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SUMMARY

Ofcom estimate the UK market for retail business connectivity services is worth about £2.1bn per annum but in practice this review is about far more. The wholesale services covered underpin all the fixed and mobile networks in the UK. This review is not just about leased lines. It is fundamental to all telecommunications services, both for residential and business end users, and is vital for effective competition and consumer choice.

In this review Ofcom has made some material changes to the definitions of the wholesale markets that are covered. Cable&Wireless do not believe these changes are properly justified and crucially they expose the inadequacies of the data collected by Ofcom in order to conduct this review. The combination of the choice of market definitions and poor data quality has misled Ofcom to incorrectly conclude that BT no longer has SMP in traditional interface circuits of 155Mbit/s and alternative interface circuits at bandwidth of greater than 1Gbit/s.

Cable&Wireless believe that in the wholesale markets the underlying technology, either copper or fibre, is the key driver to variations in competitive conditions and therefore it should feature more strongly in the market definitions. In addition, we believe it is essential that Ofcom separate out the demand created by connectivity to Communications Provider sites, data centres and telehouses as this type of demand is subject to very different competitive conditions to those in the provision access to other business locations.

In this review Ofcom have attempted geographic analysis for the first time within the business connectivity markets. The analysis is flawed. The assumptions used concerning the economic distance over which new fibre build can be justified, the aggregation at postcode sector level and the existence of a wholesale merchant market are incorrect.

We recognise that it is unlikely that all of the issues that we raise within this response will be able to be addressed within this market review. However we believe that the suggestions we have made to improve the geographic analysis can be implemented

reasonably quickly. The issues surrounding the very high bandwidth markets are more significant but if Ofcom feel that significant work is required to address them we believe it may be possible to proceed quickly with the remaining markets and address the two very high bandwidth markets in a slightly longer timeframe.

Cable&Wireless very much welcome the proposals that Ofcom make to include trunk services and alternative interface circuits within the scope of the next charge control. These are issues of significant concern and we believe that the price of PPCs is currently excessive. Ofcom should set new starting charges, rather than the more normal glide path, as part of the charge control that they propose to cover PPCs.

The proposals covering Equipment Location Space are also very important. Since Ofcom's strategic review, BT has frustrated attempts by Communications Providers to obtain a fit for purpose location space product that would enable them to purchase the WES Local Access product launched by Openreach in January 2007. Ofcom's proposals go some way to addressing these issues although it will be important to ensure that Communications Providers only have to buy a single location product for all their requirements if the end solution is to be efficient.

We also welcome Ofcom's initiative to discuss the opportunity for the provision of unbundled fibre access. Fibre is the fundamental economic bottleneck for many business connectivity services just as copper is for broadband. Ofcom's policy to encourage Local Loop Unbundling is already showing the benefits of competition and service innovation in the broadband market and Cable&Wireless is keen to explore the possibility of similar benefits from unbundled access fibre.

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1 INTRODUCTION

Ofcom estimates the UK market for retail business connectivity services is worth about £2.1bn per annum. This may appear a relatively small proportion of the £40bn UK retail telecoms market but in reality this review is far more significant. The wholesale markets covered in this review support far more than just this £2.1bn market. The connectivity services considered are the basis of all the UK's telecommunications networks, connecting together thousands of network sites and in many cases connecting end users to those networks. These services include the backhaul that is fundamental to LLU and broadband more generally and those that the mobile network operators use to connect their masts and switches. They provide connections to end users for corporate voice, corporate internet access and international connectivity. This review is not just about leased lines. It is fundamental to all telecommunications services, both for residential and business end users, and is vital for effective competition and consumer choice.

The importance of the review cannot be overstated. There are many problems impacting the competitive situation within the markets covered by this review and the requirement to understand and address them has existed for some time. The review is now long overdue.

PARTIAL PRIVATE CIRCUITS ARE OVERPRICED

The price of Partial Private Circuits (PPC) provides an example of these issues. In the 2004 review Ofcom required BT to charge PPC trunk on the basis of cost oriented prices. However BT's prices for trunk have remained significantly higher than for terminating segment. This is contrary to expectation, which is that the long distance, core network, connectivity is less expensive, not more, when compared with local networks. In 2005, after failing to agree new lower prices for trunk, Energis Communications brought this issue before Ofcom who opened an own investigation into BT's price for trunk. Although

Ofcom identified a number of concerns it closed that investigation in December 2005. It decided it needed better information, that BT had committed to provide, and that the forthcoming market review was the best place to deal with these concerns as they felt that the issues transcended both the trunk and terminating markets.

