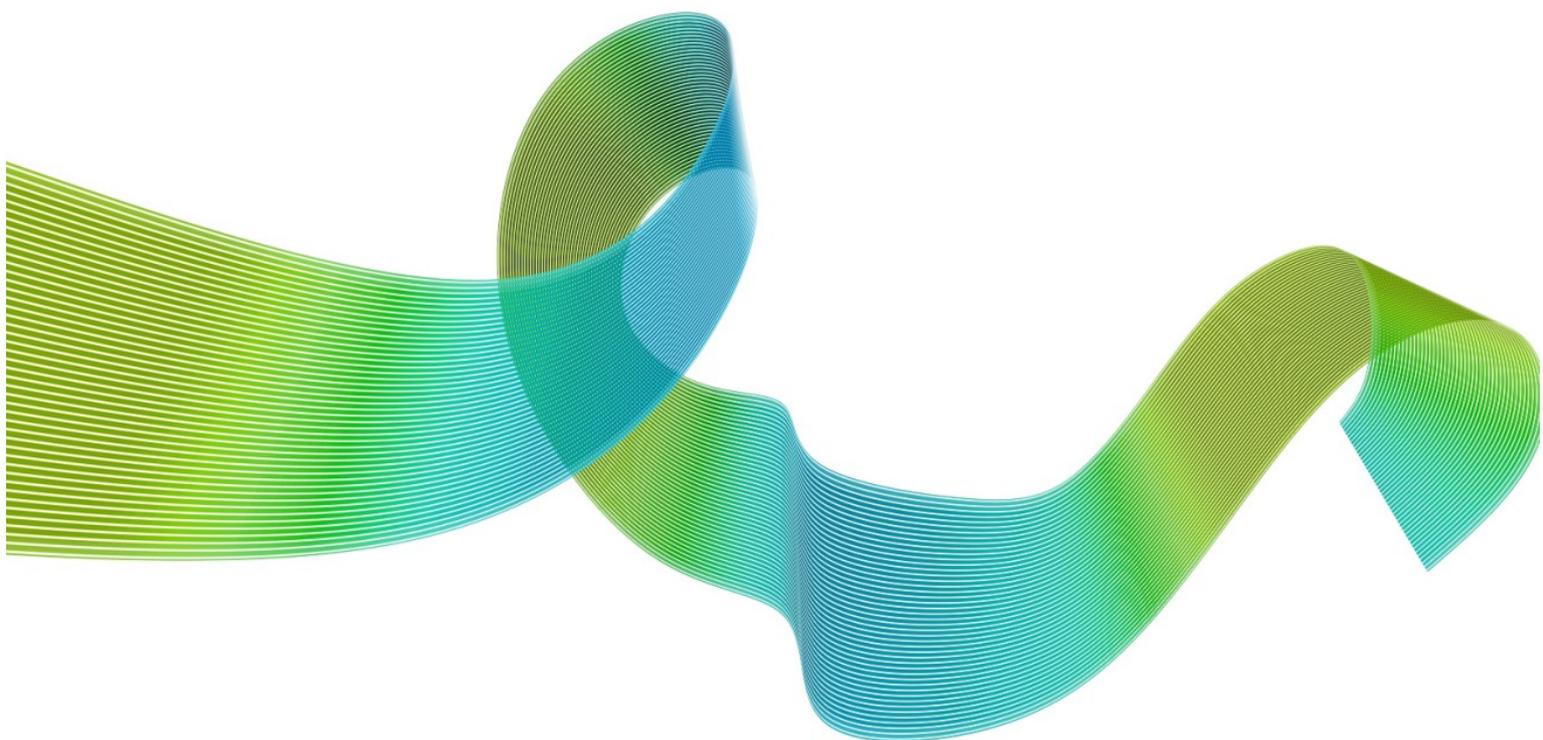


Table of Contents

- Hyperoptic Introduction 3
- Network Infrastructure & Installation Process 3
- Products and Pricing 4
- Financing 5
- WLAMR Relevance 7
- Response Summary 8
- Response Questions 9
- Annex 4: Consultation Questions 9

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 currently use a Fibre to the Building infrastructure operating across 26 cities with ambition to service significantly more. We have installed or are in the process of installing to over 300,000 residential homes and nearly 2,500 business units.

Previously 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 provided outstanding customer service. Prior to Be, Boris Ivanovic ran Sweden's Bostream from 2000-2004, offering LLU, Wholesale and FTTB.

