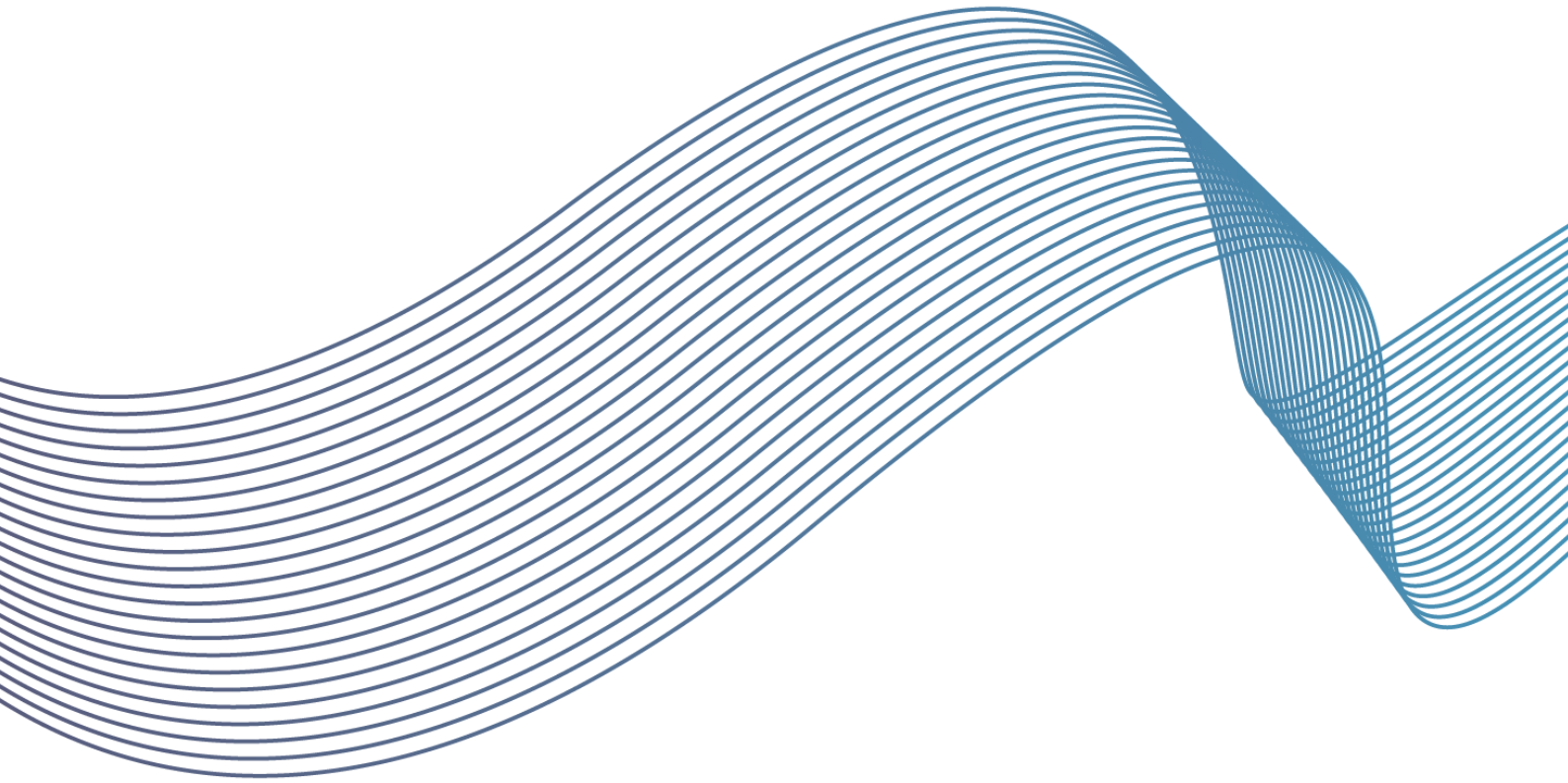
Response to Ofcom BCMR Consultation

Version 1.0



11 February 2019

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 28 cities with ambition to service significantly more. We have installed or are in the process of installing to over 400k residential homes and over 10k business units.

Hyperoptic was founded to bring the UK's broadband infrastructure to the next level creating a new full fibre infrastructure, offering 1 Gb services and raising the level of expectations on the role of connectivity in British households and businesses. Customers get the wired speeds they expect, and we have over 95 percent customer satisfaction rating consistently on our quarterly surveys.