That is now over two years ago; the price of PPC trunk is still excessive. In fact, far from providing the improved information it committed to, it has now become clear that BT's regulatory financial statements relating to these markets are even more misleading than Ofcom had thought at the time. Ofcom's subsequent work on replicability has highlighted that material revenue streams are not captured by the regulatory accounts and further, that the way BT treats its own downstream business is much more favourable than the way it treats its external customers. In a report commissioned by Cable&Wireless and THUS in December 2007, RGL estimated that BT's PPCs are overpriced by as much as 26%.

Cable&Wireless welcome the work Ofcom has done to date to uncover these issues and their commitment to investigate them further and to correct them for the future. However, as we stand BT has succeeded in delaying the correction of these issues for several years and throughout that period end users have paid too much and BT's competitors have been put at significant disadvantage to the rest of BT. This is a clear example of the competition problems currently happening in the markets under review. Ofcom must address them and quickly. This review is the opportunity to address them going forward but it is also essential to compensate BT's customers for the harm they have suffered and remove the incentives from BT to behave in this way in the future.

BT DELAYS FRUSTRATE THE DEVELOPMENT OF ETHERNET ACCESS

Cable&Wireless share Ofcom's vision of encouraging infrastructure competition at the deepest level in the network where it can be effective and sustainable. In our view the serving exchange, at least for the largest exchanges, is the level where Ofcom should

encourage competition. Important to this vision were the commitments from BT that Ofcom obtained as part of its strategic review to launch separate access and backhaul products.

As an established LLU operator Cable&Wireless has invested in capability at a significant number of BT Serving exchanges, both equipment space and connectivity. Therefore the launch by Openreach of WES Local Access in January 2007 provided the opportunity to make better use of that capability and to provide our customers with better service and better value for money.

However, over a year after WES Local Access was launched it remains a virtually unused product. [and arguably BT itself shouldn't be able to use it whilst other CPs are prevented from doing so.] It will be clear to BT that when their wholesale customers have access to WES Local Access not only will their wholesale revenues reduce but those communications providers will put greater pressure on BT's retail business through lower prices to consumers. They will also be aware that the delays to their own 21CN mean it will be some time before they have access to it themselves in order to respond to their competitors. It cannot be a co-incidence that BT's own actions have made it virtually impossible for its wholesale customers to buy the product themselves.

The key issue is the space. BT refuses to allow LLU operators to put equipment into their existing space that would enable them to make use of WES Local Access. Instead they insist those operators either buy additional, more expensive, Netlocare space or that they convert their entire LLU space at an exchange to Netlocare at a very significant price premium. However, even if operators are willing to pay the higher rates the process and service levels that underpin the Netlocare product are just not good enough. All these problems have been addressed at least to a reasonable extent within LLU and there should be no excuse for the industry to return to square one for Netlocare. To make matters worse most of the issues we see today we raised over two years ago.

The problems are not just down to the lack of a fit for purpose space product. There is still no clarity over the development of a similar access product for traditional interface, known as Tillap in BT's telecoms strategic review undertakings. The case for investment in access requires the demand from both TDM and Ethernet access if it is to be successful.

LENGTH AND COMPLEXITY OF THE DOCUMENT

Cable&Wireless recognises the complexity of the task facing Ofcom with this review, the issues are both numerous and complex. However we have already stressed the importance of the review to the market and Ofcom's own obligations under the Communications Act. The market review document is very long, we feel that its length and complexity mean that it is simply not practical for us to raise all the relevant issues within the relatively short consultation period or properly cover all those that we do raise.

In future, we would much prefer Ofcom to adopt a two-consultation stage approach for such important and complex reviews. Time is clearly vital, but in a two stage process the first document could have been published much earlier giving all stakeholders more time to undertake their own analysis on these very important issues.

2 MARKET DEFINITION AND SMP ASSESSMENT

Cable&Wireless believe that Ofcom has failed to correctly identify the relevant markets in this review. As a result it has not properly identified all the wholesale markets in which BT has SMP or put in place a set of remedies that align with its own regulatory objectives and its statutory duties.

There are two main issues. Firstly we recognise the difficulties that Ofcom have had in obtaining and interpreting the underlying data required for this review. Secondly, the geographic analysis is flawed.

