

BUSINESS CONNECTIVITY MARKET REVIEW

**RESPONSE BY GTC TO OFCOM'S LEASED LINES CHARGE CONTROLS
AND DARK FIBRE PRICING CONSULTATION DOCUMENT**

INTRODUCTION

This document comprises GTC's response ("**Pricing Response**") to Ofcom's consultation on Leased Lines Charge Controls and Dark Fibre Pricing (the "**Pricing Consultation**") under the Business Connectivity Market Review ("**BCMR**"). GTC submitted its response ("**Main Response**") to Ofcom's Main Consultation Document (the "**MCD**") on 3 August 2015 and this response should be reviewed in conjunction with that document.

Once Ofcom has had the opportunity to review both of GTC's response documents, GTC would be very happy to provide any further information required, or indeed to meet with Ofcom to discuss the issues raised.

Note: GTC has only reproduced the questions below to which it specifically responds.

3. FORM AND DURATION OF THE CHARGE CONTROL

- 3.1 Do you agree with our proposal to use an Inflation-X form of charge control? If not, what alternative would you propose and why?**

GTC agrees.

- 3.2 Do you agree with the use of CPI as the relevant benchmark for inflation? If not, what alternative would you propose and why?**

GTC agrees.

- 3.3 Do you agree with our proposal for the duration of the charge controls to be three years? If not, what alternative would you propose and why?**

GTC agrees.

4. PROPOSED FRAMEWORK

- 4.1 Do you agree with our proposed five stage framework setting out the key economic principles that we propose to take into account in designing our proposed charge controls? If not, what alternative would you propose and why?**

GTC agrees.

5. PROPOSED APPROACH THAT APPLIES TO BOTH ETHERNET AND TI SERVICES

- 5.1 Do you agree with our proposal to adopt broad baskets for leased lines services, but separate TI and Ethernet baskets? If not, what alternative would you propose and why?**

GTC agrees.

5.2 Do you agree with our approach to deriving our base year costs for Ethernet and TI services, including:

- a. our proposal to forecast costs based on BT's costs of providing business connectivity services;
- b. our proposal to apply CCA FAC as our cost standard; and
- c. our proposal that the base year for the 2015 LLCC Model is the financial year 2013/14 and that our base year for the model for the 2016 BCMR Statement should be the financial year 2014/15?

If not, what alternative would you propose and why?

GTC agrees.

5.3 Do you agree with our approach to forecasting costs and revenues over the period of the charge controls for Ethernet and TI services, including:

- a. our AVEs and CVEs assumptions;

GTC notes that the lack of transparency in how the AVEs and CVEs are estimated make it difficult to fully appraise Ofcom's approach and methodology and the impact this may have on the accuracy of the resulting forecasts.

- b. our input price inflation assumptions; and

We would expect that the price of equipment used to provide Ethernet services (such as Ethernet switches) would continue to decline, such that input price inflation is well below the rate of general inflation. These could either be captured in reductions in prices of inputs or increased reductions in the assumptions for efficiency for Ethernet services.

- c. our WACC assumptions?

GTC considers that Ofcom's estimate of WACC is likely to be higher than the true WACC of a regulated telecoms network such as Openreach. We would expect that regulated telecoms networks with SMP, such as Openreach, would have a comparable asset beta with other regulated utilities. However, Ofcom's estimate of the asset for Openreach (of 0.50) is above all benchmark utilities (who have an average asset beta of 0.4). Furthermore the asset beta estimated for BT Group (of 0.74) is also above the asset beta's of many comparable European Telecoms operators.

We do not consider that asset beta's of smaller UK competitors to BT, who rely on BT access products and typically operate in competitive downstream markets, to be as reliable benchmarks for Openreach's asset beta. Therefore more weight should be given to the estimates of asset beta from European regulated telecoms operators, and other regulated UK utilities.

