BUSINESS CONNECTIVITY MARKET REVIEW

RESPONSE BY GTC TO OFCOM'S MAIN CONSULTATION DOCUMENT

1. INTRODUCTION

- 1.1 In this document GTC sets out its response to Ofcom's Main Consultation Document published on 15 May 2015 (the "MCD") as part of its Business Connectivity Market Review ("BCMR"). Although this document necessarily makes some reference to price, GTC's main response to Ofcom's separate consultation on Leased Line Charge Controls and Dark Fibre Pricing (the "Pricing Consultation") is set out in a separate paper (the "Pricing Response") that GTC will be submitting shortly.
- 1.2 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.

2. EXECUTIVE SUMMARY

- 2.1 GTC strongly agrees with Ofcom's proposal to mandate a dark fibre remedy to BT's SMP in CISBO markets. Subject to certain reservations set out below, GTC considers that the remedy is technically feasible, and that the proposed conditions to be imposed on BT with respect to its implementation should be effective and lead to a workable product.
- 2.2 GTC is, however, surprised and disappointed at the approach OFCOM has taken to market definition and in particular the fact that it has not made any explicit reference in the MCD to demand for connections to local access infrastructure laid by GTC and others to provide fibre to newly-built homes ("FTTNH"). This comprises a distinct downstream use for leased lines and also represents a key (and growing) customer segment.
- 2.3 This significant lacuna in Ofcom's market analysis means that it has in turn given no apparent consideration to how a dark fibre remedy would be suitable for this customer group. The proposed general dark fibre price does represent a material improvement on existing EAD pricing. But this is still too expensive to allow FTTNH providers to consistently challenge BT in making connections to new homes (other than for very large new developments). New entrants thus compete by purchasing an inflexible wholesale product from BT, even where BT does not use an equivalent product to serve new housing developments by its own business.² This inequality of treatment requires a careful regulatory assessment.
- 2.4 In the absence of effective regulatory intervention, BT will continue to connect new-build homes via out-dated copper connections, relatively untroubled by competition from FTTNH providers. It is the residents of between [CONFIDENTIAL] and [CONFIDENTIAL] new homes a year who will be most let down if the BCMR misses an opportunity to help make 'best in class' FTTH connectivity available to them via alternative CPs.

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¹ Whilst Ofcom of course referred to GTC's submissions within the annexes, this was in order to summarise rather than to reveal Ofcom's views on the evidence presented.

² See Section 3 below.

- GTC therefore asks Ofcom again to consider a specific dark fibre price structure that could facilitate the development of genuine competition in the provision of FTTNH. This would be technically identical to the dark fibre remedy that Ofcom has already proposed. However, a specialist tariff could allow competing FTTNH providers to operate with an equivalent cost base to BT, and to be truly competitive. Such a tariff is deliverable one network operator has already successfully supported GTC for seven years via a specialist tariff but this is only available in a subset of UK locations due to the operator's network not having the same scale of street by street coverage as BT. There is no good reason why BT should not be obliged to offer such a tariff on a national basis.
- 2.6 GTC's proposed tariff model will be explained in further detail in GTC's response to Ofcom's Pricing Paper. GTC believes that the tariff structure it suggests would allow BT to fully recoup its costs; whilst avoiding access-seekers being charged large fixed-capacity charges for passive access where there are few homes connected. This tariff would not create inappropriate arbitrage opportunities for access seekers.

3. THE PROPOSED DARK FIBRE REMEDY IS ONLY PARTIALLY EFFECTIVE FOR FTTNH PROVIDERS

GTC agrees with much of Ofcom's market assessment and remedy types

- In general, GTC accepts Ofcom's market analysis as set out at Section 4 of the MCD that there is a single product market in the UK for the sale of CISBO services of all bandwidths. It also accepts Ofcom's geographic market analysis. This is subject only to the possibility (discussed at Section 4 below) that in defining CISBO markets Ofcom must consider the specific purchasing requirements of downstream FTTNH operators.
- 3.2 GTC agrees with Ofcom's finding that BT has SMP in this CISBO market. GTC agrees that the proposed dark fibre remedy to this SMP offers material savings to leased line users as compared to the existing EAD remedies. Using this remedy would mean that some additional developments could become cost-effective for FTTNH operators. GTC comments in more detail on the various technical and service aspects of the dark fibre remedy in its specific question responses annexed to this main response.

