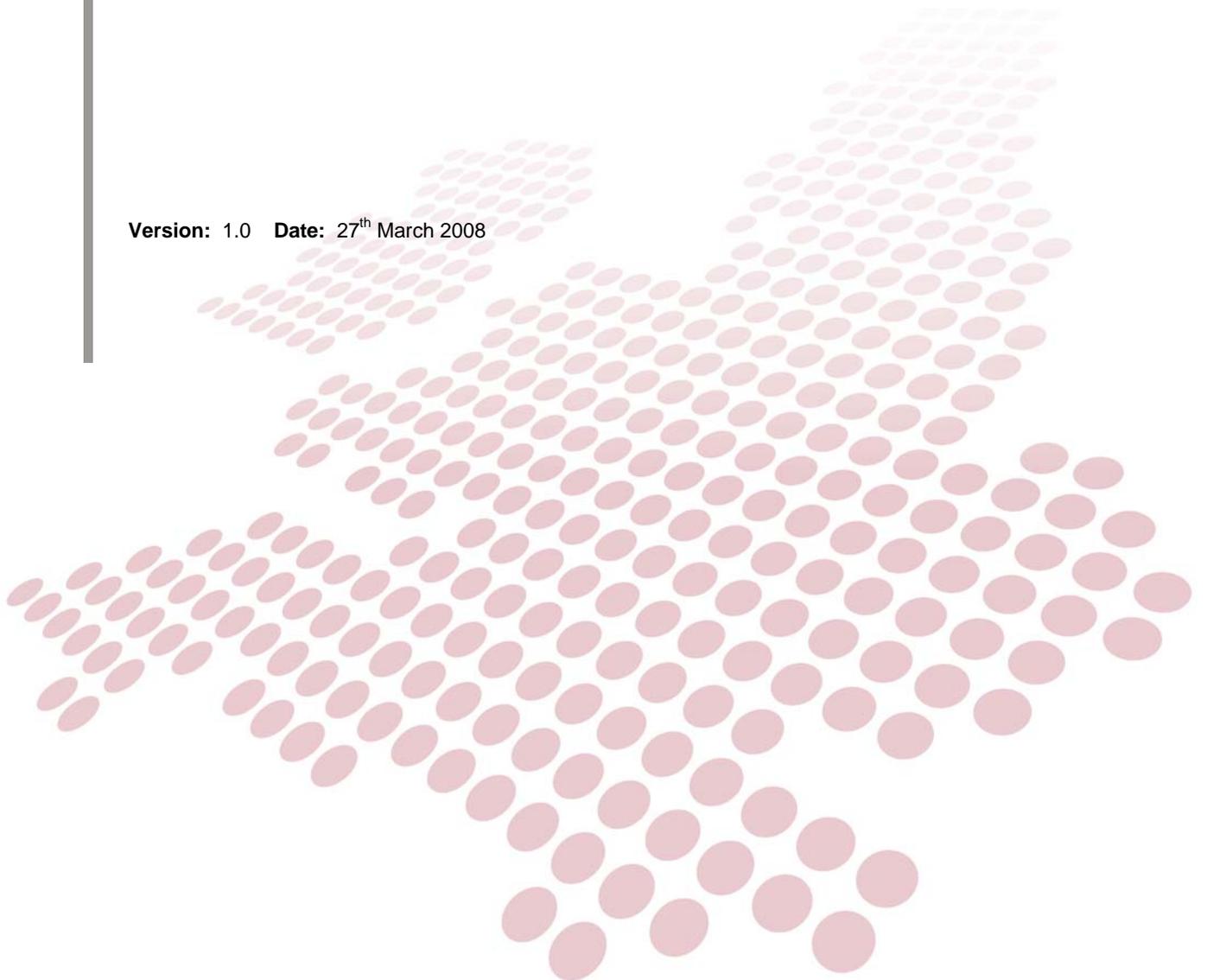


# UKCTA Response to Business Connectivity Market Review

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## 1. Introduction

UKCTA is a trade association promoting the interests of competitive fixed-line telecommunications companies competing against BT, as well as each other, in the UK's residential and business markets. The main products covered in this review (TISBO, AISBO and Trunk) are key building blocks in the provision of communications services to these markets. As there are continuing problems with the development of a properly functioning market in business connectivity products, UKCTA welcomes Ofcom's engagement in this area and the opportunity to comment on Ofcom's proposals to introduce appropriate ex ante regulation.

## 2. General Comments

Before addressing the consultation questions, we wish to make the following general points.

### **Market Definition – Proposal for a Separate Business Wholesale Broadband Market**

In para 3.45 of consultation document, Ofcom confines its definition of products included in the Business Connectivity (BC) market to those which offer symmetry. We argue that this is too narrow a product definition and that the characteristics of a BC product should be extended to include asymmetry.

UKCTA proposes that Business Connectivity (BC) products based on bitstream form a separate market, which we term Business Wholesale Broadband (BWB). This product market would contain business grade ADSL (see below), SDSL and Ethernet in the First Mile (EFM). We believe that chain of substitution exists between these products affecting the competitive conditions sufficiently that they form a distinct relevant market.

Business Customers are prepared to trade-off symmetry against price provided that minimum bandwidth requirements are met. For example, if a business customer requires 1mbit/s, they would accept an asymmetric service provided that the upload speed was 1mbit/s. "Excessive" download bandwidth would be ignored. Typically, this trade-off is viable for applications such as access to VPNs. Thus, there would be demand side substitution between asymmetric and symmetric services for these applications.