Our initial business model focused on obtaining Wayleaves from private and public landlords and installing a new fibre infrastructure to those residents and businesses in multi-tenanted buildings. We have signed Wayleaves with 100 new build developers and over 1000 freeholders including large asset management companies, local authorities, housing associations, registered providers, RTMs, and independent freeholders. Generally, we offer our installation services to those stakeholders free of charge, and residents sign up and pay for our services as any other ISP with competitive rates despite superior products. As we service both high end flats and social housing we have range of products to allow residents to choose the preference – but in all cases residents get access to dependable, consistent fibre speeds and performance.

To date we have focused on buildings in urban areas with 50 units and above (business units of 10 units and above) – however, we are responding to this consultation in the mindset of how changes to the PIA remedy proposed, in part, by this consultation process will support the Strategic Review and its aim of moving the UK towards a future with multiple competing fibre infrastructures.

In addition to being the developer and operator of the UK's largest privately funded Full Fibre network, we are well positioned to give input on the current environment for Full Fibre development as it related to the PIA remedy – we have been working with Openreach for over 2 years to use PIA in its current form and have participated widely in the Proof of Concept and industry working groups.

Network Infrastructure & Installation Process

Hyperoptic generally uses EAD and EAD/LA circuits to connect buildings and businesses to our core network, utilising where appropriate BT Exchanges as PoPs to allow us to take advantage of the EAD/LA product set. We install our own last mile infrastructure from the basement throughout the buildings using a point to point topology which allows us to truly differentiate our product from competitors who utilise shared infrastructure in the guise of VDSL, DOCSIS or in rare cases GPON.

Despite the current coverage of both Openreach's FTTC network and Virgin's DOCSIS network, the majority of our homes are not able to otherwise receive superfast broadband (>24 Mb) and are generally receiving in the 5-10 Mb range. As Hyperoptic targets Multi Dwelling Units (MDUs) and Multi Business Units (MBUs), our properties are plagued by Exchange Only lines or lack of competitors' in-building network.

Generally, Hyperoptic installs our network at our own cost and risk of capital return. We solicit registrations of interest from residents to ensure that we maximise both our time and capital expenditure. For each site, we produce a Site Business Case that takes into consideration Installation costs (materials and Labour, fibre circuit, CPE, equipment), on-going costs (EAD or EAD/LA annual fee, internet transit, customer service), and expected revenues.

We continually aim for efficiencies in working practices and cost savings in materials and services to further expand our addressable market to be able to offer fibre services to more buildings and residents.

As Hyperoptic does not insist nor expect exclusivity within a building, there is no opportunity cost to the building of allowing our network to be installed. Residents can take service at their convenience and we maintain competitive pricing along with marketing leading product specifications.

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.

[REDACTED]
[REDACTED]
[REDACTED]

 <p>1 Gb</p> <p>1Gb Fibre Broadband & Phone</p> <p>£63 a month</p> <p>IDEAL FOR</p>  <p>PACKAGE DETAIL</p> <p>1Gb download and upload speed</p> <hr/> <p>Phone service included</p> <hr/> <p>Includes free evening and weekend calls</p> <hr/> <p>Free set-up and connection worth £240</p> <hr/> <p>12 month contract</p> <hr/> <p>Broadband Only service available</p>	 <p>100 Mb</p> <p>100Mb Fibre Broadband & Phone</p> <p>£38 a month</p> <p>IDEAL FOR</p>  <p>PACKAGE DETAIL</p> <p>100Mb download and upload speed</p> <hr/> <p>Phone service included</p> <hr/> <p>Includes free evening and weekend calls</p> <hr/> <p>Free set-up and connection worth £240</p> <hr/> <p>12 month contract</p> <hr/> <p>Broadband Only service available</p>	 <p>20 Mb</p> <p>20Mb Fibre Broadband & Phone</p> <p>£25 a month</p> <p>IDEAL FOR</p>  <p>PACKAGE DETAIL</p> <p>20Mb download and 1Mb upload speed</p> <hr/> <p>Phone service included</p> <hr/> <p>Includes free evening and weekend calls</p> <hr/> <p>Free set-up and connection worth £240</p> <hr/> <p>12 month contract</p> <hr/> <p>Broadband Only service available</p>
---	---	--

Our current offer to customers demonstrates our commitment to value and accessibility of our full fibre products:

Financing

Hyperoptic is privately funded by Manager, Employees, and by investment from George Soros' private investment fund Quantum Strategic Partners. We have not received any BDUK or other public funds other than installation contributions from the Connected Voucher Scheme.