GTC's concerns over proposed dark fibre pricing

- 3.3 Although a dark fibre remedy would be a significant improvement on EAD, the pricing structure proposed by Ofcom would remain too high to make smaller new housing developments (which represent a significant proportion of new housing) viable to be served by FTTNH providers such as GTC.
- 3.4 Operators who purchase business connectivity for FTTNH purposes will continue to face significant difficulties in competing against BT. This is principally because where BT opts to provide FTTNH services in competition with providers such as GTC, it prices this internally on a per-end customer basis. In other words, BT Openreach will receive 10 times the revenue for connecting a development of 100 homes than it would for connecting a development of 10 homes. Effectively, 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. BT's charges:

- (a) are not based on distance from the exchange;
- (b) are not based on capacity or utilisation of a particular fibre; and
- (c) do not require payment of a site-specific charge.³
- 3.5 By contrast, any FTTNH service provider that competes with BT's downstream business would be charged for dark fibre based on a 1Gbit/s cost minus basis, irrespective of how many homes (i.e. what capacity) that connection serves. This difference in treatment creates a significant price hurdle for FTTNH providers in an environment where retail broadband prices are low. The consequence is that a significant number of new homes (on developments below around [CONFIDENTIAL] units) will not be able to benefit from competition for new connections.
- 3.6 The most effective way to ensure that downstream FTTNH operators are not squeezed would be for BT to price wholesale dark fibre according to the number of homes connected. The price of dark fibre would then reflect the way in which BT accounts for fibre services to its own downstream business.
- 3.7 This would also avoid certain inequitable implications of the proposed single dark fibre remedy. BT will otherwise be able to able to charge for the <u>full</u> capacity (irrespective of usage) of a dark fibre link akin to 1 Gbit/s when supplying downstream competitors such as GTC; yet only receive an income relating to capacity <u>utilised</u> for its own downstream customers in the FTTNH market place.

4. A SPECIALIST TARIFF SUITABLE FOR FTTNH PROVIDERS IS REQUIRED

- 4.1 It is clear that the wholesale connectivity required to build FTTH networks to new homes falls within the ambit of the BCMR. FTTNH providers have identical requirements for physical architecture to other access seekers such as MNOs or fixed high-bandwidth users. However, GTC has previously made clear that because any connectivity that FTTNH providers purchase from BT makes (at least initially) less intensive use of any dark fibre purchased, that this requires a bespoke tariff structure.⁴
- 4.2 This does not mean that the purchase of business connectivity by FTTNH providers should fall outside of the scope of the defined CISBO market. In Ofcom's discussion on market definition at Section 4 of the MCD, Table 4.1 shows a number of products, based on varying bandwidth requirements (and also two technologies: Ethernet and WDM) which Ofcom provisionally finds to all fall within the single CISBO product market. Based on this broadbrush approach, any SMP remedy should mandate passive access to provide any reasonable downstream services within that bandwidth range. This should include the provision of point-to-point connectivity that is suitable for FTTNH users.
- 4.3 How that access is priced is a financial question of what is fair to both BT and its customers. There is no reason why there could not be separate pricing schemes for different customer groups which compete with BT in separate markets downstream.

³ The charge BT Openreach levies on its downstream business is calculated from the average costs and average utilisation of the Fibre to the Cabinet ("FTTC") product. Some of these networks will have higher utilisation than others.

⁴ See, for example Section 4 of GTC's further submission of 20 March 2015 in response to Ofcom's preliminary consultation on passive remedies.

- 4.4 For example, Ofcom is proposing that different tariffs based on different bandwidth requirements to serve different segments should comprise multiple remedies in the same market. However, as Ofcom knows, the same infrastructure can be used not only to provide different bandwidths but also to provide different total data volumes per fibre, depending on the intensity of end-customer usage. GTC sees no reason why this could not form a tariff inside a wider package of CISBO remedies in the same way as tariffs for services providing different bandwidths.
- 4.5 For smaller sites where there is no scope for a downstream FTTNH provider to earn a margin between BT's wholesale price and consumer prices, it is of course possible to cross-subsidise these prices from larger, more viable sites. However, were GTC to do so, it would need to increase prices for connecting large sites in order to earn sufficient returns on those larger project investments; yet also earn additional returns to support smaller projects. These prices would likely be above competitive levels thus reducing the number of projects that GTC could win and defeating the purpose of any cross-subsidy strategy.
- 4.6 In any event, it is the difference between how BT serves itself in this sector versus how new entrants are served that means this is not a commercial matter that new entrants should have to compensate for themselves. This inequality of BT treatment requires a careful regulatory assessment (and indeed may potentially raise questions under competition law).

Ofcom may define a separate market for connectivity to downstream FTTNH services

- 4.7 If Ofcom considers that the leased line requirements of FTTNH customers point to those purchases being made in a separate market, then Ofcom should not hesitate to define that market and impose an appropriate remedy. GTC has consistently suggested this possibility, for example in its 5 January 2015 response to Ofcom's preliminary consultation on passive remedies.
- 4.8 GTC notes that whilst overall Ofcom is minded to conclude that there is sufficient supply-side substitution to define a single market for the wholesale provision of CISBO leased line services, it considered the extent to which leased lines supporting certain downstream services might comprise separate markets. GTC notes that whilst connectivity for (i) mobile; and (ii) local loop unbundling was considered in some detail, wholesale services provided to FTTNH operators appear to have been excluded from this market definition exercise.
- 4.9 Certainly, GTC does not consider that FTTNH services fall into the bracket of 'niche applications' for leased lines such as CCTV, broadcast and Street Access services which Ofcom proposes to find outside the scope of SMP regulation altogether. Those services are procured on a bespoke and one-off basis and do not, ultimately, serve end-consumers. By contrast, the FTTNH sector potentially comprises over [CONFIDENTIAL] new homes each year at current building volumes, with generally accepted demand for new homes at over [CONFIDENTIAL] per year. Many of these new homes are currently served by copper lines when fibre could not be easily installed.
- 4.10 If the wholesale-for-FTTNH segment has in fact been reviewed by Ofcom, GTC would at least expect Ofcom to provide some explanation of its reasoning. At present it is difficult to understand whether Ofcom considers services to FTTNH providers to be entirely inside the