This section identifies the markets that Ofcom should consider and highlights the areas where the current proposal is incorrect. However, we recognise that some of the changes that we suggest are not possible for this review and therefore we make some more practical suggestions to address the deficiencies in the analysis that will help to ensure Ofcom arrives at an outcome that is consistent with its objectives and duties.

2.1 RETAIL MARKETS

The starting point for market definition is to define the retail markets because wholesale markets are derived from the demand for retail markets. With respect to leased lines it is acknowledged that the retail and wholesale markets are far wider than just leased lines themselves. Within this market review Ofcom has gone some way to expand the market definition process in order to consider more than just the leased lines market and in doing so has increased the scope of the market to the wider market of “business connectivity services”.

This analysis is a marked improvement on previous leased lines market reviews, however it is not clear that Ofcom’s analysis and data collection has correctly identified and

researched all of the relevant retail demand types. As well as national retail leased lines Cable&Wireless believe that the following retail demand types drive demand in the relevant wholesale markets considered within this review:

- Virtual Private Network type services (e.g. IP-VPN, ATM and Frame Relay)
- Dedicated Internet Access (Including symmetric and corporate grade asymmetric)
- Voice Services for call centres, corporate offices and service providers (e.g. ISDN30, DPNSS and other multi-line digital services)
- International connectivity (where one end is in the UK)
- Dense Wave Division Multiplexed connectivity services

Crucially Ofcom defines the retail market as including only symmetrical services. We have argued in the Wholesale Broadband Access (WBA) market review that high end (for large businesses) asymmetric services are used as input to business connectivity services.

The retail markets identified above directly drive wholesale demand, each local end within the UK requires a wholesale input from a market relevant to this review whether they are self supplied or purchased from a third party. The demand derived in this way is not the only relevant demand, there is also a set of intermediate wholesale demands that in some cases may be difficult to distinguish from retail demand. This demand includes connectivity used by Communications Providers in order to build their own networks, e.g. mobile base station access, backhaul for local loop unbundling and the connectivity between network sites and other Communications Providers. Cable&Wireless understands that these intermediate wholesale demands are not included within the retail markets analysed by Ofcom although it should be acknowledged that it will be very difficult to accurately distinguish such sales from true retail demand.

Ofcom defines five retail markets; retail low bandwidth TISBO up to and including 8Mbit/s; retail high bandwidth TISBO up to and including 45Mbit/s; retail very high bandwidth

TISBO above 45Mbit/s; retail low bandwidth AISBO up to and including 1Gbit/s; and retail high bandwidth AISBO above 1Gbit/s.

Cable&Wireless does have some concerns over the use of these five retail markets. The concerns relate only to the manner in which conclusions in these retail markets appear to be adopted in the derived wholesale markets and not to the fact that the chosen definition fails to capture competition concerns in the retail markets. The key issues are:

- The bandwidth breaks appear arbitrary;
- If captured correctly the true demand from national retail leased lines will only drive a small part of the demand in the relevant wholesale markets and therefore there is a danger that key issues in wholesale markets will be missed;
- The difference between AISBO and TISBO is becoming less significant; and
- It is not practical to undertake geographic analysis on retail leased line markets, these markets are point to point in nature and therefore any such analysis has to be undertaken on the combination of the two ends rather than the location of any one single end.

These issues will be covered in more detail in the section on the wholesale markets.

2.2 OVERVIEW OF WHOLESALE MARKETS

Ofcom proposes the existence of six wholesale markets. A national market for trunk segments; a national market for low bandwidth TISBO (8Mbit/s and below); a market for high bandwidth TISBO (8Mbit/s to 45Mbit/s); a market for very high TISBO (above 45Mbit/s); a national market for AISBO up to and including 1Gbit/s; and a market for AISBO above 1Gbit/s. There are two material changes to the market definitions from the last market review. In the 2004 market review Ofcom concluded the market for high bandwidth TISBO circuits ended beyond 155Mbit/s, for this review the break between the high and very high bandwidth market falls at 45Mbit/s. Secondly in the 2004 market review

Ofcom concluded that there was a single AISBO market and that a break between 1Gbit/s and higher did not exist.

Ofcom relies upon its analysis of retail markets in order to substantiate the markets identified at the wholesale level. It is general practice in the process of market definition to firstly define retail markets. However as we discuss earlier in the section on retail markets Cable&Wireless do not agree that all of the conclusions in the retail markets are correct or that they can be simply applied across to wholesale markets.