To date, we have been expanding our network 100 percent year on year, and having recently secured 100m in debt funding. Our plans are to reach 2m homes passed by 2022 and 5m homes passed by 2025.

Currently, 50 percent of our footprint would, without Hyperoptic, be fibre-free with its residents only able to use ADSL often below 10Mbps – we are a key deliverer to whitespace areas and often target these areas having been neglected by other operators and network builders.

Response summary

Hyperoptic welcome the opportunity to respond to the Ofcom Business connectivity market review consultation.

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. Hyperoptic utilise 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. In relation to the main proposals in this consultation, Hyperoptic's model for utilisation of EADs gives rise to operational and economic barriers to switching, which, whilst not unique to our use case, are novel in the scale and potential impact on our business. In short, the incentive required to justify the operational risk and customer impact of switching a material proportion of our customer base far exceeds the pricing differential that, in our experience, is available in the current market.

As is set out in detail in this response, Hyperoptic does not have the real option to switch its EAD consumption to a proven and viable competitor in any UK geography today. In our view, Ofcom's proposal gives rise to a perverse incentive when viewed in light of the overarching policy objective set out in the FTIR and the strategic policy position respectively: to maximise FTTP availability by using infrastructure competition as a stimulus. The targets for this are 15 million premises to be connected by 2025 and coverage across al parts of the country by 2033. Hyperoptic is embarking on a significant investment programme to roll out its own fibre network to five million homes by 2024 and is deploying substantial capital to the achievement of that goal. Deregulation in advance of actual substitutability in the market will place upward pressure on EAD pricing. This will incentivise Hyperoptic to allocate its capital to swap-out of existing EAD lines to reduce overall operational expedition as opposed to, or in advance of, fibre deployment in new areas of the market. The consequence would be a reduction in additionality of FTTP deployment overall, putting at risk Government's fibre coverage targets of 15 million premises connected by 2025 and ubiquitous coverage by 2033

Market definition and SMP

We agree with Ofcom's finding of two separate product markets for Contemporary Interface (CI) services.

Contemporary Interface (CI) Access

We agree with Ofcom's analysis and conclusion that there is a single market for CI services at all bandwidths which includes all wholesale fibre-based Ethernet and WDM services; as well as dark fibre used to supply or self-supply CI Access services in the product market.

CI Access: geographic market definition

We do not necessarily disagree with Ofcom's conclusions in respect of SMP at this point in time, we strongly disagree with the focus on the mere presence of rival infrastructure as the main factor determining the prevailing conditions of competition in a given location.

Our experience of actual competition in the market today substantiates a view that the presence of rival infrastructure alone has not led to an exertion of competitive pressure on the incumbent and cannot be relied upon to constrain its behaviour in a deregulated environment. There are additional factors beyond the mere presence of rival infrastructure that have prohibited switching to date that should be given due consideration in determining the prevailing conditions of competition within a geography. We are also concerned that the effects of deregulation cannot be isolated to a specific geographic market and that the risk of bleed across into other areas is significant.

An absence of real substitutability in competing supply means that the only option for Hyperoptic to obtain countervailing power in a deregulated environment is to allocate capital to replacing existing EAD lines with our own connections. The opportunity cost of deregulating before the emergence of actual substitutability is therefore a reduction in Hyperoptic's contribution to overall FTTP coverage. Given the scale of our publicly stated ambition, this would constitute a meaningful constraint on the achievement of Government's 2025 coverage goal. As Ofcom move towards the more holistic approach outlined in the consultation, it is essential to consider the impacts of individual policies against the wider policy objective.

Ofcom's research focuses on the choices available for purchase by the presence of competing infrastructure, with less analysis of the actual propensity of customers to switch between competing infrastructures. Ofcom asserts at para 6.42, that countervailing buyer power is predicated on a credible threat to switch supplier (or to self-supply). However, Ofcom does not demonstrate causation between the evidence set out in para 6.120 of lower effective prices in the CLA than in regulated areas, and intensity of competition in those areas. Those effects could, as Ofcom recognises, reflect other factors such as lower average costs in these areas arising from higher business density. Given this conclusion from Ofcom, we find no compelling evidence that the mere presence of competing infrastructure in a defined area can act as a restraint on an operator that has the other characteristics of SMP.