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⁵ As per para 4.177 of the MCD.

market, or indeed entirely <u>outside</u> the market so as not to merit discussion in this review. Ofcom is asked to clarify this area in its Final Statement.

The BCMR presents an opportunity to encourage FTTNH competition

- As GTC pointed out in its response of 5 January 2015 to Ofcom's preliminary consultation on passive remedies, Government policy militates towards tackling the problem of the slow UK roll-out of FTTH in general, sooner rather than later. As Ofcom is aware, the EU "Digital Agenda" sets the goals of superfast broadband coverage at 30Mbps available to all EU citizens; with at least 50% of European households subscribing to broadband access at 100Mbps. In the Budget Statement of 18 March 2015, GTC notes that an even more ambitious target was set of securing 100Mbps "ultra-fast" broadband to "nearly all the homes in the country". BT's current connectivity offer to developers falls well short of this, and announced plans for G.Fast technology are still very much in their infancy
- 4.12 The Government's efforts to use means other than regulation to require BT to improve its direct provision of fibre to new-build housing have so far ended in failure. At the recent Government-sponsored⁶ 'New Build Round-table' discussions, BT reiterated that its only obligation under the Universal Service Obligation is to install out-dated copper connections to new homes. It said that it considers fibre to be a premium product and will only guarantee to deploy FTTH where a developer co-funds it. This piecemeal approach to installing what is now mainstream technology will only cease when a viable market is created by remedying the SMP that BT holds in the upstream market for the provision of point-to-point connectivity.
- 4.13 In any event, GTC considers that to fail to take action on this area under the BCMR would be to act in clear contradiction with Ofcom's own objectives under the BCMR. At para 1.25, Ofcom states that its remedies are designed "to regulate access to BT's and KCOM's networks where they have SMP, in order to protect consumers and to promote effective competition, innovation and choice to downstream markets, while promoting competition upstream, where this is sustainable, based on efficient investment in alternative infrastructure". GTC submits that these objectives would not be met until a remedy was implemented to support the development of competition in downstream FTTNH markets.

5. CONSUMER BENEFITS OF A DARK FIBRE REMEDY FOR FTTNH

- 5.1 A dark fibre tariff suitable for use by FTTNH providers to serve all new homes would provide significant benefits to UK consumers⁷:
- First, it would speed up the activation of new homes. Waits of up to six months to obtain a new connection from BT to new-build homes are common⁸ and house builders do not consider that they have a genuine choice of network provider to work around this. By contrast, where a choice is open to developers, multi-skilled operators such as GTC can quickly install communications networks at the same time as installing infrastructure for other utilities: electricity, gas and water. This allows significant efficiency improvements. A single

⁶ Led by the Rt. Hon. Edward Vaizey MP, the Minister for Culture, Communications and Creative Industries.

⁷ See Section 4 of GTC's response of 5 January 2015 to Ofcom's preliminary consultation on passive remedies.

For example, BBC Watchdog's broadcast on 20 November 2014 featured a development of flats where consumers were forced to wait 9 months before BT would provide a broadband connection. See also an April 2013 Guardian article: http://www.theguardian.com/money/2013/apr/20/BTO-failure-connect; an article from 'This is Money' from March 2014: http://www.thisismoney.co.uk/money/bills/article-2570094/BTO-Openreach-taken-four-months-connect-house-internet.html.

point of contact for all utilities also provides a better service to developers and incurs less disruption to the construction programme.