5.4 Do you agree with our proposals in relation to the types of discount that would contribute towards BT meeting its charge control obligations for Ethernet and TI services? If not, what alternative would you propose and why?

The treatment of discounts within charge controls is rightly regarded by Ofcom as important. Non-linear pricing implied by discounts are common commercial practices in competitive markets. However, the treatment of discounts within the context of a charge control on services provided by an operator with SMP should be treated with care since they could be

used to by BT to either game the control to over-recover costs without breaching the control, or by designing discount structures which preferentially differentiate between BT's downstream operators against its downstream rivals.

In this respect GTC supports Ofcom's decision not to include geographic or volume discounts within the assessment of the control (though GTC agrees that BT should be enabled to offer geographic discounts on a non-discriminatory basis where they are "self-financing").

In relation to term discounts GTC considers that this form of discount can be used in competitive markets, for example to enable suppliers and providers to share the risks associated in investments of fixed costs. However they can be used by firms with SMP to limit competition in two ways. They could be used to favour BT's own business, since BT Wholesale will always be able to sign up for longer term discounts. Furthermore they can be used to discourage switching anti-competitively. For these reasons GTC supports Ofcom's approach to limit term discounts as part of the charge control to 3 years.

6. PROPOSED CONTROLS FOR ETHERNET SERVICES

6.1 Do you agree with our basket design proposals for Ethernet services, including the need for sub-caps and/or sub-baskets? If not, what alternative would you propose and why?

GTC agrees with the design of the baskets for Ethernet services including separate sub-baskets for each of 1 Gbit/s services; Main link; BTL interconnection, and a further sub-cap on all baskets. The design of the baskets, and sub-caps allow a degree of flexibility in pricing which can be used to efficiently adjust prices. However, they constrain the ability of BT to favour certain kinds of services over others.

The sub-basket for 1 Gbit/s services is particularly important since this basket is used as the reference price in setting prices for Dark Fibre products. This is because it is possible that Dark Fibre is used more by BT rivals than BT, and because it could see a migration of customers away from BT's dark fibre products to rival's dark fibre products.

GTC considers that Ofcom should set a specific sub-cap on higher bandwidth 10 Gbit/s services beyond the sub-cap applied to all charges (CPI-CPI). This is because the costs of providing high bandwidth products to is likely to decline, at least in line with 1 Gbit/s services and possibly at a faster rate, as increasing economies of scale in this segment of the market may be released as the size of this segment of the market increases over time.

Ofcom's approach relies on high bandwidth services which use dark fibre to constrain the price of 10 Gbit/s services. However, it is likely that services using dark fibre will only very gradually provide a competitive constraint on BT's active prices, and there is a considerable degree of uncertainty over the likely take up of dark fibre to provide high bandwidth services. Therefore, in this important section of the market BT may be able to maintain high prices, absent a specific sub-cap. This in turn will prevent GTC from fairly competing with BT in the supply of broadband infrastructure for larger housing developments.

6.2 Do you agree with our approach to deriving our base year costs for Ethernet services, including in particular:

a. our proposal in relation to the technology assumed for supplying controlled Ethernet services for modelling purposes;

GTC agrees that EAD is a Modern Equivalent Asset (MEA) to be used to set the price for Ethernet services.

b. our proposed cost adjustments to BT's 2013/14 RFS to form the base year costs;

GTC supports the changes with the exception of the QoS uplift (see comment below).

c. our proposed treatment of BT's costs relating to QoS?

BT should be entitled to recover efficiently incurred costs of providing QoS. However, Ofcom should ensure that BT needs to spend incremental investments to meet basic quality of services levels. Furthermore Ofcom should ensure that BT's investment in QoS is "efficient", using the most cost effective approach, rather than expensive contracting staff.