On the supply-side, wholesale business grade ADSL, SDSL and EFM are based on bitstream and require the provider to meet the same "service wrap". Whilst investment in different equipment may be needed, we believe that it would be possible for a provider of business grade ADSL to respond to a SSNIP by a hypothetical monopolist of SDSL by entering the market. Economies of scale and scope exist largely due to the provider having the infrastructure in place to provide

the higher standard of service demanded by customers as compared to residential customers.

### **Market Definition – Business Grade ADSL**

In our response to the Wholesale Broadband Access (WBA) Market Review we set out the following argument in favour of a separate business grade broadband access market:

*... there is a clear break in the chain of substitution between residential/business internet access and provision of ‘high end’ business broadband services. Businesses require ‘high end’ asymmetric broadband connectivity for a range of data connectivity requirements (such as links between branches, suppliers and customers, and applications such as those which enable secure data access and transfer). These services have very different service characteristics when compared to the typical retail offer that provides usage limitations, high contention ratios and direct routing to Internet.*

*First, uncontended ADSL services can offer users guaranteed bandwidth, so speed is never impacted. This enables businesses to use ADSL for applications such as voice, the quality of which could not be guaranteed on contended ADSL. The price of such a service might range from £150 to £600 per month, depending on the downstream bandwidth.*

*Secondly, business ADSL services can be privately routed to connect into corporate MPLS VPNs (as distinct from IP SEC/ tunneled VPNs) offering reliability and security similar to that of a leased line network and differing from normal broadband internet connectivity in the following ways:*

- **Uses:** *VPNs are used not just for internet access, but for secure data sharing and other applications, such as voice, which require high-end QoS and prioritisation capability.*
- **Characteristics:** *data is transferred via secure connections, rather than over the internet, thus removing the need for firewalls.*
- **Pricing:** *VPNs are priced at a relative premium and are not marketed as an alternative to ordinary broadband internet access.*

*These differences in the retail market translate into substantial differences at the wholesale level. This leads to the conclusion that there are in fact two separate wholesale broadband markets: one supporting the provision of plain Internet access; and another used in the provision of business connectivity services. The two distinct wholesale markets reflect the differences between the business and residential retail product markets: residential wholesale asymmetric broadband which is used as a wholesale input for residential retail broadband internet services (cable is part of this wholesale market), and business wholesale asymmetric broadband which is used for*

*business retail (voice, data and internet) services (cable is not part of this market). We attempt to define this further below.*

*The market power analysis must be performed in a distinct manner for both product markets. For the residential market, cable is a substitute and needs to be factored in. In the business market cable is not a substitute and needs to be excluded. Wholesale inputs for residential and business applications are, in the main, distinct.*

*Whereas self-supply by LLU providers might constitute market share in the wholesale residential broadband market, it may or may not be appropriate to include LLU self-supply in the market share assessment for the wholesale business broadband market, depending on the characteristics of the “notional” wholesale product which is self-supplied, and indeed depending on the features of the retail products the self-supply is ultimately used for.*

*In its 2005 market review, OPTA, the Dutch regulator, found that providers on the retail market for “low quality” broadband access had sufficient wholesale alternatives, such as cable companies and LLU operators, and were therefore not depending on a wholesale broadband offer by KPN. KPN was therefore found not to have SMP in this market. However, KPN was found to have SMP in the wholesale market for “high quality” broadband access, largely due to the fact that only KPN offered national coverage.*

To ensure that the full range of business connectivity products are included (SDSL, ADSL and EFM), we believe that the current market definition should be extended to recognise that business customers do not require symmetry exclusively and that in some circumstances they are happy to use asymmetric products to meet their requirements.

We understand from discussions with Ofcom that it is of the opinion that (a) there isn't a distinct wholesale business-grade market and (b) even if there was, BT wouldn't have SMP because the threat of market entry from LLU Operators would constrain their pricing behaviour largely because the equipment used to provide a business grade service would be much the same as that used for residential service. Therefore a provider of residential grade WBA could easily enter a business grade market in the event of a SSNIP by a hypothetical monopolist.

We believe that Ofcom is wrong to draw this conclusion. Even if the equipment is the same, reconfiguring it is potentially non-trivial and LLU Operators would need to invest in providing a much more sophisticated service wrap (provisioning, changes, fault reporting and fault repair, account management, etc.) to meet the needs of business customers. In the table below we list the requirements of business customers from a business grade asymmetric product and whether these are available from BT Wholesale (BTW).

Service Requirements of a large business	Description	BTW DSL based business services
Full range of DSL services	ADSL, SDSL, EFM line card availability	ADSL: national SDSL: 809 exchanges EFM: 1100 exchanges
Bandwidth capacity	Uncontended / low contended services increase backhaul bandwidth capacity requirement	YES
QoS	Enabled range of QoS end to end	YES
Minimum assured rates / committed rates	Ability to maintained order customer bandwidth. Requires additional capacity and monitoring of capacity.	YES – WBC DDQ
Resilience of network	Resilient backhaul and core conveyance	YES - BT has dual homed MSANs
Use of Openreach enhanced / business grade care /repair	Business services require an enhanced / business grade care SLA/G	YES
MSAN repair to match enhanced care SLA	Business services require an enhanced MSAN care SLA	YES
SLA probes & monitoring/reporting	Business services require these back office systems.	YES
24 hour operational Network Operation Centre	Staffing/monitoring & response times to underpin business grade SLAs on processes	YES

Furthermore, we estimate BT enjoys market share of approx. 90% for wholesale business-grade ADSL, so even if there is a threat of entry by LLUOs, that is unlikely to constrain BT's SMP in the short term.