- **Second,** infrastructure competition would provide faster connections which consumers are demanding today.
 - (a) BT's current FTTC rollout of a service offering "up to" 76Mbps for downloads (but only "up to" 19Mbps for uploads) still uses copper as the final connection, meaning broadband speeds vary considerably depending on distance between the cabinet and the premises. It is believed that download speeds of less than 42Mbps are more typical.⁹
 - (b) FTTNH providers install a GPON-based service all the way to each new home that:
 - (i) delivers download speeds of between 50 and 300Mbps;
 - (ii) is future-proofed¹⁰ and could deliver speeds many times faster as demand for bandwidth continues to grow exponentially, and certainly faster than BT's potential future copper-based G.Fast product;
 - (iii) can facilitate ISPs offering consumer packages that include the same speed for upload as they do for download (facilitating home working); and
 - (iv) does not vary in speed depending on distance from street cabinet.
 - (c) New-build properties are typically built to a higher specification than existing housing stock. They tend to attract occupants who demand best-in-class broadband infrastructure, which means FTTH.
 - (d) FTTH networks have lower operating costs than FTTC:
 - (i) active equipment can be concentrated in a small number of locations where it can be easily operated and maintained; and
 - (ii) fibre cables are less susceptible to faults, for example due to water ingress, than copper cables used for FTTC/VDSL services.
- Third, FTTNH providers undertake only a single installation process to reach FTTH speeds, in contrast to BT's two-step approach of installing copper but later removing this and upgrading this to fibre. GTC estimates that on the basis of BT's connections model, it is unlikely that the UK will achieve full FTTH coverage before the second half of the 2020s. Clearly, this means inefficiency and environmental cost for properties being built now.
- If FTTNH operators secured a suitable dark fibre tariff from BT, they could accelerate the delivery of the benefits set out above to a significant proportion of the UK's housing stock. So far, only [CONFIDENTIAL] new homes are contracted to benefit from FTTH via GTC (with [CONFIDENTIAL] newly-constructed homes already served). Yet, with the right remedy, there is an opportunity to serve many more consumers. Over the next three years between [CONFIDENTIAL] and [CONFIDENTIAL] million properties may be constructed, meaning a further [CONFIDENTIAL] million or so consumers could benefit from FTTH.
- 5.6 There are also externalities from providing FTTH in new-builds. The existence of a significant proportion of FTTH-enabled homes is likely to raise customer awareness and as a

⁹ Source: Ofcom publication: UK Fixed-line Broadband Performance, May 2014. Data for 'FTTx' (i.e. FTTC and FTTH combined, at Figure 1.4.

¹⁰ GTC would be able to utilise its technology of choice, evolving at its own rate and not constrained by BT's slower approach. For example, GTC would be able to accelerate the adoption of NGA technologies such as XG-GPON 1, TWDM PON and WDM PON.

consequence increase demand from consumers for the services and applications that only FTTH can deliver. This will lead to accelerated investment in access networks amongst existing housing stock. For example a consumer used to having FTTH functionality in a new-build property will likely look for this to be installed if they subsequently move to an older property.

6. THE BENEFITS OF A DARK FIBRE REMEDY FOR FTTNH OUTWEIGH RISKS

- 6.1 GTC agrees with Ofcom's views at Section 7 of the MCD that the benefits of the introduction of a dark fibre remedy outweighs the risks. GTC set out its general views on the benefits of dark fibre in its 5 January 2015 response to Ofcom's preliminary consultation on passive remedies, with a particular emphasis on this topic in the Economics Annex.
- 6.2 In the MCD, Ofcom has of course not assessed a specific dark fibre remedy priced for the use of FTTNH customers. However, in support of its request for this remedy, GTC comments below on potential benefits and risks, using the same analytical framework set out by Ofcom at section 7 of the MCD. Overall, GTC considers that the case for a specific dark fibre remedy for FTTNH customers is compelling.

Risk of inefficient entry

GTC considers that an appropriately fixed price for dark fibre to FTTNH operators would avoid any risk of inefficient investment choices being made, either by GTC or other FTTNH market entrants. It would not offer inappropriate opportunities for arbitrage. FTTNH providers would use BT's existing infrastructure, and pay the full cost recovery to BT to connect its infrastructure to its core network. FTTNH providers would seek to compete with Openreach over the last mile by being more efficient, through economies of scope and by innovation, rather than 'cherry picking'. In the case of GTC, this would mean extending the scope of its competitive offer to smaller developments as well as large.

BT investment incentives

GTC does not consider that a dark fibre remedy for FTTNH would inhibit BT's incentives to invest, and would not distort investment signals. FTTNH providers only compete for incremental customer growth, rather than existing customers. A specific remedy would be unlikely to lead to distortions to build-or-buy decisions or rebalancing of end user prices in the corporate connectivity market. BT would continue to recover fixed and common costs from its existing customer base, with any wholesale dark fibre sold making a proportionate contribution to these fixed and common costs. Any residual risk is proportionate to the potential benefits in the market for new housing developments, which were explained at Section 5 above.

Impact on other CPs' incentives to invest in infrastructure

GTC does not consider that non-BT operators would lose material revenue as a consequence of a dark fibre remedy for FTTNH providers. Because in practice FTTNH operators such as GTC serve only new developments, there is usually little or no CP investment close by that could be stranded by an FTTNH provider starting to rely on BT dark fibre to connect new developments. To the extent there is CP infrastructure close by (and is made available) it is likely that FTTNH providers would seek to use it. For example, GTC has a good (albeit geographically constrained) working relationship with a fixed network

operator which it does not anticipate would be impacted by a dark fibre remedy. In areas where providers such as Virgin and CityFibre have laid fibre, they would not lose revenue because their main focus is on self-provision in any event.

Distributional impacts

A specialist dark fibre remedy for FTTNH providers should have no material distributional impact on BT. BT will not earn a lower return for any connection made to GTC than if it had made a connection itself. In fact, in many cases BT would have the opportunity to earn an *enhanced* return because it would earn the same contribution from a connection without incurring the capital expenditure from laying additional fibre to an individual new home.