In 2016, we received a €25m loan from the EIB to further expand our full fibre network.



1Gb Fibre Broadband & Phone

£48 a month
for 12 months then £63 a month



IDEAL FOR



PACKAGE DETAIL

- 1Gb download and upload speed
- Phone service included
- Includes free evening and weekend calls
- Free set-up and connection worth £240
- 12 month contract
- Broadband Only service available



100Mb Fibre Broadband & Phone

£28 a month
for 12 months then £38 a month



IDEAL FOR



PACKAGE DETAIL

- 100Mb download and upload speed
- Phone service included
- Includes free evening and weekend calls
- Free set-up and connection worth £240
- 12 month contract
- Broadband Only service available



20Mb Fibre Broadband & Phone

£18 a month
for 12 months then £25 a month



IDEAL FOR



PACKAGE DETAIL

- 20Mb download and 1Mb upload speed
- Phone service included
- Includes free evening and weekend calls
- Free set-up and connection worth £240
- 12 month contract
- Broadband Only service available

WLAMR Relevance

Hyperoptic was particularly inspired by 2016's Strategic Review of Digital Communications and wholeheartedly agrees with Ofcom that the industry can do more to focus on Full Fibre solutions that will last generations. BT has had for too long unequivocal access to its ducts and poles and has used that access to further its monopolistic control of that network.

Hyperoptic makes use of Ofcom regulated products in a unique way from other operators, as such the opinions and proposals expressed herein are likely to diverge from both larger mainstream operators and other alternative providers. We offer both Residential and Business products and in particular utilise EADs (and Dark Fibre when released) and PIA to provide an alternative to BT's NGA products thus providing choice to consumers and businesses who previously could only consume resold BT products.

The outcome of the WLAMR – specifically the definition, scope, and processes for PIA - has the potential to fundamentally shape the ability of consumers and SMEs to buy and use 1 Gb broadband in the near future.

Response Summary

Topic	Response
Obligation on BT to make adjustments	Hyperoptic agrees that Openreach should be obliged to make adjustments to the network so that it is fit for purpose for large scale fibre rollout.
Usage restrictions	<p>Hyperoptic posits that full unrestricted use of PIA would result in the highest commercial upside for today and tomorrow and would provide entrepreneurial creativity and breadth in planning and financing new networks.</p> <p>However, recognising the constraints presented by the current regulatory regime, Hyperoptic supports the mixed use proposal made by Ofcom and reiterates that Openreach should not be the determinant of mixed use and that proper implementation of this requires Ofcom to resolve disputes.</p>
EOI / No undue discrimination	<p>Hyperoptic agrees with Ofcom that ideally EOI would be implemented but also appreciates the potential negative impact to current products given impact to processes and performance.</p> <p>Therefore, no undue discrimination is sufficient for initial release, however particular goals should be set over time as to when EOI will apply – perhaps in stages.</p>
Planning and surveying	<p>Hyperoptic agrees that digital processes and interfaces are required to support the adoption of PIA at sufficient scale and that it should be possible for telecoms providers to assess potential rollout plans remotely.</p> <p>Hyperoptic believes that Ofcom should consider stronger obligations on Openreach to use survey results to continually improve the quality of the information it provides to telecoms operators.</p>
Build works	Hyperoptic is in general agreement with the proposals put forward by Ofcom, however particular attention should be paid to the process by which Openreach authorises telecoms operators to perform works in order to maintain efficiency of deployed resources. Further, it should be possible for a telecoms operator to directly contract to Openreach to perform works if it so chooses.
Customer connections	Hyperoptic believes that further work is required to define an approach to drop cables from poles and that the goal should be a standardised approach that is run by Openreach.
Pricing, cost recovery	In general, Hyperoptic agrees that costs should be recoverable by Openreach across all uses of the network. More detail and analysis is required, but Hyperoptic understands that pricing will be subject to a further consultation during the summer.

Response Questions

Annex 4: Consultation Questions

Question 4.1: Do you agree with our proposals for a specific access obligation, which includes an obligation on BT to make adjustments to its physical infrastructure when its network is congested? Please provide reasons and evidence in support of your views.

Hyperoptic agrees with the proposals for a specific access obligation including the obligation on BT to make adjustments to its physical infrastructure when its network is congested.