### **SDSL, EFM and 21CN**

Ofcom proposes to continue regulating SDSL during the life time of the next review and discusses imposing a charge control upon SDSL. The key benefit of SDSL is that it uses cheaper DSL technology to provide symmetrical services. However, SDSL will not be offered in the 21CN WB (M) C product portfolio.

Today SDSL is offered via Datastream and IPStream, although in practice Datastream is the primary option as it enables uncontended services. BT currently proposes to stop selling Datastream in March 2009 meaning no further SDSL connections can be installed after March next year, although the current installed base will be supported until the Datastream platform is closed down.

We understand that BT plans to replace SDSL with EFM (Ethernet First Mile) but that BT is not planning to rollout EFM nationwide. Currently available plans suggest that BT will enable 1,100 exchanges for EFM. (Note that only 776 of these exchanges match with Ofcom Market 3 exchanges for WBA).

The lack of a nationally available EFM product to replace SDSL may cause competing CPs and their customers problems if the market is such that BT has SMP on the relevant market. Ofcom therefore needs to take into account BT's EFM product when considering how to regulate symmetrical DSL based services. As stated earlier, we propose that business grade ADSL, SDSL and EFM form a distinct relevant market from TISBO and AISBO as defined by Ofcom.

### **Accommodation and Interconnection Services**

UKCTA has long been concerned about the various Accommodation services available from BT and the terms on which they are provided. We therefore welcome Ofcom's decision to address some of these issues and its proposals for a charge control on interconnection and accommodation services (defined as "technical areas") including Netlocate, IBH, ISH and CSH.

Ideally, UKCTA members would like a single accommodation product in which CPs could house their own equipment irrespective of the service provided to end users. Ofcom should oblige BT to remove all restrictions on the use of space products (subject to technical and core network considerations) to allow the most efficient use of a CPs investment. We do not understand why essentially the same product features – space, power, etc. – should be provided under different terms dependent on what the CP uses the space for. We would also like to see an obligation on BT to use best endeavours to provide space in an exchange and to provide a strong reason why space cannot be provided. This would require BT to explain to other CPs seeking space in an exchange why substantial blocks of space are booked by downstream BT businesses for future use.

Whilst we accept that the BCMR cannot alter the Undertakings directly, we consider that this single accommodation products should be provided on an EoI basis to all CPs including BT's own business units. It seems illogical that access (be it copper or fibre) and backhaul can be purchased on an EoI basis but the space in BT exchanges, where access and backhaul are joined, are not subject to the same rules. Space is an important cost component and the lack of EoI for accommodation services confers a considerable commercial advantage upon BT's business units.

We understand that Ofcom considers itself to be constrained by the market review process to treat accommodation as a technical area to relevant markets. We are not convinced that Ofcom is right in its assessment and believe that under Section 5 of the Communications Act 2003, Ofcom has wider powers to act outside the scope of the review process and we ask Ofcom to consider taking action using these powers.

In the absence of an ideal product, we welcome Ofcom's proposal to require BT to make IBH available as an alternative to ISH/CSH where CPs take accommodation services with a view to allowing them to share space across exchange-based services i.e. across LLU and AISBO/TISBO and IBH.

Whilst welcoming Ofcom's proposed new IBH product to aid CPs who currently have more than one collocation space in an exchange, this alone will not be sufficient to address CP demand for space. The parallel deployment by BT of new network equipment through the 21CN programme exacerbates the problem, and with 21CN running behind schedule it is likely that BT will require additional space until the middle of the next decade.

As space in exchanges is a finite resource, a complementary solution is required. UKCTA proposes a complementary space product that would be available alongside the IBH product and allow CPs to terminate BT's access products in the CP's own exchange (PoP) site. The CP site would be near to the BT exchange and BT would provide a link (IBH extension) from the BT exchange to the CP site. This would not only help to alleviate the growing problem of lack of space in BT's exchanges, it would also avoid inefficient duplication of infrastructure. CP's should not be obliged to incur the cost of renting space and facilities in a BT exchange if they can exploit space and facilities in their own PoP site at minimal incremental cost.

Furthermore, BT's current processes and charging structure discourage the efficient management of a CPs' space in exchanges. Where a CP has more than one area in an exchange but has not fully utilised them, it would seem prudent to allow the CP to reduce its number of accommodation areas by moving services from one area to another. However, typically the charges proposed by BT to conduct this work make it commercially unviable. In fact, it is often more cost effective for the CP to continue to rent multiple, under-utilised areas than to reduce its footprint in the exchange, This is clearly inefficient particularly in exchanges that have no additional space available and BT is planning to build entirely new accommodation areas within the exchange to meet demand at considerable expense.

We also welcome Ofcom's proposal to align Netlocare contractual and cost recovery principles with LLU Co-mingling services. This is a positive step forward. However, LLU Co-mingling is not perfect and flaws in the LLU co-mingling product should not be carried over into Netlocare.

## **Novations**

An efficient novation process is key to reducing the costs of switching for business customers. UKCTA was expecting, and would have liked to have seen, a proposal from Ofcom to ensure novations can occur efficiently and request that Ofcom addresses this issue as a high priority.