7. EAD

EAD is an insufficient remedy to BT's SMP

- 7.1 As GTC explained in its response of 5 January 2015 to Ofcom's preliminary consultation on passive remedies, EAD products are simply too expensive to sufficiently allow the opening up of the downstream FTTNH market other than for very big new developments.
- 7.2 Given that a link between the pricing of EAD and dark fibre is being proposed as part of Ofcom's remedy design, GTC's comments otherwise on the pricing of both the proposed EAD and dark fibre remedies will be set out in GTC's upcoming Pricing Response.

BT's EAD delivery performance is unacceptable

- GTC has reviewed Section 13 of the MCD and concurs with Ofcom's observations that the delivery experience provided by BT is extremely poor and completely unacceptable. This poor performance is exacerbated by very poor reporting and communication. Downstream customers such as GTC therefore have very little chance to anticipate delays (or address reasons that might be causing these delays) so as to mitigate for BT's poor performance. The vast majority of EAD products that are ordered by GTC comprise Category 2 installations. Whilst these are amongst the more complex products to deliver, the very reason they are categorised in this way is to flag to BT in advance that more resource should be dedicated to getting these delivered. At the moment, GTC's experience is that each project runs the high probability of very poor delivery performance against SLA and this is simply unacceptable.
- 7.4 GTC's view is that the plan that Ofcom has proposed for BT to return to the delivery performance against SLA that it achieved in 2009/2010 is far too conservative in two senses:
 - (a) Ofcom should mandate that BT recover their delivery performance to the 2009/2010 levels within 12 months, as opposed to the 3-year period that Ofcom has suggested; and
 - (b) GTC believe that Ofcom should mandate that BT achieve a SLA of as near to 100% as practical. A proposed allowable failure rate of 10% as compared to SLA targets is totally unacceptable. Despite the *prima facie* requirement for BT not to discriminate unduly, GTC is concerned that the EADs that it purchases could easily fall within the accepted 10% rate of failure, especially if they are more complex jobs that BT fails to adequately resource. There is a significant risk that GTC could suffer significant reputational damage if these delays become associated with

GTC's end-service to customers. This would then effectively damage the development of competition in relation to the provision of FTTNH, despite BT being still in compliance with its Ofcom performance targets.

7.5 In other utility markets, the regulator has recognised that poor performance of the incumbent can adversely affect the new homes sector and new entrants. In all cases (gas, water and electricity) the regulator has introduced a self-service model, where certified competent persons from companies such as GTC can make their own connections to the incumbent's upstream network using the same processes and standards as the incumbents use themselves. Self-service removes the ability of the incumbent to game and potentially foreclose or slow down competition in the sector, and GTC is of the view that this same approach should be adopted in relation to telecommunications.

8. INTERCONNECTION AND ACCOMMODATION SERVICES

8.1 GTC notes that Ofcom's proposals are broadly in line with its own technical interconnection proposals set out in Section 6 of GTC's response to Ofcom's preliminary consultation on passive remedies. GTC therefore agrees with Ofcom's proposals and has no further comments.

9. DUCT ACCESS

9.1 GTC agrees with Ofcom's preliminary view at paras 7.71 – 7.73 of the MCD that a duct access remedy is an unsuitable means to progress the extension of competition in business connectivity access.

GTC

3 August 2015

ANNEX

GTC RESPONSES TO SPECIFIC OFCOM QUESTIONS

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

4. MARKET ASSESSMENT FOR WHOLESALE CONTEMPORARY INTERFACE SYMMETRIC BROADBAND ORIGINATION SERVICES

4.1 Do you agree with our approach to wholesale product market definition and our proposed wholesale product market definitions in relation to services provided using contemporary interfaces? In particular, do you agree with our proposal to define a single product market for Contemporary Interface Symmetric Broadband Origination (CISBO) services? If not, what alternative would you propose and why?

In principle, GTC agrees with Ofcom's approach, which it believes to be sufficiently broad to accommodate a specific tariff for use by FTTNH providers. However, in the event that Ofcom's remedy analysis does not support such a tariff under the general CISBO market definition, GTC considers that Ofcom should define a separate market for CISBO for FTTNH providers. In any event, Ofcom's analysis contains a significant lacuna in not expressly considering the specific needs of BT's FTTNH customer base as explained more fully in the Executive Summary submitted with this response.

4.2 Do you agree with our approach to geographic market definition and our proposed geographic market definitions? In particular do you agree with our proposals to define the Central London Area (CLA) and the London Periphery (LP) as separate geographic markets? If not, what alternative would you propose and why?

GTC supports Ofcom's proposals, which support its own experiences as a customer.

4.3 Do you agree with our approach to SMP assessment? In particular, do you agree with our proposals to find no CP to have SMP in the market for CISBO services in the Central London Area (CLA), and to find BT to have SMP in the markets for CISBO services in the London Periphery (LP) and the Rest of the UK (RoUK). If not, what alternative would you propose and why?