ATI regulations

- Hyperoptic has taken legal advice to better understand the ATI regulations and is agreement with Ofcom that the regulations do not provide adequate means of addressing competition concerns nor promoting investment. With unspecified processes and pricing there is significant risk to any potential investment case and there are multiple broad 'get-out' clauses for companies to refuse access to information. This has the effect of rendering the legislation as of little practical use.

Relieving congested physical infrastructure

Hyperoptic has provided evidence to Ofcom that generally matches the implied rate of blockages of 2.23 / Km set out in 4.25.3 (reference document WLMR DPA March 2017 Hyperoptic update v2) as well as cost information. Hyperoptic is in full agreement that the access obligation imposed on Openreach should include necessary repairs to congested sections of ducts.

- It is fair and reasonable that the obligation is about augmentation and not extension, however guidance set out in the consultation is still ambiguous and would require further definition and testing to become effective.
- Any ductwork that Openreach is planning to install (i.e. has committed to do so) into a new build should be included – this should not be regarded as extension in any way.
- Hyperoptic agrees that where new lead-ins are required, that individual CP's should be responsible for and own the new duct.
- Hyperoptic is in general agreement with the principle that Openreach should be responsible for increasing capacity on poles as necessary. However, in the absence of a detailed solution with accompanying processes giving a mechanism through which CP's will order, cease and interconnect with any drop cable installed by Openreach, Hyperoptic can do no more than just agree in principle. This requires much more discussion and definition by Openreach and industry.
- Hyperoptic agrees that Openreach should decide on the best way to relieve congestion and that the non-discrimination principle is key to the successful implementation of this.

Question 4.2: Do you agree with our proposals on the scope of PIA: (1) To broaden usage through a mixed usage generic rule; (2) To modify the PIA condition to define geographic scope by reference to telecoms providers' local access networks. Please provide reasons and evidence in support of your views.

In agreement with the DCR, Hyperoptic agree that regulating DPA through PIA – is an important tool towards infrastructure competition for the local access broadband market. As such we support full and

complete regulation of DPA giving certainty to investors on expected capex and opex relative to a new build.

As for any fibre build, unrestricted usage and potential commercial upside for today and tomorrow will provide entrepreneurial creativity and breadth in planning and financing new networks. However, Hyperoptic understands that in the case of the FAMR, OfCom is currently limited to defining remedies related to Openreach's SMP in fixed access use.

- 1) Therefore, we agree with the proposal to serve other commercial purposes in addition to strict NGA service replacement.

However, there should be no restriction on what additional services could be offered if the primary use is residential broadband. The definition of "leased lines" is as symmetric and not shared is outdated and non-exclusive; so by specifically allowing leased lines rather than any other supplemental use, operators could be forced to imitate product specifications merely to get around regulatory rules. This would be a bad outcome both for competing services (infrastructure investors) and potential users of competing networks. This is especially true in a world where Dark Fibre becomes available from Openreach and maybe considered by most to be the "new" leased line – where any speed may be offered by operators or indeed provided directly as Dark Fibre to be lit by the final consumer.

Hyperoptic reiterates that Openreach should not be the determinant of mixed use and require operators to share business plans or future uses. Any belief of breaking the primary usage approach should appeal to OfCom for consideration with the outcome only being made available to Openreach.

- 2) Hyperoptic agree that extending the geographic scope to be based on providers' local access network is more appropriate than restricting to Openreach's network topology.

Question 5.1: Do you agree with our proposed imposition of a no undue discrimination SMP condition on BT? Please provide reasons and evidence in support of your views.

Hyperoptic agrees with Ofcom that ideally EOI would be implemented but also appreciates the potential negative impact to current products processes and performance.

Therefore, no undue discrimination is sufficient for initial release, however particular goals should be set over time as to when EOI will apply – perhaps in stages by product.

Question 6.1: Do you agree with our proposed approach to the processes and systems relating to planning and surveying? Please provide reasons and evidence in support of your views.

- Hyperoptic is in agreement with the proposed approach and agrees that information provided by Openreach should be sufficiently granular as to avoid the need for physical surveys as a precursor. Improvements have been made to make maps and network information available online but further work and testing is required. Hyperoptic has also taken part and provided feedback during the industry working groups.
- A fully functional interface directly between systems is in the process of being delivered by Openreach and Hyperoptic is testing it. This is currently subject to a fair use policy, which should be the subject of further industry scrutiny to ensure that access to data is at a sufficient level to not impede or delay the consideration and planning of large scale network deployments.
- In 6.52 Ofcom states that the information from surveys is likely of interest to Openreach and that it expects that the information will be gathered and used to improve the quality of the database. Hyperoptic believes there should be a firmer obligation on Openreach and that the quality of the information provided should be measured and Openreach obliged to demonstrate

improvement in quality. The cost of collecting the information is borne by CP's surveys (in addition to Openreach itself) and therefore improvement in data provided should be expected.