## Length and Quality of the Consultation Document

We fully recognise that the BC market is complex and multi-faceted and that Ofcom is required to undertake and publish a thorough analysis of the market. However, Ofcom should also appreciate that resources within CPs are limited and that reading, analysing and preparing a response to such a lengthy document is time consuming and resource hungry, and many CPs do not have the capacity to undertake such a task, even within a ten week consultation period. We would therefore ask that in future Ofcom seeks to be more proportionate and finds a way of breaking up the consultation so that it can be more easily managed by CPs.

We also appreciate that considerable effort is required to produce a document of this length and complexity to a high standard. Nevertheless, we are concerned that the some of the analysis lacks sufficient depth. For example, the supply side substitution analysis supporting Ofcom's claim that there are separate bandwidth markets for TISBOs consists of five short sentences over three paragraphs. As we argue later in the response, this brief analysis misses a key aspect of supply-side substitutability which puts in doubt Ofcom's conclusion regarding market definition. In general, the discussion on economies of scale and scope when assessing SMP in the various markets is also too short and misses key aspects of analysis. It also means that too much weight is placed on market shares, where the source of market power may lie in one of the areas that should be the subject of qualitative analysis.

There were also a number of proof reading errors. Some examples, by no means an exhaustive list, are shown below.

- Figures 15 and 16 on pages 83 and 84 are incorrectly referred to in the text as Figures 7 and 8 (para 3.323, 3.324 and 3.326).
- Table 8 is referred to as "Table XXX" in para 4.26.
- There is a typing error in para 7.248 which almost changes the meaning of the first sentence – we assume "about" (sic) should be "above". In Figure 108 (page 442) the own infrastructure column refers to "phisical (sic) digging".

### 3. Consultation Questions

*Question 1: Do stakeholders agree with our proposed retail market definition? In particular, do you agree that separate markets continue to exist for traditional interface and alternative interface retail leased lines?*

Over the period of this review we expect AISBO and TISBO to become increasingly close substitutes. It is already possible, through placing appropriate equipment in the customer's premises to present a TISBO circuit as AISBO and vice versa<sup>1</sup>. Over the life time of the current review we expect the price and availability of this equipment to

<sup>1</sup> For example, equipment provided by MRV Communications Inc allows voice to be carried over Ethernet.

improve to such an extent that TISBO and AISBO circuits will become increasingly good substitutes for each other.

The demand of one good is normally affected by the price of that good, the price of substitutes and other variables. Demand is expressed as a demand function, typically shown as:

$$D_A = f(P_A, P_S, X)$$

Where  $D_A$  = Demand for good A,  $P_A$  = Price of good A,  $P_S$  = Price of substitutes and  $X$  = all other factors. How strongly  $P_S$  affects  $D_A$  is a function of how close the two products are as substitutes.

If we were to calculate the demand function for TISBO today, we would expect to find that the price of AISBO would be a variable in the equation but also that it would only have a weak influence on demand. The elasticity of substitution would be in the inelastic range and so the demand function for TISBO would be almost independent of demand for the other AISBO, and vice versa.

If a demand function were to be produced during this review period, and certainly by the time of the next BCMR, we would expect to see the elasticity of substitution in the elastic range as the two become closer substitutes. This expectation has implications for remedies and in particular charge controls which we will return to in our discussion on remedies.

*Question 2: Do stakeholders believe that there is evidence that might support an alternative view?*

See our comments in the introduction concerning the proposal that business grade ADSL, SDSL and EFM belong in a separate relevant market.

*Question 3: Do stakeholders agree with our proposed approach to geographic market definition?*

We explain in more detail our concerns with Ofcom's approach to geographic markets in response to Question 6 below. In general, whilst we understand Ofcom's desire to use a unit of analysis at a more aggregated level than individual premises, we believe that aggregation at postal sector level is not sufficiently granular to provide a true picture of competitive conditions.

*Question 4: Do stakeholders agree with our proposed retail geographic market definitions?*

UKCTA does not believe that it is any longer viable to include Hull as a separate market at the *retail* level. Leased lines by their nature are point to point products and in most cases we would expect one end of the line to be outside the Hull area. It is

therefore our opinion that the *retail* market should be considered as a single national market.

This statement applies only to retail and is not applicable to wholesale markets.

*Question 5: Do stakeholders agree with our proposed wholesale product market definitions? In particular, do you agree with Ofcom that: i) a separate market now exists for high bandwidth AISBOs, and ii) the very high bandwidth TISBO market now includes circuits at bandwidths above 140/ 155 Mbit/s?*

### **Retail – Wholesale Mapping**

We are concerned that Ofcom appears simply to transfer the retail market definition to the wholesale market without further thought as to whether this is actually possible or whether there are different conditions in the wholesale market which might make a simple transfer inappropriate. There is no assessment of whether wholesale conditions vary between the breaks Ofcom proposes (e.g. the 45mbit/s and 155mbit/s break). In the retail market, 155mbit/s is put in the same market with 622mbit/s even though Ofcom indicates that there would be a break in chain of substitution between these. We argue that there are different markets for end customer access for which the competitive conditions for 45mbit/s and 155mbit/s are alike, and another market for CP network extension which Ofcom should examine on a geographic basis to determine whether there are regions of greater competitiveness and, if so, Ofcom needs to consider whether these defined locations make it desirable to have sub-national markets for 155mbit/s.

### **AISBO**

UKCTA is not convinced by Ofcom's analysis that there is a break in the AISBO market and that circuits of less than or equal to 1gbit/s do not place a constraint on a hypothetical monopolist of high bandwidth AISBO such as to make a SSNIP profitable. We, therefore, do not agree with Ofcom's conclusion that there are two separate markets for AISBOs. We base this conclusion on two premises.