When defining a single market for CI Access services at all bandwidths Ofcom also mentions the ability to switch seamlessly between bandwidths, inferring that it is the actual event of switching that informs its view of competitiveness. Our experience shows that whilst there is a theoretical option to switch, there are a number of factors make effective switching unviable today, thus removing it as a constraining effect on the incumbent. For the reasons set out in the following paragraphs, in our experience the option to switch away from EADs does not exist

Barriers to switching can occur from different scenarios: economic; operational; and customer impact.

Economic barriers:

- OR has far greater reach than alternative providers, giving it a price efficiency advantage over its competitors, as referred to above in relation to para 6.120. Ofcom also sets out (in table 6.9) that, even within the CLA, other networks are still likely to have to undertake additional deployment in order to reach a premise (this is likely to be disproportionately true in respect

of Hyperoptic's bespoke use of leased lines to serve MDUs). This will result in higher connection costs in order to take service from a competitor – a disincentive to switch.

- As a result of the greater network reach that OR has, even where a competitor to set a competitive price on specific site basis, the economics would not scale to a multi-area agreement where additional civils costs would invariably be bundled in to the overall price. So whilst theoretically their presence within a given area could exert a competitive effect on OR, the reality is that it would not be a viable option.
- The percentage saving Hyperoptic would need to realise to be incentivised to migrate away from EADs would need to be material, because such a transition would involve significant operational and migration costs (see below). The competitive price offers that Hyperoptic has been presented with by the market today are not close to being sufficient to meet the costs of migration. Exacerbating this, is the fact that in a deregulated environment OR would potentially be able to leverage their reach in order to structure price incentives to remain with them. Bulk discounts or minimum terms offers for instance could result in bleed across different competitive geographies, resulting in customer lock-in on the OR network in areas where the level of competing infrastructure suggests that there should be effective competitive pressure on OR.
- There is a requirement to order a cable link from OR if interconnecting with an alternative provider at the exchange (either to replace an EAD or to order a new circuit). Even when switching to a competing supplier the process would involve additional costs that are payable to OR. These additional costs serve as a very real disincentive to switching and materially impact on the business case for a connection. A cable link costs £760 (minimum and up to a ceiling of £22,150 if the link is to outside the exchange – we have used the minimum costs for this example). When considering this cost element alone (i.e. excluding rental etc to the alternative suppler) as a percentage of the costs of an EAD across 5 years £9,680 (£1,566*5+£1,850) it equates to 7.85% for the cable link for an equivalent single leased line in an exchange area. For a single year it is 21.9% (£1,620+£1,850) £3,470. These percentages rise significantly if work is required outside of working hours or there are excess construction charges.
- There are also the additional costs of integrating with a new supplier, both in respect of the commercial and legal work to reach a signed contract as well as the systems and process work that would need to take place.

Operational barriers:

- Operational barriers take a number of forms. In order to switch to an alternative supplier, there will be issues with integration and interoperability complexity, as well as additional friction in terms of fault management across multiple processes and tools across different carriers.
- In order to migrate an EAD to a competing infrastructure provider, we would need to order the circuit into the exchange (this is from the third party) and cable link to connect demarcations between ourselves and the supplier of the circuit. This link has to be ordered from OR. There will be separate SLA's for each of the products and these are managed by different suppliers. This increases the chance that something will go wrong.
- The process also requires additional coordination across multiple suppliers for final connection – this is not the case when taking an EAD.

- If there is a service impacting issue once the circuit goes live, the integration of multiple suppliers significantly complicates our ability to diagnose faults. This would require the use of different tools and processes, with the possible requirement to manage escalations across more than one supplier to repair the fault. This adds time to resolve a fault and impacts on the service offered to end customers. It also creates additional overhead in managing a more complex process with the associated costs.

Customer impact and reliability

- Aside from the above, there are also significant concerns regarding reliability. Introducing any untested or uncertain dependencies into our service inputs would be a high-risk initiative for us. The EAD product set, including associated SLAs, has been developed over a greater period of time and includes set processes for scenarios. Competitors to OR that are available are unproven, and their ability to respond effectively in outage scenarios is untested. Before we would be able to consider a working relationship with another provider, we would need to be convinced of their ability to execute in the access layer. A loss of reliability ultimately poses a major economic risk to the business.
- Additionally, there is no process that allows for migration between competing infrastructures (as set out on page 48 of the government's FTIR). At present the only option is to cease service from one provider and order a new service from the new provider, all of which needs to be managed exceedingly carefully to minimise friction and downtime between migration. Due to the bespoke way we utilise EADs, this is magnified by the fact that a single EAD serves 10s or 100s of customers and the risk of churn, customer inconvenience and brand damage is much higher for us compared to an individual business.