6.3 Do you agree with our approach to forecasting costs and revenues over the period of the charge control in relation to Ethernet services, including in particular:

a. our volume forecasting assumptions;

GTC considers that the use of dark fibre by entrants to provide active products will be likely to result in an increase in demand for Ethernet services. This is because there will be a range of providers competing on quality and innovation targeting all segments of the market. Therefore Ofcom should ensure that this likely increase in demand is factored into Ofcom's analysis.

b. our efficiency forecasting assumptions; and

Efficiency of Ethernet services should be higher than the 5% per annum based on the evidence provided by Ofcom, where 5% per annum appears to be at the very lower bound of efficiency estimates for Ethernet. While the 5% estimate of for efficiency is higher than that used in previous charge controls, it is lower than that central range of estimates examined by Ofcom. Ofcom has taken the lower end of backward and forward looking estimates of efficiency for Ethernet services and weighted its estimate towards TI services. For example:

- Ofcom estimate that efficiency based on RFS is in the range 8% to 10.5%.
- BT's PVEO estimates of efficiency for Ethernet services is in the range 5% - 7.5% on a backward looking basis and 5% - 10% on a forward looking basis.

There is no reason why Ofcom should choose a conservative estimate as the risks to efficiency are broadly symmetrical if Ofcom overstates or understates the rate of efficiency gain.

Ofcom should consider a specific estimate of efficiency for Ethernet, since the evidence that Ofcom analysed suggests that scope for efficiency in Ethernet services is greater than that available in TI services. By adopting a single efficiency across all TI and Ethernet services, Ofcom risks overestimating efficiency (and understate cost reflective

prices) for TI services, and underestimating efficiency (and overstate cost reflective prices) for Ethernet services.

c. our proposal to reflect the impact of the proposed dark fibre remedy?

Ofcom make a number of assumptions about how the dark fibre remedy will affect volumes of its active products over the course of the charge control. These are that:

- EAD LA and OSA circuits at 1Gbit/s and above in the second year of the control (the first year that the proposed dark fibre remedy will be commercially available); and
- 100% cannibalisation of new connections (and associated rentals) for EAD, EAD LA, and OSA circuits at 1Gbit/s and above in the final year of the control (in other words, we assume no new connections for these circuits).
- one-for one substitution between active circuits and the proposed dark fibre, and the total number of circuits will not change; and
- both internal and external sales will be affected.

These are important assumptions in setting the price of Ethernet (and by implication dark fibre prices) as Ofcom uplifts the forecast costs of the Ethernet basket. GTC recognises that there is little direct evidence on which to base these assumptions, but that Ofcom has chosen assumptions which are conservative and favourable to BT. In particular the level of cannibalisation is likely to be overstated because:

- There is likely to be a period of time while active products which are based on dark fibre are widely available, particularly in areas where there is less demand (eg in RoUK). This is because entrants may not be able to match the scale and other first mover advantages of BT in already providing.
- It will take time before entrants roll out new dark fibre products. This is for a number of reasons, there may be uncertainty in the demand for such products (as Ofcom point out existing connections are unlikely to migrate) and corporate customers may prefer to buy existing connection and new connections from the same provider (Openreach) using the same technology (EAD), until there is a proven commercial market for products using dark fibre.

Furthermore, GTC considers that Ofcom's approach and assumptions show a degree of asymmetry in the risk faced by Openreach around the potential for dark fibre to substitute for active services.

- If dark fibre based active services take time to develop and come to market and there is a low level of cannibalisation than Ofcom predicts, then BT will benefit from the increased quantum of common costs that Ofcom has allocated to active remedies over dark fibre.
- If dark fibre is more successful as it grows the market and volumes are higher than Ofcom projects, then BT will also benefit from the market growing impact as a result of the market growing effect of dark fibre.

Given the significant degree of uncertainty around the assumptions on the use of dark fibre to provide active services and the asymmetry of their impact, Ofcom should seek to ensure that Openreach is not able to earn excessive profits. Ofcom should consider mid-point reviews during the charge control, if erroneous forecasts on the use of dark fibre

tends to favour BT. Further, Ofcom should note that it will be likely to make a one off adjustment to prices at the start of the subsequent review if erroneous forecasts tend to favour BT.