- Hyperoptic agrees with Ofcom that Service Level Commitments and Guarantees are required in relation to the timescales for BT to respond to a request by a Third Party to relieve congested Physical Infrastructure.

Question 6.2: Do you agree with our proposed approach to the processes for build works and enabling works? Please provide reasons and evidence in support of your views.

Hyperoptic agrees with the proposed approach to build and enabling works noting the following:

- The timescales for Openreach to approve self provision of enabling works needs to reflect the fact that resource may have been allocated to a job by a telecoms operator. To maximise efficient use of both resources and permit arrangements there should be a pre-authorized or the permission from Openreach needs to be immediate via a phone call or review of a picture captured via a mobile device. Anything slower than this will impact the cost base of the CP and not of Openreach.
- Hyperoptic agrees that the rates for self-provision should not be higher than Openreach should expect to pay its own subcontractor. However, it should be possible for telecoms providers to have the option to subcontract to whomever they wish or indeed to use their own direct labour to perform both build and enabling works, always subject to necessary accreditations and quality standards.

Question 6.3: Do you agree with our proposed approach to processes relating to the connecting the customer stage? Please provide reasons and evidence in support of your views.

Overhead lead-ins

The approach suggested by Ofcom is to allow Openreach to choose how best to provide a customer lead in from a congested pole, due to local differences. This approach is fine in principle, but allowing BT to choose creates a complex scenario that is not in the best interests of consumers and competition. This is because there could be multiple processes and parties involved in making decisions about which option should be followed and all of this somehow needs to be coordinated, communicated between the parties and eventually to a consumer. Where a pole is congested, the simplest method by which Openreach can provide a customer lead in is to upgrade the drop wire to a fibre connection (via a hybrid copper/fibre cable if copper connection still necessary). Openreach should have ownership of the fibre connection and should be responsible for installation to a demarcation point inside customer premises, with the telecoms provider renting the fibre from Openreach. The fibre should be a standardised specification, agreed with industry, in order to facilitate future switching between providers. The method of connecting on the pole to the telecoms providers own network should also be standardised through industry agreement.

Underground lead-ins

Hyperoptic agrees with Ofcom that in cases where lead-ins are accessible and are blocked, damaged or not present, that the telecoms provider could be responsible for installation of a new one to be wholly owned by the operator.

Hyperoptic also agrees with Ofcom that in some cases installation of a new footway chamber greatly increases the efficiency of connecting to premises from a spine duct in which it may have installed fibre and Openreach should be obliged to provide this chamber according to a set of SLAs and SLGs.

Question 7.1: Do you agree with our proposed form of price regulation for PIA rental and ancillary charges? Please provide reasons and evidence in support of your views.

Hyperoptic agrees that as PIA becomes better productionised its costs needs to be considered in line with the totality of the SMP regulatory regime. Sharing costs by all users of the duct access network is sensible and matches benefits of a more customer driven network upgrade programme.

The proposed price cap to match current pricing is sensible although further analysis of any future pricing model is required.

Hyperoptic propose that through the regulatory regime for PIA, longer term commitments to duct rentals should be properly priced to incent long term investment. Unlike for BCMR where longer term contracts were considered discriminatory against non-BT businesses, any provider of local access broadband products would expect long term investment and benefit from an investment planning perspective from long term price incentives.

Question 7.2: Do you agree with our proposed approach to the recovery of network adjustment costs? Please provide reasons and evidence in support of your views.

Hyperoptic agrees that Openreach should be able to recover the cost of the network adjustment costs across all users of the network.

The principle of a financial limit on network adjustment costs is sensible, but the details of the limit require further analysis and agreement with Industry.

Question 7.3: Do you agree with our proposed approach to the recovery of productisation costs? Please provide reasons and evidence in support of your views.

Hyperoptic confirm its agreement to the recovery of productisation costs given the opportunity Openreach has to be forward thinking in how it chooses to implement such productisation and to aim to have such systems benefit other parts of the Openreach business and indeed move towards EOI.