GTC agrees with Ofcom's approach to SMP assessments and considers that Ofcom has arrived at correct conclusions if one takes the view that there is a single CISBO market. In the event Ofcom considered it necessary to define a separate market for CISBO services for FTTNH customers, then clearly BT would have SMP in those markets on the same geographic basis.

4.4 Do you agree with our approach to product and geographic market definition for wholesale CI core conveyance services and do you agree with our proposed market definitions for wholesale CI core? If not, what alternative would you propose and why?

GTC is content with Ofcom's proposals.

7. REMEDIES: APPROACH AND STRUCTURE

7.1 Do you agree with our approach to assessing what remedies are appropriate to address the competition problems we have identified in the markets in which we propose to find that BT and KCOM have SMP? If not, please explain why, and what alternative approach you consider we should take.

GTC generally agrees with Ofcom's approach. However it has concerns with respect to the tariff pricing proposed for dark fibre as explained more fully in the Executive Summary submitted with this response.

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.

GTC strongly agrees with Ofcom's assessment that a package of passive and active remedies delivers significant additional benefits to competition and by extension consumer welfare, as a result of both active and passive remedies being made available.

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.

GTC does not comment on the risks of passive remedies more generally except to state that these are likely to be considerably lower that might be assumed pre-implementation. It also directs Ofcom to its views at Section 6 above on the degree of risk that would attach to a remedy for SMP in CISBO services to FTTNH customers in particular.

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.

GTC agrees with the risk/benefit analysis for a dark fibre remedy as a whole which concluded that the potential benefits outweigh the potential risks. As set out above, however, GTC considers that there is scope for an additional tariff targeted at FTTNH customers only, and GTC has set out its submissions on the risk/benefit analysis with respect to that proposal at Section 6 above.

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.

GTC strongly agrees with Ofcom's assessment that passive remedies, and in particular a dark fibre remedy, would be generally beneficial to the market as a whole.

8. GENERAL REMEDIES FOR WHOLESALE LEASED LINES MARKETS

8.1 Do you agree with the general remedies that we propose for BT in the wholesale TISBO and CISBO markets? If not, what alternative remedies would you propose and why?

GTC agrees with the concerns raised by other stakeholders about the SoR process. GTC look forward to receiving the feedback from the monitoring programme instigated by Ofcom following the previous Fixed Access Market Review FAMR, expected in the summer 2015.

GTC does not utilise wholesale low bandwidth TISBO connections and therefore does not comment on those proposals.

GTC agrees with the proposals made by Ofcom regarding the BT Reference Offer.

GTC agrees with Ofcom's proposals to re-impose the obligation on BT to notify of changes to its charges, terms and conditions within 28 days or 90 days (depending on the details of what is affected). In addition GTC agree with Ofcom's proposal to impose a condition that requires the notification of new technical information within a reasonable time period, but not less than 90 days in advance of providing new wholesale services or amending existing technical terms and conditions.

GTC agrees with Ofcom's requirements for Cost Account and Accounting Separation.

GTC notes Ofcom's review and proposals on charge controls and will provide a detailed response as part of its Pricing Response.

9. SPECIFIC REMEDY FOR THE CISBO MARKETS - DARK FIBRE ACCESS

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?

GTC strongly supports the general dark fibre remedy proposed, which suits GTC's technical requirements well.

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.

As will be set out in more detail in GTC's Pricing Response, GTC considers that the pricing of the proposed dark fibre remedy to be too high to support the optimum development of competition in the downstream market for the provision of FTNH services. The only suitable remedy to address BT's SMP in wholesale services for this use would be to mandate a specialist price remedy/tariff, as GTC will detail more fully in its Pricing Response.

10. SPECIFIC REMEDIES FOR THE CISBO MARKETS - ACTIVE REMEDIES

10.1 Do you agree with the specific active remedies that we propose for BT in the wholesale CISBO markets? If not, what alternative active remedies would you propose and why?

GTC strongly agrees with Ofcom's proposal to impose a 'basis of charges' condition on BT, which will require the rental and connection charges of EAD to be set by reference to the rental and connection charges for EAD LA, adjusted to reflect the difference in the long run incremental costs of EAD, with an additional requirement for BT to assess the differential on a bottom-up basis. GTC almost always utilises EAD rather than EAD LA due to the connection points typically being in different exchange serving areas and therefore see this as beneficial and a fair proposal.

GTC is comfortable with Ofcom's assessment of how ECCs are applied and the positive changes introduced in 2014. However, GTC considers that Openreach should be allowed flexibility on the actual build-up of the ECC components and costs to allow Openreach to optimise costs on behalf of their customers. For instance Openreach should be free to utilise other operator's passive infrastructure and pass on any appropriate connection costs so long as the costs are less than the equivalent dig and save and are beneficial to the customer. This approach will avoid the unnecessary duplication of duct, reduce disruption to the all parties and reduce deployment times.