6.4 Do you agree with our proposals in relation to starting charge adjustments for Ethernet services? If not, what alternative would you propose and why?

GTC strongly supports the starting price adjustments that BT makes to its cost data used to set the prices for Ethernet services. Glidepaths provide a degree of regulatory certainty and predictability at the cost of inefficiencies when prices are not consistent with costs. Therefore glidepaths should generally be reserved for cases where there is both a genuine risk of financial or commercial harm as a result of a sudden adjustment, and where it is generally understood and agreed by all stakeholders that there is no scope for a bias in the misalignment of costs and prices. Where these two conditions are not met, then a one off adjustment to prices should be made to enable efficiency and prevent BT from over recovering.

BT has a degree of judgment in its attribution of costs to products within the RFS and in doing so it is incentivised to attribute costs in a way which maximises its own profitability at the expense of rivals. Furthermore, where costs are significantly out of line with starting prices, there is likely to be scope for inefficient prices, where prices do not reflect costs for the duration of the control.

For example Ofcom give examples where BT has changed its allocation of costs from the regulated part of its business to the unregulated parts of the business which have the effect of increasing the profitability of BT's regulated businesses. We agree with Ofcom that a starting price adjustment is appropriate.

In relation to modelling changes which have affected Ofcom's estimates of costs, GTC agrees with Ofcom that such changes should be reflected in starting price adjustments. While Ofcom might note that it would not expect a systematic bias in the changes that are made as a result of changes and refinements in the calculation methodology since "our modelling approach is consulted on and uses the best information and judgement available at the time", GTC notes that a systematic bias in favour of BT may be possible. This is because, first, Ofcom relies to a degree on information and understanding provided by BT in order to design and build its model and BT may be able to exert a degree of influence on the design of Ofcom's model. Second, certain data parameters are redacted which makes it difficult for stakeholders and their advisors to properly subject all assumptions and design features to rigorous degree of scrutiny.

6.5 Do you agree with our proposals in relation to the value of X for Ethernet services. If not, what alternative would you propose and why?

Given the significant misalignment between prices and costs, Ofcom should rebalance the price control to make a larger starting price adjustment and take account of revised assumptions on efficiency to set the X factor.

8. DARK FIBRE PRICING

8.1 Do you agree with our proposals regarding dark fibre pricing? If not, what alternative would you propose and why?

Introduction

As Ofcom is aware, GTC is focussed on the construction and connection of FTTH-based networks to new housing developments. For short hand, in its responses to Ofcom's BCMR consultation documents GTC refers to operators in this space as fibre-to-the-new-home ("FTTNH") providers. By way of a preliminary comment, GTC acknowledges that Ofcom's proposed dark fibre remedy will clearly help to increase the number of new developments where modern high speed fibre networks can be deployed by FTTNH operators.

Notwithstanding this, GTC estimates that a significant proportion [CONFIDENTIAL] of new housing developments will still remain economically unviable to be served by FTTNH operators under the pricing structure that Ofcom proposes for dark fibre. This is because the proposed charges do not reflect the way in which BT charges for fibre access to its own downstream businesses. A specialist tariff based on the number of new homes connected per site is required to address this. GTC explained the reasons why it considers that Ofcom has the powers to impose such a remedy, and also the reasons why it should exercise those powers, in its Response to Ofcom's Main Consultation Document. This Pricing Response details the way GTC considers that this remedy should be priced.

In the event that Ofcom is not persuaded to mandate a specialist tariff for dark fibre, in response to this Question 8.1 GTC also explains its concerns over Ofcom's approach to the allocation of common costs with respect to Ofcom's proposed EAD-based pricing. In particular, the proposed EAD-minus charging methodology will not provide a cost reflective tariff and that other costs need to be unbundled.