First, the current demand for higher bandwidth is so small that the demand cannot be classified as a market. Figure 68 in Annex 5 (Market Trends Analysis) shows that in 2006 all CPs sold approx 1,700 circuits of 1gbit/s and above. From BT's Current Cost Accounts (CCA) for 2006 – 2007<sup>2</sup>, we see that BT sold 1,000 internal and external Wholesale and LAN Extension Circuits and 575 Backhaul Extension Services of 1gbit/s. This implies that BT sold approx. 725 AISBO circuits of more than 1gbit/s wholesale to both its own and to CPs downstream businesses. Based on Ofcom's calculation of BT having 26% share of this market, this would suggest that the entire market for circuits of more than 1gbit/s was approx. 2,200 in 2006,

<sup>2</sup> Source: BT plc *Current Cost Financial Statements for 2007 including Openreach Undertakings* p39

compared with some 36,500 circuits of up to and including 1 gbit/s. In our view this is too small a demand to constitute a market in its own right.

Looking to the future, as LLUOs consider network optimisation they will wish to converge the services they pick up locally at a single handover (TDM and Ethernet) making the availability of 2.5G AISBO critical. LLUOs will also expect to increase backhaul capacity to meet growing bandwidth demands as a result of larger customer bases and increased per-user activity. So we are likely to see an evolution in demand over the life time of this review which would not have been apparent from the 2006 market data that Ofcom has used in its analysis. This makes a proposal to break the market at 1gbit/s premature.

Secondly, Ofcom bases much of its analysis of separate AISBO markets on the difference in cost between circuits up to and including 1gbit/s and over 1gbit/s. Ofcom has not demonstrated that because 1gbit/s cost less than 10gbit/s circuits they do not constrain a hypothetical monopolist of higher bandwidth AISBOs and so belong in separate markets. Based on Ofcom's initial analysis (which hasn't been completed and requires further scrutiny and more granular cost information from BT) Table 82 in Annex 11 indicates that BT is able to subsidise low bandwidth WES and WEES from high profits earned on high bandwidth circuits. BT's Return on Capital Employed (RoCE) on 10mbit/s circuits is 1% (compared to a WACC of 11.4%) and on above 1gbit/s circuits is 58%. This implies that BT is charging below the competitive price for low bandwidth services and comfortably above it for higher bandwidth circuits. To determine whether a SSNIP would be unprofitable, it would be necessary to use the competitive price, i.e. one which would generate a return in line with the cost of capital, rather than a price apparently below the competitive price.

There are significant common costs between AISBO circuits of all bandwidths such that a hypothetical monopolist of, say, low bandwidth AISBO would face entry from a supplier of high bandwidth AISBO in the event of a SSNIP, such as to make a price increase non-profitable.

On a forward looking basis, as Ofcom points out in paras 3.347 and 3.348, BT plans to roll-out Project Orchid within the timeframe of this review and this is likely to change the cost profile. According to Ofcom, "the incremental costs of providing additional bandwidth will not vary significantly...". This would suggest that during the review period any cost differences between low and high bandwidth AISBO will erode, further removing any differences in competitive conditions between low and high bandwidth AISBOs.

Faced with this likelihood, now seems the wrong time to be changing the market definition and creating two "markets", one of which is very small.

### **TISBO –Separate Bandwidth Markets**

Ofcom finds three product markets exist for TISBO: low bandwidth, high bandwidth and very high bandwidth. Much of the rationale for Ofcom's proposal is based on Figure 15<sup>3</sup> on page 83 of the consultation document which shows step changes in BT's pricing at 10mbit/s and 45mbit/s.

We believe Ofcom's analysis does not correctly define the relevant market, with subsequent effects on regulatory remedies. We base our counter argument on two key points.

First, using BT's prices to define market boundaries creates a circular argument. Ofcom starts by defining markets based primarily on BT's prices and then finds BT to have SMP in those markets (with the exception of high bandwidth in CELA). The key definition of SMP is that the firm is able to behave to an appreciable extent independent of customers. This would mean that it can set its prices without reference to customers. Ofcom's definition, therefore, defines the market based on the pricing behaviour of the SMP operator. So if BT set different prices, with a step change at say 34mbit/s Ofcom would presumably find the market boundary to be 34/mbit/s rather than 45mbit/s.

Secondly, Ofcom dismisses the possibility of supply-side substitution (paras 3.356 – 3.358) by claiming that because CPs already provide bandwidths across the full range, switching supply from one bandwidth to another would not constitute additional competitive constraint.

This seems to us to be an overly brief analysis and misses a critical issue which would question whether separate bandwidth markets exist. A firm offering symmetric broadband origination across the full range of bandwidths has substantial common costs: the same duct and fibre<sup>4</sup> is used to deliver both low speed and high speed access. A supply-side substitution analysis assesses whether in the event of a SSNIP by a hypothetical monopolist of one product, the provider of another product could enter the market without deploying new assets. The market under investigation therefore is a hypothetical monopoly rather than a competitive market.

Given the common costs across the bandwidths, it is clear that a provider of low bandwidth TISBO could respond to a SSNIP by a hypothetical monopolist of high or very high bandwidth TISBO by entering the market using existing assets, making the SSNIP unprofitable. This would clearly place the two products in the same market.

Taking the two arguments above together, we believe there should be a single market for TISBO with no bandwidth breaks.

