

**PROMOTING COMPETITION AND INVESTMENT IN FIBRE NETWORKS CONSULTATION –
RESPONSE FROM CMS / INTERCAI MONDIALE**

1. Introduction

CMS and Intercai Mondiale

This submission is made jointly on behalf of CMS and Intercai Mondiale. CMS is the largest law firm in Europe and a leading technology, media and communications legal adviser. Intercai Mondiale is a long-standing and experienced technology and economics consultancy, specialising in communications networks and regulation. The issues raised in this consultation are an intricate mixture of law, economics and regulatory policy and in order to address them properly it is essential not to consider the issues raised in isolation, and from one particular viewpoint, but rather to address them in the round, considering regulation, technology, economics and law together. This submission seeks to do that and is made jointly on behalf of CMS and Intercai Mondiale.

The submission is made independently of any client interest and we have no instructions in relation to the issues addressed here.

Ofcom consultations

Ofcom has published several consultations and Market Reviews covering spectrum and fibre, and some of these are summarised in Table 1 below.

Spectrum		
Consultation/Market Review	Brief Description	Date
Variation of Spectrum Access licences in the 3400 to 3680 MHz band	Ofcom's consideration of the requests to align the technical conditions of certain 3.4GHz, 3.5GHz and 3.6GHz Spectrum Access licences with European Commission Decision 2019/235	April 2009
Spectrum above 6 GHz for future mobile communications	This document asks for stakeholder input on spectrum bands above 6 GHz that might be suitable for future mobile communication services, often referred to as 5G (the 5th generation of mobile services).	February 2015
VHF radio spectrum for the Internet of Things	Statement from Ofcom	March 2016
Improving access to 5.8 GHz spectrum for broadband fixed wireless access	Statement from Ofcom	November 2017
Award of the 700 MHz and 3.6-3.8 GHz spectrum bands	Statement from Ofcom	December 2018



Variation of UK Broadband's spectrum access licence for 3.6 GHz spectrum	Statement from Ofcom	December 2018
Fibre		
Consultation/Market Review	Brief Description	Date
Business Connectivity Market Review:	Leased lines charge controls and dark fibre pricing	June 2015
Business Connectivity Market Review	Review of competition in the provision of leased lines	April 2016
Non-domestic rates and the price for regulated Dark Fibre	Statement from Ofcom	June 2017
Dark Fibre Consultation	Consultation on adding dark fibre to the remedies for business connectivity markets	November 2017
Wholesale Local Access Market Review: Statement	Markets, market power determinations and remedies	March 2018
Physical Infrastructure Market Review	Access to ducts and poles to support investment	November 2018
Promoting investment and competition in fibre networks consultation	Approach to geographic markets	December 2018

Table 1: Summary of recent Ofcom Consultations

To a degree, the measures considered in each of these consultations overlap in their impact on telecommunications markets and the deployment of fixed and mobile broadband networks. Therefore, it is assumed that Ofcom will need to draw all the conclusions together before making final decisions in each area. Given the different timeframes involved, it is not clear how or when Ofcom will do this.

Further, DCMS as policy maker and Ofcom as regulator need to act coherently to deliver fibre and 4G / 5G coverage. It is not clear that the measures proposed in this consultation will deliver the investment needed to achieve DCMS's goals where BT/Openreach has a vertically-integrated monopoly (i.e. in non- competitive areas), since there are no proposed investment obligations and no clear link to stimulus of investment by BT/Openreach or other communications providers.

DCMS Policy	Impact of this consultation
FUTURE TELECOMS INFRASTRUCTURE REVIEW (July 2018)	(FTIR), announced as part of the government's modern Industrial Strategy, proposes the changes that are needed to give most of the population access to 5G, connect 15 million premises to full fibre broadband by 2025, and provide full fibre broadband coverage across all the UK by 2033.

Table 2: DCMS Policy and potential impact of this consultation



Notwithstanding the above observations, Ofcom has invited responses to this consultation on a standalone basis. Whilst we believe that many of the measures proposed are appropriate, we suggest that by themselves they are insufficient to achieve coverage goals and implied investment goals for fixed broadband networks. Further, the consultation considers fixed fibre broadband networks in isolation from the roll out of 5G mobile networks. We believe that there is synergy in the provision of fixed and wireless broadband access and, therefore, a holistic approach covering the deployment of both networks is needed. Such an approach needs to consider stimulus of investment, coverage and connectivity goals, and competition concerns to enable fibre-based broadband services to be provided across the entire country.