Impact on FTTNH operators of proposed dark fibre remedy pricing

It is important for Ofcom to understand the difficulties that FTTNH operators such as GTC would face in utilising Ofcom's proposed dark fibre remedy based on the current proposed pricing. At Table 1 below, GTC has modelled the impact of the proposed remedy (on the basis of all cumulative price decreases in place by the end of the remedy period) in order to determine the economic viability of particular types of site that could be served by an FTTNH provider. The following modelling assumptions have been used:

- **"Revenue"** earned per connected household per annum is assumed to be £192.48, based on BT BT's published revenue of £16.04 per month for Fibre Voice Access service in combination with a Generic Ethernet Access (GEA) service at 40Mbit/s/10Mbit/s.¹
- The **"BT Weighted Average Revenue per Home"** is defined as "Revenue" multiplied by the "Penetration Rate". The assumed "Penetration Rate" is 84% i.e. 84 out of every 100 new homes opt to sign a contract with the CP that has laid the connection to their home.²

¹ Source: Openreach Superfast Fibre Access Price List, 5.1.4 Fibre Voice Access 4/11/14

² Source: BT Openreach connection penetration ratio as set out in Ofcom's Communications Market Report 7th Aug 2014

- **"Estimated Network OpEx Costs per Home"** reflects the costs of operating the last mile of fibre from BT to the home. This includes fibre plant and active equipment maintenance, electricity, systems maintenance, Business Rates etc.
- **"Forecast EAD Lease Cost per New Home"** includes the proposed EAD/Dark fibre rental prices post BCMR assuming Ofcom proposal is accepted.
- **"Per plot CapEx"** reflects an estimate of the fixed and variable capital costs associated with constructing a fibre network for each size development.
- **"RepEx"** represents the estimated annualised cost of replacing active electronic equipment on a ten year cyclical basis.

It can be seen that serving small residential development sizes of around 10 plots or less would incur negative margins. i.e. the income received from end customers does not even cover the on-going operating costs. To be clear, this would mean that there would be no competition to provide connections to these homes and consumers would be denied fast FTTH connections.

Similarly there would be no competition for larger sites up to [CONFIDENTIAL] plots. This is because the margin between income and operating costs is too small to provide a reasonable return on the capital investment which would need to be incurred to construct the network. GTC therefore estimate that the proposed BCMR pricing remedy will still foreclose competition on the large number of small sites up to [CONFIDENTIAL] plots. This means that homes on around [CONFIDENTIAL] of all new development sites would be denied competition for new connections, and from experiencing the benefits of modern high speed fibre networks.

Table 1

Modelled annual margins on residential fibre products (per household)

Dark Fibre Product	No. of New Homes on Development Site	BT BT Weighted Average Revenue per Home P.A.	Estimated Network OpEx per Home P.A.	Forecast EAD Lease Cost per New Home P.A.	Estimated Annualised Repex	Forecast Margin Before Repex	Per Capex Plot	Economically Viable
Dark Fibre LA	10	£162	[CONFIDENTIAL]	£131	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]
	20	£162	[CONFIDENTIAL]	£66	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]
	30	£162	[CONFIDENTIAL]	£44	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]
	40	£162	[CONFIDENTIAL]	£33	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]
	50	£162	[CONFIDENTIAL]	£26	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]
	80	£162	[CONFIDENTIAL]	£16	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]
	100	£162	[CONFIDENTIAL]	£13	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]
Dark Fibre	10	£162	[CONFIDENTIAL]	£199	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]
	20	£162	[CONFIDENTIAL]	£100	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]
	30	£162	[CONFIDENTIAL]	£66	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]
	40	£162	[CONFIDENTIAL]	£50	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]
	50	£162	[CONFIDENTIAL]	£40	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]
	80	£162	[CONFIDENTIAL]	£25	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]
	100	£162	[CONFIDENTIAL]	£20	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]
EAD LA	10	£162	[CONFIDENTIAL]	£175	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]
	20	£162	[CONFIDENTIAL]	£88	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]
	30	£162	[CONFIDENTIAL]	£58	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]
	40	£162	[CONFIDENTIAL]	£44	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]
	50	£162	[CONFIDENTIAL]	£35	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]
	80	£162	[CONFIDENTIAL]	£22	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]
	100	£162	[CONFIDENTIAL]	£18	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]
EAD	10	£162	[CONFIDENTIAL]	£245	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]
	20	£162	[CONFIDENTIAL]	£123	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]
	30	£162	[CONFIDENTIAL]	£82	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]
	40	£162	[CONFIDENTIAL]	£61	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]
	50	£162	[CONFIDENTIAL]	£49	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]
	80	£162	[CONFIDENTIAL]	£31	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]
	100	£162	[CONFIDENTIAL]	£25	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]	[CONFIDENTIAL]