### **TISBO – Very High Bandwidth Markets**

<sup>3</sup> Erroneously referred to in the text as Figure 7

<sup>4</sup> Given that market reviews are forward looking, we believe it is appropriate to refer to fibre rather than copper.

The above comments notwithstanding, we do not agree with Ofcom that 155mbit/s TISBO circuits belong in the market for Very High Bandwidth and believe that Ofcom has fundamentally misunderstood the demand for such circuits. If there are separate markets based on bandwidth then 155mbit/s circuits belong in the high bandwidth market not the very high bandwidth market.

Much of the demand for 155mbit/s circuits is for backhaul by CPs from sites such as tele-houses, ISPs etc. CPs tend to buy several 155mbit/s to the same building with the expectation that aggregated traffic from the building will require more than 155mbit/s. It is wrong, therefore, for Ofcom to treat purchases of 155mbit/s circuits as purchases of that bandwidth, but they should rather be seen as purchases for much larger bandwidth where CPs consider multiple 155mbit/s circuits to be the most efficient way to buy these circuits. The demand, therefore, is not for 155mbit/s per se, but for the total bandwidth to the site.

### Trunk

In general we welcome the change in the definition of trunk segments – it will mean that CPs are no longer buying so much trunk in particular in London. However, we would welcome more clarification of the distinction between backhaul and trunk, particularly in the light of Project Orchid which is not well understood at this stage.

*Question 6: Do stakeholders agree with our proposed wholesale geographic market definitions? In particular, do you agree with Ofcom that a separate market now exists in the UK for high bandwidth TISBOs in the Central and East London Area (CELA)?*

### Separate CELA Market

Ofcom's use of postal sectors provides too little granularity and, when coupled with its assumption that CPs would be prepared to dig 250m from a "flex-point", provides an inaccurate assessment of the competitive conditions in the market. Ofcom's model demonstrates the theoretical *possibility* of competition and therefore of competitive conditions and so geographic markets, but not the *actuality or prospect* of competition. We believe that a more accurate assessment of competitive conditions would inevitably lead to a conclusion that there is a single national market for both business connectivity products.

We find the analysis of the distance CPs would be prepared to dig particularly weak. According to Ofcom's own assumption (para. 7.225 and 7.226) the cost of building fibre is between £50 - £135 per metre plus £1,500 – £3,500 to obtain the way-leave. For a 250m dig, therefore, the cost could be between £14,000<sup>5</sup> and £37,250<sup>6</sup>. In

<sup>5</sup> (250 x £50) + £1,500

<sup>6</sup> (250 x £135) + £3,500

addition to these charges must be added the cost of surveying and any continuing costs of maintenance and for the way-leave, and business rates.

Ofcom's use of a benchmark of a 250m radius around a flex-point suggests that the 250m refers to a straight line from the flex-point to the customer. If this is the case, then costs would in fact be substantially higher as it is extremely unlikely that a dig could take place in straight line. Rather it would need to go around buildings and other obstacles.

These costs must either be recovered through monthly rental charges or by an up-front payment, or absorbed by the CP. CPs may be prepared to absorb such costs for a long term retail contract of several years. However, wholesale contracts tend to be much shorter, usually just one year, after which the wholesale CP cannot guarantee continuing revenues.

Finally, when a CP makes a decision whether to build its own fibre or buy from an existing provider, it will do so on a forward looking assessment of the costs compared with buying-in a PPC.

UKCTA's membership includes firms which buy substantial amounts of wholesale access from their points of presence to customer premises. Their experience in the market means that they are in a strong position to know which CPs have their own infrastructure and, in CELA, to know this on a building-by-building basis. In a large building, where substantial internal cabling is required, wholesale buyers of symmetric broadband access even know this information on a floor-by-floor basis. Ducting resources within buildings is often limited and the first supplier to the building has a strong advantage of subsequent CPs seeking access to individual floors.

Based on existing infrastructure, competitive conditions are known to vary from one building or even one floor to the next, even in areas with a high density of business premises such as the City of London.

An assumption that a CP would be prepared to dig new network in a radius of 250m from a flex-point and therefore be able to compete for business even in a building where it is not connected, is not credible. There are several reasons why this is so:

- i) Cost: Digging costs up to £135 per metre (see para 7.225). This is a significant cost when set against the rental income likely to be earned. Unless the customer is willing to meet the cost it is unlikely that CPs would be prepared to build more than a few tens of metres from a flex-point. Given that an existing CP in the customer building would not face these costs, and so not have to recover them from the customer, it is unlikely the customer would pay for a new build.
- ii) Time: CPs cannot immediately begin digging but need to obtain permission from the local authority. This may mean they cannot dig for several months: a delay the customer may not be prepared to accept.

Against these barriers to digging, the CP would set the revenue it will earn, the contract length and its relationship with the customer. However, even if all these support a decision to dig, the assumption of an average of 250m significantly distorts the assessment of competitive conditions.

Taking the above facts into consideration, Ofcom would not find the homogenous competitive conditions within any postal sector that its analysis implies. Rather it would find competition in some buildings but not in others and low barriers to expansion only where a customer is close enough to a CPs flex-point to make digging out to the customer economically feasible.

In our view, the patchwork quilt of competitive conditions we would find would not amount to a separate geographic market even within CELA. There would not be enough contiguity between small islands of competition within a postal sector to create a separately identified market.

We therefore do not agree with Ofcom that a separate geographic market exists in CELA. Rather the lack of distinct competitive conditions leads to the conclusion that a single national market exists (except Hull) in wholesale markets.