This section on wholesale markets covers the following issues:

- The bandwidth breaks in the wholesale markets are not justified and, particularly for higher bandwidth circuits, the difference between wholesale and retail demand characteristics misleads the analysis;
- Differences between AISBO and TISBO continue to exist although there is now substitutability between them in some areas particularly at the higher bandwidths;
- In practice it is the underlying technology used for the origination services that drives competitive conditions and Ofcom should put much greater emphasis on this within its market definition than it has within this review;
- Although the change to the definition of trunk circuits appears logical care must be taken to avoid issues arising; and
- The geographic analysis is fundamentally flawed. Although there may be geographic variations to competitive conditions they are much less significant than Ofcom's analysis suggests and, if anything, will occur in the higher bandwidth services.

In addition to these wholesale markets identified by Ofcom, Cable&Wireless believes the following three markets also exists; wholesale broadband access (including but not limited to high end ADSL, SDSL); and wholesale DWDM; and wholesale network extension services for communications providers.

2.3 BANDWIDTH BREAKS

TISBO

At the retail level Ofcom has found a break in the chain of substitution leading to their view that there are three separate TISBO markets depending upon bandwidth. A low bandwidth market for up to 8Mbit/s, a high bandwidth market for between 8Mbit/s and 45Mbit/s and a very high bandwidth market for speeds over 45Mbit/s. The analysis appears to be based exclusively on the wholesale price of PPC inputs to support the retail leased line services. Cable&Wireless do not believe that this analysis is valid. The cost of the service (i.e. the price of the wholesale input) on its own is insufficient to determine market boundaries and even if it was the cost information used is inappropriate. There are a number of issues:

- It is not appropriate to set retail market boundaries that drive regulation based upon prices BT themselves have some control over;
- In any event the RGL report has shown significant problems with PPC prices that make them even less suitable for this purpose;
- It is incorrect to assume that the end user requirement is simply a matter of the amount of bandwidth and it is possible to construct any given bandwidth from any combination of circuit speeds. In practice the application or the CPE used will often dictate the specific requirement;
- As PPC prices have changed little since the 2004 market review it is not clear how this methodology could have caused the change in the breakpoint between the high and very high bandwidth markets; and
- If this methodology were to be correct then there would likely be more bandwidth breaks, for example between 155Mbit/s and 622Mbit/s.

It is clear from this that there is no compelling evidence that Ofcom has correctly identified the bandwidth breaks in the retail markets. However, of greater significance is that even if these bandwidth breaks were correct at the retail level it simply does not follow that they translate through to the wholesale markets:

- The retail leased line markets, if properly analysed, form only a portion of the total demand in the wholesale markets;
- If cost is the key driver for defining bandwidth breaks then it would be different in wholesale markets compared to retail as the value based pricing approach used within PPCs (as the cost input to retail) does not match accurately the underlying incremental costs of providing the wholesale TISBO circuits; and
- It cannot be correct to define wholesale markets as a result of the prices set by the very regulation that applies to those markets in the first place.

For these reasons Cable&Wireless do not believe that Ofcom's analysis of the bandwidth breaks can be justified. In particular, there is no evidence that 155Mbit/s circuits have moved into the very high bandwidth market since the last review.

AISBO

Bandwidth breaks within the AISBO retail market have been derived based largely upon analysis of the underlying cost of the wholesale inputs (WES costs). In this market Ofcom has found a break in the market for circuit speeds at greater than 1Gbit/s. As for the TISBO case above the evidence does not support this conclusion and Cable&Wireless does not believe that this break exists. The consequence of this bandwidth break is that it makes Ofcom's SMP assessment much more difficult, errors are more significant and lead to an incorrect conclusion that the market is national and that BT do not have SMP.

The analysis of AISBO shares some of the issues covered under TISBO but there are further issues that we wish to draw Ofcom's attention to:

- Ofcom is incorrect to exclude DWDM from this analysis. The 2.5Gbit/s AISBO circuit is probably the most important circuit speed in this market in the near future and we note that most DWDM circuits are in fact at 2.5Gbit/s. In fact we believe that the equipment used to provide WES/BES 2.5Gbit/s is actually DWDM capable equipment;
- The cost analysis needs to be more thorough, it appears that BT has provided one view but it is necessary to consider the implications of different equipment costs and the way that costs will change over the review period, we think the graph shown by Ofcom in figure 18 exaggerates the cost increase at high bandwidths;
- It is necessary to look further than just cost, particularly when considering the wholesale market. Ofcom's figure 18 shows that the cost of a 10Gbit/s circuit is roughly twice that of a 10Mbit/s circuit but the price of the 10Gbit/s is many times that of the 10Mbit/s. The reason BT can use this value based pricing approach is that all these circuits are in the same market and BT has SMP in that market;
- If Ofcom were correct that there is a separate AISBO market for high bandwidth its very small size would make analysis particularly problematic. Ofcom has clearly found it difficult to gather the data for this review and where relatively small volumes are concerned it is much more likely that errors become material in the analysis; and
- It is necessary to consider more bandwidth options and the implications of those options. For example it is very likely that there will be many retail bandwidth increments available between 1Gbit/s and 10Gbit/s and differences in incremental costs of these will be small. Using the approach Ofcom has adopted this would suggest that 1Gbit/s is in the same market at 2Gbit/s and 3Gbit/s.

The finding of a separate market for AISBO at greater than 1Gbit/s is most crucial when it comes to the backhaul market. Over the period of this market review BT and LLU operators will start to deploy backhaul circuits at greater than 1Gbit/s. In the very near term backhaul of 2.5Gbit/s is absolutely fundamental for Ofcom's vision of infrastructure

competition as this is required to enable convergence of TISBO and AISBO; 1Gbit/s cannot provide this functionality. It should be very clear to Ofcom that BT continues to have SMP in backhaul from at least a significant number of its exchanges at circuit speeds such as this. However, errors in market definition have complicated the analysis to the point where Ofcom has found a separate national market for AISBO at greater than 1Gbit/s where BT does not have SMP; this is simply incorrect.

2.4 HIGH BANDWIDTH CIRCUITS TO CP SITES

The issue of whether and where bandwidth breaks occur is a matter of how to undertake the market analysis, there is little hard evidence that makes one view clearly correct, or incorrect. However, by considering circuit speeds within specific bandwidth ranges it does result in a significantly more serious problem; the analysis of the high bandwidth markets is misdirected by considering two very different types of demand.

Analysis of demand for high bandwidth services, 155Mbit/s in particular, reveals that a large proportion of the demand is for connectivity to Communications Provider or data centre sites. The business case to satisfy this type of demand is very different to that which would exist for a large office building that requires a 155Mbit/s circuit. As a result competitive conditions that surround the two types of demand are very different meaning that in reality they fall within different markets. Important characteristics of CP or data centre sites that differ from a typical office building are as follows:

- The overall demand to the site is many GBit/s rather than Mbit/s. A circuit of, for example, 155Mbit/s is typically just one of many that will ultimately be provided to that site maybe because different circuits support different services, are required at different times or are routed to different destinations. Clearly, it is the overall capacity to the site that drives any decision to build new fibre rather than buy from BT or a third party;

- The economics of building connectivity are heavily dependant upon the initial investment in fibre; particularly given technology innovation the cost to add new capacity over existing fibre is relatively cheap. Therefore, if fibre has already been provided based upon some previous justification (e.g. to establish an interconnect) it will be much easier to justify additional circuits; and
- The location of Communications Provider and data centre sites is often selected with fibre connectivity in mind whereas a business will be much less likely to choose the location of its office based upon its proximity to fibre.

Once these factors are considered it is quite clear that the competitive conditions surrounding the provision of high bandwidth services to Communications Provider and data centre sites will be very different to those for the supply of similar services to other business sites. Ofcom has not distinguished between the two whereas within high bandwidth markets the former is likely to be a very material proportion of the overall demand. As a result Ofcom has gone on to erroneously draw conclusions about the competitive nature of one market based largely upon data from the other.

Cable&Wireless suggest that Ofcom could correct this in one of three ways:

- If bandwidth breaks are not used then the Communications Provider type demand will be a small proportion of the overall demand and therefore will not unduly impact the analysis;
- If Ofcom feels bandwidth breaks are essential then they should be based upon overall demand to the site, not the individual circuit speed, as the individual circuit speed is not a key driver of competitive conditions. However, we recognise the practical difficulties of this approach; and
- Alternatively, Ofcom should separate out the market of 'network extension services' that would include backhaul from BT, other Communications Provider and data centre sites. This approach has the benefit that as a result of the limited size of the market it would be practical to do a proper geographic analysis which would be

necessary as BT clearly continues to have SMP in backhaul from at least some of its sites.

2.5 DIFFERENCES BETWEEN AISBO/TISBO

Cable&Wireless doubts whether substitutability between TISBO and AISBO is as stark as Ofcom believes.