The structure of the tariff proposed is discriminatory to BT's downstream competitors

The reason the dark fibre tariff structure proposed by Ofcom is not viable to be used by FTTNH providers is because this is fundamentally different to the tariff structure that BT employs when it builds out and connects developments that will be served by its own downstream business. GTC has already commented on this issue at Section 3 of its response to Ofcom's Main Consultation Document, but repeats the key points below for Ofcom's convenience:

BT's pricing for the network is on a per end customer basis. For example, BT will receive 10 times the revenue for connecting a development of 100 homes than it would for connecting a development of 10 homes. BT does not require its own downstream business to pay high fixed capacity costs if they only connect one home to the cabinet and fibre backhaul.

Further, in respect of providing network from the exchange to a particular cabinet, BT's charges to its own "notional" downstream business:

- are not locational, they are not based on the distance from the exchange;
- are not based on the capacity of or utilisation of a particular fibre; and
- do not require payment of a site specific charge for the provision of network

Instead, BT's charges are calculated from the average costs and average utilisation of the FTTC product. Some of these networks will have higher utilisation than others.

By contrast, the proposed dark fibre tariff structure will mean that competing FTTNH providers are charged based on the full 1Gbit/s capacity that is available irrespective of how much capacity they use, such as to create a significant price hurdle which squeezes alternative providers and distorts competition. This is particularly the case for new entrants who wish to compete for new residential development sites of below [CONFIDENTIAL] plots.

GTC is firmly of the view that instead, dark fibre charges to third parties need to reflect the way in which BT charges fibre services to its own downstream businesses. BT should not receive income for the full capacity of a fibre span when serving a third party, yet only receive income for utilised capacity when serving its own notional downstream business.

Proposed alternative tariff to serve FTTNH customers

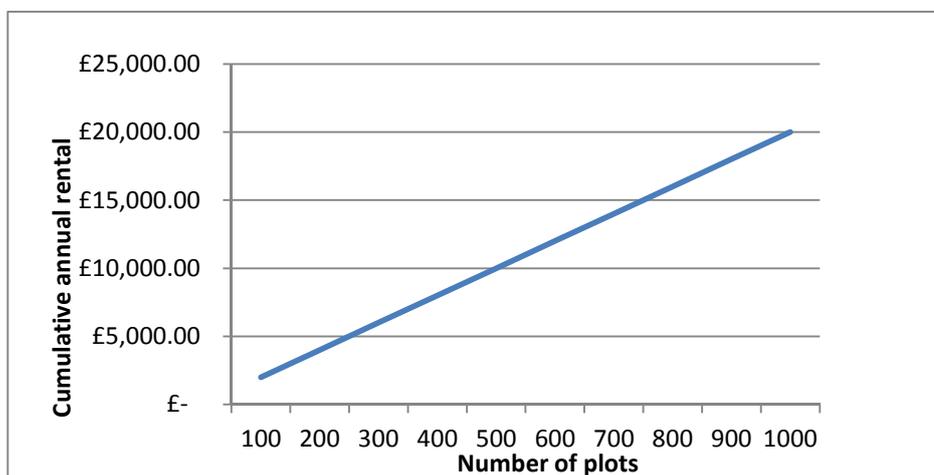
GTC has previously explained an alternative tariff that would be fair to third party FTTNH customers, as part of its supplementary response (20 March 2015) to Ofcom's preliminary consultation on passive remedies. GTC summarises this again below.