The use of 5G and other wireless technologies to overcome coverage issues will only be realised following the widespread deployment of fibre. To an extent, this may be offset by the use of wireless backhaul and mesh enabled networks, however, we do not believe that these technologies will provide UK-wide solutions.

Various EU findings indicate that historically the separate deployments of fixed and mobile networks to deliver broadband services has proven to be financially sub-optimal and future connectivity services should be technology agnostic – able to leverage any connected fibre or wireless infrastructure. Fostering this approach will enable new ‘connectivity service’ providers to enter the market at scale, with the resulting consolidation providing the impetus for network operators to accelerate deployment of fibre and wireless infrastructure.

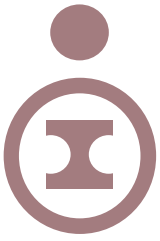
The holistic approach also needs to take account of the delivery of connectivity in high cost / low density (typically rural) areas. In these areas Ofcom needs to consider how to extend fibre deployment (including backhaul links) so as to facilitate the option to deploy fixed wireless and mobile broadband in lieu of FTTP solutions as part of a valid business case for network operators.

The proposed holistic approach therefore needs to consider low cost provision of ultra-fast and gigabit services to the premises at much lower cost through:

- Coordination of ‘vision’ and approach between DCMS and Ofcom.
- Increasing fibre deployment to the cabinet from over 95% to near 100% facilitating a range of connectivity solutions – from FTTP, through fixed wireless and mobile broadband;
- Specific focus on high cost/low density areas to ensure there is sufficient fibre deployment to provide network operators the option to deploy fixed wireless and mobile broadband solutions;
- The introduction of ‘connectivity service’ providers to the market and the technology-agnostic basis upon which those services be built, nevertheless these providers will be reliant on an underlying network infrastructure or the availability of DSA;
- Efficiency of network build, allocation and utilisation of scarce resource (spectrum, space in ducting etc) and utilisation of investment in the industry (including permitted state aid);
- Active encouragement of network sharing, both active and passive, as competitive focus moves to the service layer and connectivity becomes network-agnostic;
- The necessary regulation of wholesale pricing and service provision at the network level;

This holistic approach should take account of:

- The consequences for businesses that have already provided alternative network access, including FTTP and fixed wireless, in non-competitive areas that may find their business cases unviable due to regulatory change.
- The role of BT/Openreach and the approach taken by DCMS and Ofcom to ensuring the necessary investment in network infrastructure is incentivised and not constrained directly or indirectly by monopolistic forces.
- The need to ensure that investment will happen in non-competitive areas for fixed broadband services, in which Openreach will be a monopoly supplier, in order to achieve



fibre roll out goals. Whilst the wholesale price may cover the costs of serving these areas, it isn't apparent that Openreach is obliged to do so and hence cannot choose to invest in more attractive projects. Openreach may therefore decide to invest its Capex in more attractive areas of the business, and it is not apparent that the measures described in this consultation are sufficient to guarantee investment in high cost and low revenue areas, except where the universal service obligation applies.

- The requirements that 5G, and indeed 4G, networks, have for fibre to the cell site, and the need for such fibre to be available in high cost and low revenue areas to ensure the roll out of such mobile networks. Investors in mobile broadband networks will need some certainty that adequate fibre backhaul will be present in those areas before finalising their own rollout plans. A Joint 5G/fibre approach will reduce costs and timescale to provide ultrafast and Gigabit services in non-competitive and urban markets. Such a joint 5G/FWA approach will enable new players to enter the market and offer ultrafast and Gigabit services at a lower cost of entry. This approach can be optimised further by co-ordinating the approach with DCMS to accelerate the rollout of broadband services. Further, 5G/FWA will enable competitive services (including Gigabit services) in "non-competitive fibre area" and will provide the competitive dynamic to encourage Openreach to invest in fibre in rural areas and accelerate the rollout of next generation services

In our responses to questions 2.3, 3.1 and 3.4 we have indicated areas where a joint fibre/5G approach could lower cost of entry and encourage new players to enter non-competitive areas and leased line markets, to offer ultrafast and next generation Gigabit services.

Questions

Question 2.1: Do you agree with our overall approach to regulation in potentially competitive areas?