GTC have no experience of utilisation of BT's Project Services whilst deploying EAD services. GTC is therefore are content with Ofcom's findings.

GTC agrees with Ofcom's requirement for BT to provide the specific types of network access that are widely used by CPs. These include disaggregated Ethernet access and backhaul segments as well as Ethernet and WDM backhaul.

GTC agrees with the transitional measures proposed for the Central London Area and core markets.

GTC agrees with Ofcom's circuit classifications that cross boundaries between the different CISBO market segments.

12. REMEDIES - INTERCONNECTION AND ACCOMMODATION SERVICES

12.1 Do you agree with the interconnection and accommodation remedies that we propose for BT in the wholesale TISBO and CISBO markets? If not, what alternative remedies would you propose and why?

GTC agrees with the proposal that BT will still be required to provide accommodation services relevant to the CISBO wholesale market. In particular, because GTC is interested in potentially utilising the Access Locate product in the future it is supportive of any performance enhancement that can be made in this area.

13. REMEDIES - QUALITY OF SERVICE

13.1 Do you agree with our assessment of Openreach's Ethernet provisioning process, how it has been working in practice, the root causes of performance deterioration and process developments? Does our assessment reflect your experiences and understanding of Openreach's wholesale Ethernet provisioning performance? If not, please explain why and provide us with any supporting evidence.

GTC agrees. GTC has found that Ofcom's assessment of Openreach's Ethernet provisioning process reflects GTC's experiences; although GTC's experiences are all via a third party and therefore GTC do not have full knowledge of exact reasons and communications.

Do you agree with our provisional conclusions on Openreach's performance? If not, please explain why, and provide us with any further supporting evidence.

GTC agree with Ofcom's provisional conclusion; however a particular issue for GTC is the lack of clarity regards reporting when projects are put on hold changing the CDD date. The majority of GTC connections fit into Category 2 and therefore their delivery is typically far later than their SLA would indicate as the norm.

Have we accurately captured the reported impact of poor performance? If not, please explain why and provide us with any further supporting evidence.

Due to GTC's indirect relationship with Openreach as regards the installation of Ethernet circuits, it is difficult to put a cost to the additional manpower it takes to deploy Ethernet circuits to GTC's sites. GTC considers that the real and critical impact on GTC is the reputational damage that failing to connect a development site ahead of first customer moveins can have. As GTC is a relatively new entrant to the telecoms space with building developers, it is imperative GTC do an excellent job, even though the incumbent may not. GTC has built its reputation on, amongst other things, excellent customer service and GTC believes that failing to provide new move-ins with service from day one is not providing excellent customer service. Furthermore, failure to provide service to new move-ins immediately could lead to GTC having to pay compensation or provide costly workarounds at GTC's expense.

As one of the leading independent utilities connection businesses in the UK, GTC has considerable experience of the specific issues faced when working with an incumbent network operator so as to connect to their upstream networks to serve new home developments. Historically the electricity and gas markets suffered very similar incumbent performance as to that being exhibited by Openreach today.

For electricity and gas markets, Ofgem has been successful in establishing a self-service connection model. This means that GTC, as an access seeker, is permitted to use its own competent operators to make connections at pre-agreed points (determined by the customer using records provided by the incumbent) and to audited standards. By bringing the task within the customers remit, the model removes delays and can provide better customer service. This is the model that Openreach uses for its PIA remedy and GTC see no reason why this could not be rolled out to also cover the dark fibre remedy deployment by Openreach.

13.4 Do you agree with our assessment of Openreach's incentives to deliver acceptable Ethernet provisioning quality of service? If not, please explain why and provide us with any further supporting evidence.

GTC agree with Ofcom's assessment of Openreach's incentives to deliver acceptable Ethernet provisioning quality of service, and the requirement to increase the incentives to enable consistent delivery of provisioning and repair services. 13.5 Do you agree that it is appropriate to exclude customer caused delays from the minimum standard performance measures for provision activities? If not, please explain why.

GTC agrees with Ofcom's opinion that customer caused delays should be excluded from the minimum standard performance measures. However, GTC find that if this is to be the case, it is imperative that Openreach fix all of the issues that are causing lack of clarity as regards reporting customer non compliances that cause projects to be put on hold changing the CDD date.

13.6 Do you agree that it is appropriate to include the "non-customer" delays (also including Third Party delay in Openreach data) in the minimum standard performance measures for provision activities? If not, please explain why.

GTC agrees, based on Ofcom's reasoning that including "non-customer" delays in the minimum standard performance measures for provision activities is the correct way forward.

13.7 Do you agree that it is appropriate to include delays due to events covered by MBORC declarations in the minimum standard performance measures for provision and repair activities? If not, please explain why.

GTC agrees, based on Ofcom's reasoning that including delays covered by MBORC declarations in the minimum standard performance measures for provision activities is the correct way forward.

Do you agree that it is appropriate to apply the minimum standards nationally? If not, please explain why.

GTC agree that it is appropriate to apply the minimum standards nationally, but Openreach provide industry with KPI data indicating a regional breakdown.

