# **UKB**Networks

# Response from UKB Networks to Ofcom's consultation on its Business Connectivity Market Review

July, 2015

# **Non-confidential Version**

## Introduction

UKB Networks Limited ("UKBN") welcomes the opportunity to comment on this further consultation with respect to Ofcom's current review of the Business Connectivity Market.

UKBN is a wholly owned subsidiary of HKT, Hong Kong's premier telecommunications network and service provider. HKT is listed and headquartered in Hong Kong with a market cap of approximately \$9bn. The investment of HKT and its parent company PCCW in the UK to date amounts to more than  $[\succeq]$ .

# [×]

We have limited our response to certain aspects of the consultation, principally concerning dark fibre and Openreach Quality of Service.

## **UKBN's Network Topology**

UKBN's wireless networks comprise 4G LTE fixed wireless access as well as and dedicated high capacity microwave links used as "leased line" products". UKBN's typical network topology for a wireless access network is as follows:

# [×]

Keycom uses similar principles in the network design, though installing local fibre as the last step. For backhaul from our local fibre networks, we use a mixture of Ethernet, WDM and dark fibre products. Ethernet backhaul circuits would range from [>].

## **Importance of Backhaul**

Whilst UKBN is building high capacity wireless and fibre access networks, it will largely rely on third party network providers to backhaul its traffic from its hub sites to its core network. It is vital that the backhaul circuits provide sufficient capacity to carry the data requirements of the end users, not only for current demand, but also to cope with growth in the number of users and growth in the data usage levels of end users.

The ability to burst and to increase capacity rapidly to meet demand are vital in order to meet customer expectations and provide a high quality user experience. Every time a user experiences a

slow connection or buffering represents a network that is capacity constrained and is unable to meet consumer demand.

UKBN will increasingly rely on BT, as the only operator with truly ubiquitous network reach, for backhaul circuits, particularly as we deploy networks in more rural areas. [>]

The Government has placed considerable importance on delivering broadband connectivity to all parts of the UK and reducing the "digital divide" and to enabling digital inclusion through cost effective and flexible solutions. It is becoming increasingly apparent that an important way of delivering this policy goal is by moving away from traditional FTTx solutions.

## Ofcom's approach to Remedies

Question 7.2: Do you agree with our assessment of the benefits that a package of passive and active remedies can offer relative to a package of active remedies only? If not, please explain why, giving your views on our assessment of these benefits, and providing any relevant evidence in support.

We strongly agree that Ofcom should provide a package of passive and active remedies. Dark fibre will not be suitable for all users in all cases, and so the active products will remain important for the foreseeable future.

Dark fibre has the following benefits over active products:

- It enables the operator to provide "bursts" of traffic over and above the day to day data requirements of its end users.
- It enables an operator to scale up its backhaul capacity to meet growing customer demand more quickly and more economically, thus preventing a capacity bottleneck which would diminish customer experience.
- It enables an operator to expand its access network without relying on a third party backhaul provider to increase backhaul capacity.
- It enables rapid diagnosis and repair of network faults, thus enabling service quality differentiation.
- It encourages a competitive market for dark fibre to develop based on new infrastructure investment where new entrants can see an opportunity to compete with BT based on a more efficient model.
- Dark Fibre is technology neutral and is therefore useful for providing services to enterprises and government – operators can separate and isolate individual wavelengths using different frequencies of light and thus provide more secure private networks as well as public internet access on the same optical path.

In general, enabling a more fluid, flexible and efficient approach to access network build (as the availability of dark fibre backhaul would), would enable and encourage service innovation and increase customer choice. The Relish service is an example of this – a service based on an entirely new local access network offering true product differentiation, with features such as:

- Rapid install next day delivery
- No need for a landline
- Monthly rolling contracts.

Such networks can, of course, be built using active backhaul products, but the availability of dark fibre will encourage more rapid network build and expansion and, as a consequence, innovation.

Question 7.3: Do you agree with our assessment of the risks associated with imposing passive remedies? If not, please explain why, giving your views on our assessment of these risks, and providing any relevant evidence in support.