The cumulative effect of the factors set out above is that Hyperoptic faces material disincentive to switching to another provider which would need to be offset by a substantial price differential that is simply not available in the market today. As outlined above, even if this were possible on a case by case basis it would be much harder to achieve savings that would justify the additional costs to the business of setting up and managing additional suppliers. Ultimately it would come down to a choice of using available funding to grow the footprint in keeping with Government's targets or using available capital to change the way current customers are already served.

CI Access: SMP findings

We do not dispute Ofcom's findings in respect of SMP but would urge a deeper review on the actual constraining effects on OR of competing infrastructure within the CLA.

We referred above to the comments that Ofcom made in respect of the CLA at 6.120. These suggest that although there is significant presence of competing infrastructure, there is no evidence to demonstrate that this has a constraining effect on OR. We would urge Ofcom to undertake more detailed study on the constraining impact of the mere presence rival networks on OR with a view to making an evidence-based assessment at the next Review. Given that the CLA is effectively the test case for geographic deregulation, the learnings from in-depth, evidence-based analysis would help to inform debate as regulation transitions to a new geographic approach.

In the executive summary Ofcom set out in respect of HNR areas that they expect BT's rivals to have a stronger incentive to build their networks, enabled by access to BT's ducts and poles, to take advantage of commercial opportunities. We would urge caution in drawing conclusions from the availability of such access as the product is currently not yet finalised with a number of key items still to be determined, as well as future developments already required in order to make the product truly suitable for use in a scalable way. This is in addition to the fact that Ofcom have had to arrange a number of CEO-level meetings in order to try and get the Reference Offer back on track. Added to this is the requirement to remove the mixed-usage clauses from the contract, which Ofcom is currently consulting on. There is also no guarantee at this point that there will not be an appeal to a future Statement from Ofcom, so there should not be an automatic presumption that access to ducts and poles will have an impact in the short to medium term.

CI Inter-exchange connectivity

We do not have specific comments on Ofcom's findings but our comments in respect of how the mere presence of another operator are viewed (as distinct from evidence of actual constraining impact) mirror those set out above. We will not duplicate them here.

Dark fibre for inter-exchange connectivity

We are supportive of the proposals that Ofcom has made in respect of dark fibre for backhaul. Hyperoptic currently utilises dark fibre for backhaul on a commercial basis from an alternative provider where available. This provides material savings over the equivalent cost for an EAD (circa 40%). However, given the limited reach of commercial dark fibre, Hyperoptic remains heavily reliant on EADs in the back-haul layer. Dark fibre remains attractive to us in the access layer. The value of this is particularly significant as a countervailing constraint on OR should EAD deregulation proceed. It is also a critical enabler of X-GS GPON networks as it provides the fibre capacity in the access layer to exploit next generation capabilities of up to 10Gbs. As a new entrant making a strategic choice between GPON and next Gen GPON, the availability of dark fibre could be a persuasive factor in our ongoing consideration of the optimal future network architecture that is appropriate for the UK market. We therefore urge Ofcom to introduce a more extensive dark fibre obligation in addition to the backhaul proposal on the table today and would be happy to meet with Ofcom to set the details of this out in more detail.

Hyperoptic's experience of onboarding and working with an alternative provider, as well as initial discussions we have had with other alternative providers, has contributed to the view expressed earlier in the submission that working with alternative and multiple providers is a barrier to switching away from OR leased lines.

Conclusion

As set out above, we have significant concerns that premature deregulation of EADs (i.e. without demonstrable competitive constraints on OR) will result in upward pressure on pricing that will incentivise Hyperoptic to swap-out EADs for our own fibre build. The opportunity cost is in the diversion of capital from the exercise of adding to the UK's overall availability of FTTP connections. We therefore urge Ofcom to implement additional metrics or KPIs that would serve to demonstrate the presence of competitive pressure on OR and only move towards deregulation if actual competition

is clearly and reliably achieved. We also Ofcom to introduce a more extensive dark fibre obligation in addition to the backhaul proposal set out in the consultation.