13.9 Do you agree with our proposals regarding the application of minimum standards over the three year period of this review? If not, please set out your reasons and alternative proposals.

GTC agree with Ofcom that it will take Openreach time to meet the new required minimum provisioning standards. However GTC feels that the timescales are too conservative. Openreach performance has been degrading for 4 years and Openreach is already working on improvements. GTC feel that most improvements, from the current defined provisioning KPI should be expected in Year 1, with the remaining improvements to meet the revised minimum required provisioning standards in Year 2.

13.10 Do you agree that it is appropriate to use a combination of initial CDD and TTP as the basis around which to set the new delivery date certainty minimum standards? Please provide reasoning for your answer. If you do not agree, please also give your proposed alternative including reasoning.

GTC agrees that it is appropriate to use a combination of initial CDD and TTP as the basis around which to set the new delivery date certainty minimum standards.

Do you agree that it is appropriate to set the metrics for the delivery time certainty minimum standard to the initial value of 80% and final value of 90%? Please provide

reasoning for your answer. If you do not agree, please also give your proposed alternative.

GTC does not agree that the final value of 90% is adequate or safeguards the service delivery of businesses like GTC who are dependent on BT's services.

In other utility sectors such as electricity and gas there are agreed arrangements for properly competent operators to make connections to the upstream networks themselves. This gives control of the process to the service provider rather than the incumbent with whom they compete in the downstream market. In the absence of "self-connect" type arrangements in telecoms, the only alternative is to take the BT service.

In the absence of competition it is essential that BT meets it targets in almost every single case, and the target be set at as close to 100% as is practicable (and in any event be set at a minimum of 99%).

A target as low as 90% means that BT can be many months late in providing 10% of all EAD circuits, and yet still be classified as providing a good service. These 10% of circuits could mean GTC fail to meet new housing development move-in dates for dozens of sites, thus damaging GTC's otherwise good reputation.

13.12 Do you agree that it is appropriate to apply limits to mean TTP and upper (97%) and lower (40%) percentiles as the basis for the lead time minimum standard? Please provide reasoning for your answer. If you do not agree, please also give your proposed alternative.

GTC agrees, based on Ofcom's reasoning that it is appropriate to apply limits to mean TTP and upper (97%) and lower (40%) percentiles as the basis for the lead time minimum standard.

13.13 Do you agree that it is appropriate to set the upper percentile initial and final values to 159 and 118 working days and the lower percentile initial and final values to 30 and 29 working days for the lead time minimum standard to the values? Please provide reasoning for your answer. If you do not agree, please also give your proposed alternative.

GTC agrees, based on Ofcom's reasoning, that it is appropriate to set the upper percentile initial and final values to 159 and 118 working days and the lower percentile initial and final values to 30 and 29 working days for the lead time minimum standard to the values.

13.14 Do you agree that it is appropriate to set the repair time minimum standard to 94%? Please provide reasoning for your answer. If you do not agree, please also give your proposed alternative.

GTC agrees that the repair time minimum standard should be set to 94% on the basis that this is close to the best figure achieved historically whilst delivering an improvement on the current measured performance.

13.15 Do you agree with our proposal to set a new SMP services condition which provides for Ofcom to direct BT to comply with all such quality of service requirements in relation to network access provided by BT pursuant to our proposed general and specific network access requirements? If not, please explain why.

GTC agrees with Ofcom's proposals to set a new SMP services condition which provides for Ofcom to direct BT to comply with all such quality of service requirements in relation to network access provided by BT pursuant to GTC's proposed general and specific network access requirements.

Do you agree that it is appropriate to assess compliance with the proposed minimum standards on an annual basis? If not, please explain why.

GTC agrees that it is appropriate to assess compliance with the proposed minimum standards on an annual basis.

13.17 Do you agree with our proposals to direct BT to comply with minimum performance standards for setting initial contractual delivery dates, delivery against initial contractual delivery dates, fault repair performance and overall mean time to provide? If not, please explain why, and set out your proposed alternative.

GTC agreed with Ofcom's proposals to direct BT to comply with minimum performance standards for setting initial contractual delivery dates, delivery against initial contractual delivery dates, fault repair performance and over mean time to provide.

13.18 Do you agree with our proposals to direct BT to provide the KPIs we have specified? If not, please explain why, and set out your proposed alternative.

GTC agrees with Ofcom's proposals to direct BT to provide the KPIs specified.

13.19 Do you agree with our proposals to maintain the existing SLG Direction? If not, please explain why, and set out your proposed alternative.

GTC agrees with Ofcom's proposals to maintain the existing SLG Direction.

13.20 Do you agree with our proposals regarding the conduct of, and principles and criteria to be applied from now on, to contractual negotiations concerning SLAs/SLGs for the provision of Ethernet services? If not, please explain why, and set out your proposed alternative.

GTC agrees with Ofcom's proposals regarding the conduct of, and principles and criteria to be applied from now on, to contractual negotiations concerning SLAs/SLGs for the provision of Ethernet services.