One leading network operator already provides a successful product to CPs such as GTC which allows them to access their backhaul network on a per-plot charging basis (where this is geographically available). Total charges rise in a linear way as the new development builds out and more homes are connected. They are calculated as a single annual rate per connected plot and billed monthly.

GTC has considered how these principles could apply to the pricing of the proposed dark fibre remedy. The level of the per plot charge should be set at a rate equivalent to the total revenue that would be collected using capacity-style tariffs (e.g. EAD) but distributed across all the new homes in the available market. In this way, a Weighted Average Tariff Per Home ("**WATPH**") can be adduced. Any weighting calculation should also take account of the average size of developments connected and some account of the average distance of these developments from the exchange.

Once development sites are built out, the aggregate revenue from all new-build sites would equal the aggregate of all alternative capacity charges. The tariff structure would be simply measured per plot rather than by connection size. Because the network operator's aggregated revenues from the new build sector should be the same, whether measured by capacity or by number of plots, this tariff system does not require any cross-subsidy from other sectors or classes of customer. The product itself could include a use restriction (as per many BT products such as Physical Infrastructure Access ("**PIA**")) which would limit its use to connectivity for new build housing developments and eliminate any opportunity for gaming.

A simple illustration of how such a pricing scheme would work is set out below. The graph shows prices that new entrants would be required to pay to BT annually for the rental of a pair of dark fibres to a single hypothetical development, using a dummy WATPH of £20 per year. As the number of active plots increases, the price paid overall increases proportionately. The increase in the number of plots would be captured and paid for by access-seekers on a monthly or quarterly basis.



Comments on proposed EAD-based dark fibre pricing

For all the reason stated above, GTC considers that Ofcom should mandate specialist dark fibre pricing for FTTNH purposes. However, in the event that Ofcom is not persuaded by the logic of such an approach, in this section GTC sets out its concerns with respect to certain aspects of the design of the EAD-based tariff that Ofcom has proposed in its consultation document.

As explained above, the proposed EAD-based tariff structure will mean that for smaller developments, the charge levied by BT for providing fibre to the boundary will always be higher than the revenues an FTTNH-installing CP can recover from charges to its end customers. In para 8.17 of its consultation Ofcom states:

“...we propose that the most appropriate form of price control to implement the proposed ‘active-minus’ pricing approach would be a ‘basis of charges’ condition specifying that BT should derive prices for Dark Fibre Services from the prices for reference Ethernet services (1Gbit/s EAD and 1Gbit/s EAD Local Access), with the prices reduced to reflect the long-run incremental costs that are avoided by BT when providing that Dark Fibre Service instead of the corresponding 1Gbit/s EAD or 1Gbit/s EAD LA service, as appropriate. We refer to the difference between the price for Dark Fibre Services and the reference EAD services as the ‘active differential’ ”.

However, it is the **total costs** that should be considered: BT’s charges also include a component of common costs. Paragraph 6.26 of Ofcom’s consultation states:

“Ethernet services of different types and across different bandwidths are likely to share substantial common costs. As set out in Section 4, our preference is to provide BT the incentive to recover common costs in the most efficient way by placing the services in a single charge control basket”.

Whilst it is recognised that BT is entitled to recover its common costs, a CP will also have to bear common costs of its own. If the CP has to recover its own common costs, as well as paying BT's, then a CP's margin will be squeezed. It does not seem appropriate for BT to recover the whole component of the common cost component from the CP. There needs to be a mechanism for allocating these common costs between upstream and downstream components.