*Question 7: Do stakeholders agree with our proposed approach to SMP assessment?*

Whilst we agree with the approach, we find that Ofcom places excessive emphasis on market shares. Particularly because the market shares are based on volumes not values. As BT is likely to be the price leader in most markets, market share calculations based on volumes are likely to understate BT's market share.

Further, and especially in the light of the above comment, some of the qualitative analysis is exceptionally brief to the extent of being cursory. We would like to see more detailed analysis of these qualitative measures to compensate for the lack of market share data based on values.

*Question 8: Do stakeholders agree with our assessment of SMP in the retail low bandwidth market in the UK excluding the Hull area? In particular, do you agree with our assessment that regulation in this market is still required for the time being?*

Yes. However, as stated above we believe a single national market exists for retail TISBO.

*Question 9: Do stakeholders agree with our assessment of SMP in wholesale TISBO markets in the UK excluding the Hull area?*

Our concerns discussed above regarding bandwidth breaks in the market notwithstanding:

- We agree with Ofcom that BT has SMP in the low bandwidth wholesale TISBO market.
- As discussed above, we do not agree that on the evidence presented by Ofcom, the high bandwidth TISBO market can be disaggregated between CELA and the rest of the UK. We therefore regard the market as national. We believe that an SMP assessment at the national level would show BT to have SMP.
- The same applies to very high bandwidth TISBO. In response to Question 5, we showed that much of the demand that Ofcom sees for very high bandwidth TISBOs is not for individual circuits, but for total bandwidth to a site. This gives a distorted picture of the market power of BT, making it look as if it has less than in fact it does. If the analysis were conducted on a circuit by circuit basis, Ofcom would find that BT still has SMP in connectivity to sites taking an individual 155Mbit/s or 622Mbit/s circuit. Ofcom's SMP assessment has been distorted by the fact that any competing fibre has been justified on the grounds of much larger overall bandwidths combined with historic excessive prices.

*Question 10: Do stakeholders agree with our assessment of SMP in wholesale AISBO markets in the UK excluding the Hull area?*

Our concerns regarding the break in the market notwithstanding:

- We agree that BT has SMP on low bandwidth AISBO.
- We do not consider it realistic to describe high bandwidth AISBO as a separate market due to its small size.

*Question 11: Do stakeholders agree with our assessment of SMP in the wholesale trunk segments market?*

Yes, we agree with Ofcom.

*Question 12: Do stakeholders agree with our assessment of SMP in the retail low bandwidth market in the Hull area?*

As stated in our response to Question 4 above, it is in our view no longer appropriate to define a separate retail market for Hull.

*Question 13: Do stakeholders agree with our assessment of SMP in wholesale TISBO markets in the Hull area?*

We make no comments regarding wholesale markets in the Hull area.

*Question 14: Do stakeholders agree with our assessment of SMP in wholesale AISBO markets in the Hull area?*

*Question 15: For those markets where we have found no SMP and propose to deregulate, do you agree with Ofcom that the available evidence supports the finding of no SMP?*

Our main concern with the markets where Ofcom has not found SMP is that our analysis indicates that what Ofcom defines as “markets” should not really be considered as separate markets and that a proper market definition would lead to a finding of SMP. Even if we accepted the new market definition, we do not consider that Ofcom has properly considered likely developments, over the lifetime of this review, in the demand for high bandwidth AISBO.

*Question 16: Do stakeholders agree with our assessment of the appropriate regulatory option and our proposed remedies for the wholesale TISBO markets in the UK excluding the Hull area?*

- In response to Question 1, we described how TISBO and AISBO are likely to become closer substitutes during the course of this review period and may well be considered to be in the same market by the time of the next BCMR. We also pointed out that the demand for one (e.g. TISBO) will be affected by demand for the other. Whilst we believe that charge controls and cost orientation are appropriate remedies for markets where enduring SMP exists, Ofcom must be careful that the rate of substitution between TISBO and AISBO is not artificially accelerated or suppressed. For example, if the charge control on TISBO of a given bandwidth too low in comparison to AISBO of the same bandwidth then it is possible that the rate of substitution will be distorted and will take place less quickly than if both were set at their respective competitive prices. This would lead to an allocatively inefficient outcome.
- We are pleased that Ofcom recognises that existing measures have not been fully effective in this market, with BT’s market share increasing and question marks over BT pricing. The 2006 replicability review also concluded that BT’s own downstream businesses were given advantage over other CPs. We, therefore, agree that additional measures are required.
- We are pleased that Ofcom is considering including wholesale SDSL in the next charge control. We believe that more must be done to encourage the sustainable use of this product, mirroring its use in the EU. UKCTA members will work with BT to design a new wholesale business grade product based

on 21CN, however, take-up of the current product will not increase until pricing and SLA issues are resolved.