We believe that Ofcom places undue weight on its desire to avoid inefficient market entry caused by arbitrage opportunities. We note Ofcom's comment in footnote 202: *"We note that, in seeking to avoid creating arbitrage opportunities, our goal is not necessarily to protect all aspects of the current pricing structure of BT's active products, but rather to avoid incentivising inefficient entry based solely on arbitrage between incompatible pricing structures."* 

BT's current pricing structure should not dictate regulatory policy. Nor should Ofcom be overly concerned to prevent inefficient market entry – this should be purely for the market to decide. This applies in relation to both bandwidth charges and distance related charges.

We do not believe that Ofcom should give material weight to the risk of active tariff rebalancing, especially as it appears that returns on BT's regulated services have been consistently above the rate required to compensate investors<sup>1</sup>. We do not believe there is any overall benefit in the business sector continuing to subsidise other user groups, if indeed that would be the outcome. Alternatively, the outcome might be that BT simply becomes more efficient and/or ceases to over-recover its costs.

These risks should be set against the benefits of encouraging investment in network build on the part of users of dark fibre, for example encouraging investment in wireless and fibre access networks.

We are opposed to active-minus pricing and favour instead cost-based pricing (which would likely therefore be distance-based), as explained in our answers below.

Question 7.4: Do you agree that our proposal of a dark fibre remedy priced and designed in the way we have described in this consultation provides the best balance between the benefits and risks that we have identified? If not, please explain why, providing any relevant evidence in support, referencing specific aspects of our proposed remedy design where appropriate, and taking into account any comments you have made in response to questions 7.2 and 7.3. Question 7.5: Do you agree with our assessment of passive remedies, and our proposal to include dark fibre in the package of remedies we propose to impose on BT? If not, please explain why. Question 9.1: Do you agree with our proposals in relation to the dark fibre remedy? If not, what alternative dark fibre remedy would you propose and why?

Question 9.2: Do you agree with our proposals in relation to the pricing of dark fibre? If not, please explain why, and what alternative approach you consider we should take.

<sup>&</sup>lt;sup>1</sup> Frontier Economics, The Profitability of BT's Regulated Services: a report prepared for Vodafone, November 2013: <u>https://www.frontier-economics.com/documents/2013/11/the-profitability-of-btsregulated-services-frontier-report.pdf</u>

We welcome Ofcom's proposal to impose a dark fibre remedy.

As we stated in our January 2015 response, we also believe that a more widely available duct access product would encourage new investment at the access network level, [>].

We disagree with Ofcom's approach to pricing of the dark fibre product. Ofcom proposes that dark fibre products should be priced by reference to the EAD/EAD Local Access 1Gbit/s active products, with dark fibre variants of both EAD and EAD Local Access, and with the same charge structure in respect of circuit length as their corresponding active products.

UKBN urges Ofcom to adopt a cost-plus pricing model. Pricing and contractual terms should reflect the infrastructure nature of the remedy; dark fibre pricing should be bandwidth-neutral. Both BT and its competitors will have to invest significantly in fibre reach and capacity over the coming years and appropriate cost regulation is critical to both providing appropriate incentives and returns for BT, and for providing a satisfactory investment environment for others.

If an active-minus model is adopted, we are not convinced that the 1Gbit/s EAD products are the correct benchmarks to use and consider that there would be a strong case for the 100 Mbit/s products to be used.

We do not believe that cost-plus pricing will discourage network investment on the part of potential alternative providers of dark fibre. Dark fibre providers tend to invest in metropolitan areas and/or on intercity routes<sup>2</sup>. There is no prospect of alternative providers gaining sufficient presence to act as a constraint to or compete with BT within the period of this review. Eventually these networks could change the competitive dynamic in, for example, "Central Business Districts"<sup>3</sup> which might result in a deregulation of these areas following future market reviews.

In relation to the design of the dark fibre product, we note that Ofcom proposes to model the product on the EAD and EAD LA products. We note that the EAD products are designed to route into and out of BT exchanges<sup>4</sup>. This is arguably not the most efficient routing methodology and could lead to unnecessarily high charges where charges (either active-minus or cost-plus) are distance based. However, such inefficient routing could incentivise market entry of alternative network providers who are able to provide service more efficiently than BT, to the benefit of customers.

<sup>&</sup>lt;sup>2</sup> For example, <u>http://www.cityfibre.com/news/2014/11/12/cityfibre-signs-dark-fibre-deals-with-ee-and-three-to-enhance-mobile-networks</u>

<sup>&</sup>lt;sup>3</sup> Ofcom BCMR consultation, paragraph 4.87 and footnote 103