Further, whilst placing common costs into a single EAD cost may appear to be efficient, there is nothing to say that the common costs in providing EAD are the same common costs associated with dark fibre, or with BT's own high speed broadband. It seems inappropriate that CPs should be required to pay costs in respect of the upstream network which BT's own internal downstream businesses do not. If the common costs associated with EAD:

- are allocated as a percentage of the EAD 'cost', and
- the EAD cost is higher than the cost for dark fibre

the common costs recovered from customer connected via the CP are likely to be higher than BT recovers from its directly-connected customers.

9. PROPOSED CONTROLS FOR ACCOMMODATION, EXCESS CONSTRUCTION AND TIME RELATED CHARGES

9.1 Do you agree with our proposals for charge controls for accommodation? If not, what alternative would you propose and why?

GTC agrees with Ofcom's proposal to maintain a common charge control for BT accommodation services as defined in the June 2014 FAMR Statement.

9.2 Do you agree with our proposals for charge controls for ECCs? Please explain your answer with supporting information. Question 9.3: Do you agree with our proposals for charge controls for TRCs? If not, what alternative would you propose and why?

9.3 Do you agree with our proposals for charge controls for TRCs? If not, what alternative would you propose and why?

This answer responds to both Questions 9.2 and 9.3 together. Excess construction charges and time-related charges are particularly important charges for the provision of passive services compared to active services. This is because buyers of passive services are required to buy a suite of ancillary ECCs and TRCs to support the provision of dark fibre infrastructure. Therefore there is a risk that BT could attempt to strategically limit demand for dark fibre by setting higher prices for ECCs and TRCs, and provide these services at lower quality. Therefore in order to ensure that BT is not able to exploit its significant market power Ofcom should continue to monitor the provision of TRCs and ECCs to ensure that prices are consistent with costs, and to ensure that services are being provided to a reasonable degree of quality.

Further, Ofcom should consider ensuring that customers have options to self-provide some TRCs or ECCs. GTC notes that in other regulated utilities there is a greater degree of freedom for customers of the regulated firm to self-provide the services which are analogous to TRCs and ECCs. This not only is efficient, since the customer of the utility is often better able to provide the ancillary services required to the appropriate specification, but it provides

a degree of competitive constraint on the regulated firm, since customers have a genuine outside option (to self-provide) if the regulated firm's prices are high or quality too low.

10. IMPLEMENTATION OF THE NEW CHARGE CONTROLS AND COMPLIANCE

10.1 Do you agree with our proposals for implementation of the proposed new charge controls and for ensuring compliance with the proposed new charge controls. If not, what alternative would you propose and why?

GTC broadly agrees with Ofcom's proposals for implementation and compliance monitoring for the new charges controls. However, it notes that the proposals to use base weighted indices to assess prices changes for baskets of services in dynamic markets such as those covered by the leased line charge controls could allow BT to enjoy greater revenues and hence profits by targeting price reductions on declining services. Ofcom should take into account this upward bias when setting the charge control by determining a higher X factor than would be the case if a current weighted index was used. This may require making adjustments to the level of X output from Ofcom's cost model to take account of this effect.

11. REGULATORY FINANCIAL REPORTING

11.1 Do you agree with our proposals for BT's Regulatory Financial Reporting, including in particular:

- a. the proposed Consistency with Regulatory Decisions Direction; and**
- b. the proposed Direction modifying requirements relating to the preparation, audit, delivery and publication of the Regulatory Financial Statements, and Direction modifying requirements relating to the form and content of the Regulatory Financial Statements?**

If not, what alternative would you propose and why?

GTC welcomes Ofcom's decision to align the RFS with the cost base used to set charge controls. This approach should improve transparency for stakeholders and the subsequent decision making.

GTC

7 August 2015