- Where a charge control is needed to remedy enduring SMP, entirely new starting charges will be required in the next charge control period and not just be carried over from the old charge control. Starting charges must take into consideration current flaws in BT's accounts, correcting any future over-recovery
- We are disappointed that Ofcom talk about only 'encouraging' BT to address replicability issues. Ofcom have been encouraging BT for two years (longer if the transparency clause in the undertakings is taken into account) and industry is frustrated at lack of progress and had hoped the BCMR would provide more details. Specifically, CPs need more detail on how BT is proposing to create a replicable product set and the timetable for any regulatory review.
- The current OTA work on SLAs / SLGs is a high priority for industry and we would urge Ofcom to act quickly if a satisfactory outcome is not reached.
- We welcome the clarification that sawtooth discount structures are anti-competitive and should be prohibited.
- We agree with Ofcom's statements that 'the cost-orientation obligation was intended to ensure that prices reflected LRIC (Para 8.100) and that 'BT is currently subject to a basis of charges obligation which requires it to be able to demonstrate that its charges for trunk segments are reasonably derived from the costs of provision, measured on a forward looking LRIC basis (Para 8.286). We support the continued use of LRIC with the appropriate mark up for common costs as the benchmark for assessing BT's compliance with its cost orientation obligation. Any standalone cost methodology which allows BT to recover common costs more than once is clearly not a satisfactory means of determining cost orientation.
- We are pleased that Ofcom is considering including excess construction charges in the next charge control. Operators have no influence over these charges at present and we welcome this as a step towards addressing our concerns.
- We are pleased that Ofcom is considering including accommodation and interconnect services in the next charge control. We re-iterate the earlier point regarding starting charges for ISH / CSH equipment. We do not believe these charges are currently cost orientated, new starting charges are required.
- We look forward to further consultation on TILLAPs and TILLBPs.

*Question 17: Do stakeholders agree with our assessment of the appropriate regulatory option and our proposed remedies for the wholesale low bandwidth AISBO market in the UK excluding the Hull area?*

1. Proposal to have a charge control for Ethernet Services up to 1Gbit/s
  - Provided that any charge control does not distort the market, UKCTA supports this proposal and we look forward to commenting on the consultation document when it is released. However, at this stage we make no comment regarding which aspects of the charges (i.e. WES, WES LA or Main Link per m charges) should be reduced or be the focus of the control.
  - There are a number of unknowns regarding the practicality of a charge control. Specifically, Project Orchid may offer significant efficiency and cost improvements if the product is successfully adopted by CPs but this is hard to predict at this stage. The implication of these matters will need to be given careful consideration.
  - We wish to stress the importance of including Excess Construction Charges within the scope of the Charge Control work
2. We support the proposal to roll over the results from the SLA/SLG work
3. Ofcom proposes to remove the notification periods for price changes, technical notifications, etc. on the grounds that EoI provides sufficient comfort. They will be replaced by a general obligation to provide reasonable notification to third parties. We wish to point out that:
  - The undertakings form an overlay to ex-ante regulation and should not be seen as a replacement for it, not least because there are very limited control and enforcement mechanisms in place.
  - Some BT products are targeted at 3<sup>rd</sup> parties only (e.g. BES) and therefore EoI will not provide the protection suggested by Ofcom.
4. Removal of the current 25km distance limitations on Ethernet services
  - UKCTA welcomes Ofcom's proposal to remove the distance limits on WES and BES. However, the 25km limit written into the undertakings for WEES should remain.
5. Proposal to extend obligations to interconnection and accommodation services.
  - UKCTA support this proposal as discussed in our introductory comments.

*Question 18: Do stakeholders agree with our assessment of the appropriate*

*regulatory option and our proposed remedies for the wholesale trunk market?*

- We welcome Ofcom’s recognition that over recovery is occurring in trunk and that a charge control is, therefore, required. We would urge Ofcom to ensure that the starting charges take into account current flaws in BT’s accounts to correcting over recovery in future.
- UKCTA supports Ofcom’s assertion that LRIC should continue to be used as the appropriate basis for assessing BT’s compliance with its cost orientation obligation.
- We agree with Ofcom that the current period for notification of prices applied in the TISBO market should be extended to include trunk.

*Question 19: Do stakeholders agree with Ofcom’s assessment about the appropriate regulatory option and our proposed remedies for the retail low bandwidth traditional interface market in the UK? In particular, do you think that Ofcom should accept BT’s proposed voluntary undertakings that it will continue to supply new analogue and sub-2Mbit/s retail circuits until 2011 or earlier if, subject to industry agreement and consent by Ofcom, the underlying platform is closed at an earlier date; that it will not increase its prices for analogue services more quickly than the rate of inflation (RPI-0%) for a period two years following the publication of the LLMR statement i.e. from 2008 to 2010; and that it will commit to a further two-year cap, the level of which would be agreed with Ofcom prior to 2011?*

Whilst UKCTA generally has reservations about a voluntary commitment, we accept that this is a practical option.

However, we do not agree with the implication of para. 8.333 that the SMP obligations on BT should fall away after a four year period without a formal market review.

*Question 20: Do stakeholders agree with our assessment of the appropriate regulatory option and our proposed remedies for the wholesale TISBO markets in the Hull area? In particular, do you think Ofcom should accept KCOM’s proposed voluntary undertaking not to increase the prices of its wholesale TISBO services by more than RPI+0% over the next four years?*

No comment.

*Question 21: Do stakeholders agree with our assessment of the appropriate regulatory option and our proposed remedies for the wholesale AISBO markets in the Hull area?*

No comment.

*Question 22: Should Ofcom investigate further the case for introducing a dark fibre remedy by undertaking a market review of the relevant market? If such a review were to be undertaken, is it likely that BT or any other CP would be found to have SMP in that market? And if SMP were to be found, what would be the pros and cons of requiring the dominant provider to make dark fibre in the access network available to third parties?*

UKCTA members would welcome an investigation by Ofcom of the case for introducing a dark fibre remedy. However, a clear definition of what is meant by “dark fibre” would be necessary before any we feel able to make any further comments.