We think that competitive pressure will give rise to prospective consolidation. To avoid this, Ofcom should be considering the encouragement of active and passive network sharing in potentially competitive areas. A single fibre infrastructure may well be able to support both fixed and mobile broadband services giving rise to significant economies of scale.

Question 2.2: What is your view of our access and charge control proposals for wholesale local access services in potentially competitive areas?

No response at this time.

Question 2.3: What is your view of our access and charge control proposals for leased line services in potentially competitive areas?

Ofcom states that “***Making sure alternative operators have a fair opportunity to invest at low cost is critical to this strategy***”.

Ofcom should therefore consider adding 5G mmWave to deliver ultrafast and next generation Gigabit services as a remedy in delivering leased line services to customers alongside fibre to the cabinet. It will enable faster deployment, lower cost of entry, and enable new entrants to the market, resulting in increased competition and investment from both fixed and mobile operators.

Ofcom should also consider using a Dynamic Spectrum Allocation policy to enable “alternative operators to have a fair opportunity to invest at low cost” to enter the market for leased line services. As Ofcom is aware, DSA allows for part of the broadband spectrum to be allocated locally rather than on a national basis. This will enable local players (councils, businesses and entrepreneurs) to get local spectrum licenses, at lower costs, and offer broadband services according to local needs.

Question 3.1: Do you agree with our overall proposed approach to regulation in non-competitive areas?



Ofcom states that “***Our goal is to support investment and competition in ultrafast services, to as many people and businesses as possible***”.

Ofcom’s goal, therefore, should be to achieve "competition in ultrafast services" regardless of technology. In this case, facilitating the deployment of any technology (be that FTTP, fixed wireless or mobile broadband) that achieves the goal of ubiquitous connectivity is hugely desirable. However, regardless of technology, widespread deployment of fibre is paramount.

Further, the document discusses government grants to encourage fibre roll-out in rural areas. The Ofcom approach, however, focuses on Openreach regulation only, without considering the government approach or how to promote investment and competition using fibre and 5G/FWA. Further, there are no milestones to measure progress on achieving the government target of 15m fibre premises by 2025. Hence, there needs to be a co-ordinated government/Ofcom approach to non-competitive areas to deliver ultrafast services to lower cost of entry and encourage competition.

It is also our view, as mentioned previously, that Ofcom should consider Dynamic Spectrum Allocation for rural areas to encourage local investment and enable more competitors to enter the market. Simply improving the ROI for Openreach to invest in rural areas will not ensure that Openreach will invest in fibre, especially if the target is to achieve 40MB speed which can be fulfilled through existing copper infrastructure.

Question 3.2: Do you agree that a RAB charge control framework is appropriate for non-competitive areas? If not, please explain why you think an alternative is more appropriate.

No response at this time.

Question 3.3: Do you have any comments on the design of a RAB charge control for non-competitive areas?

No response at this time.

Question 3.4: Do you agree with our proposal to introduce dark fibre in non-competitive areas?

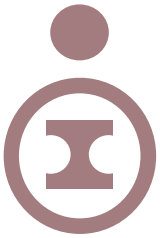
We believe that while requiring Openreach to deliver dark fibre services in theory will benefit connectivity in rural areas, in practice it will de-incentivise BT to rollout fibre in such non-competitive areas. Dark Fibre will cannibalise a significant amount of leased line revenue for BT.

Question 4.1: Do you agree with our proposed overall approach to QoS?

Generally, yes and we understand this approach is confined to Openreach and their relationships with service providers. As the number of alternative fibre providers increases (and in some cases may have SMP), then will such QoS obligations apply to these alternative providers?

Question 5.1: Do you agree with our overall approach to transitioning regulation as BT deploys its new fibre network?

We understand from the Ofcom document “The future of fixed telephone services”, dated 22 February that an industry working group has been set up to examine the transition from Openreach copper-based products to fibre-based equivalents. Although the timescales for this activity are unknown, we suggest that the working group activity will accelerate as BT deploys its new fibre network and hence copper-based products will be retired. Logically, copper-based



products supplied by Openreach will no longer be supported after transition and suggest that minimal effort by Ofcom is expended on the regulation of copper products during the transition.

Question 5.2: Do you agree with our proposal not to require BT to offer new forms of wholesale access to its copper network?

Covered in 5.1 above and agree with Ofcom's proposal.