155Mbit/s

155Mbit/s TISBO has been in decline as CPs have switched to purchasing 155Mbit/s AISBO where ever this is viable (ie where circuit lengths are short enough to enable AISBO to be used). When tendering for a customer we will look at the range of sites requiring 155Mbit/s of bandwidth and determine whether firstly there any sites we already have connectivity to our own fibre or whether the site is in a short enough distance from our network to make a short dig cost in. Where self provided fibre is not an option we will first seek to serve sites with 155Mbit/s AISBO and where sites are beyond the current 25km distance restriction we will use 155Mbit/s TISBO. There is a clear substitution from TISBO to AISBO.

2Mbit/s and below

Similarly as with 155Mbit/s we should have seen greater substitution from 2Mbit/s and sub 2Mbit/s TISBO services to DSL based services ADSL and SDSL. Substitution has however been limited due to the failure of the underlying LLU service to have a suitable SLA for service repair. Over the course of the next market review conclusion we expect that the LLU repair SLA will be improved beyond its current timescale to a more appropriate, if not equivalent SLA. This will enable a far greater number of circuits to

switch from TISBO to DSL based services, ADSL, SDSL (although BT plan to withdraw this product post March 2009 so SDSL will only continue to grow on alternative LLU operator networks) and Ethernet First Mile (EFM) which BT is rolling out to 1100 exchanges by early 2009 and other LLUOs where they offer this service. Within its TDM 20CN to 21CN migration consultation BT provided an Annex of how it expects services to have the choice of migrating to equivalent (or near equivalent) 21CN TDM services or either to broadband or Ethernet services.

	<i>Speed</i>	<i>Product</i>	<i>20CN Stop Sell**</i>	<i>20CN Withdrawal***</i>	<i>21CN Product Alternatives</i>	<i>Pproposed /expected 21CN Product Launch</i>
2Mb and above	155Mb	PPC	2009	Q1, 2014	155Mb TDM 100Mb and 1Gb Ethernet	2009 2008
	34 Mb	PPC	2009	Q1, 2014	34Mb TDM 100Mb Ethernet	2009 2008
	2Mb	PPC	2009	Q1, 2014	2Mb TDM 10Mb Ethernet	2009 2008
	2Mb	RBS	2009	Q1, 2014	2Mb TDM 10Mb Ethernet	2009 2008
Sub 2Mb	1Mb*	PPC	2009	Q1, 2014	2Mb TDM Broadband/Ethernet	2009 2008
	128k- 960k	RBS	2009	Q1, 2014	128k-960k TDM 10Mb Ethernet	2009 2008
	128k -960k	PPC	2009	Q1, 2014	128k-960k TDM Broadband/Ethernet	2009 2008
	64k	PPC	2009	Q1, 2014	64k TDM Broadband/Ethernet	2009 2008
	Sub 64K *	PPC	Complete	Q1, 2014	64k TDM Broadband/Ethernet	2009 2008

The important factor to consider is that 20CN services have a stop sell date during 2009. At this point CPs need to make a decision whether to supply new services on either the

21CN TDM infrastructure or whether to switch to broadband (where applicable) or Ethernet. The choices do not reflect the opportunity to switch lower bandwidth services to EFM where available so are not fully reflective of a CPs range of choices.

2.6 TECHNOLOGIES (COPPER/FIBRE/RADIO)

Ofcom concludes that the separate markets for TISBO and AISBO services as established by the last market review continue to be relevant for this market review. In our view the identification of wholesale product markets needs to be undertaken in a different manner. Ofcom needs to look at the underlying technology, where services are provided over radio, copper or fibre. Looking at the services provided in this manner reflects the capabilities for substitution by services and identifies similarities in underlying economics. It is more likely that viewing products and markets in this manner will encompass the services that we are seeking to protect more appropriately and adequately.

Radio connections are used for some end users where fibre is uneconomic and also for backup connections. However, the proportion of radio circuits compared to the overall total is small, radio is not always considered a suitable solution and in any case the capability is more easily replicated than either copper or fibre. As a consequence we do not discuss further.

COPPER

Copper services have traditionally been used to provide some 2Mbit/s PPC circuits and sub 2Mbit/s PPCs. Since the availability of DSL services copper also delivers ADSL and SDSL business services. During the period of the review EFM will also become a widespread copper based service. Within its Wholesale Broadband Access Market review Ofcom identifies that for ADSL services that LLU operators provide a competitive

constraint and as a consequence propose the deregulation of a collection of exchange areas known as Market 3. Cable&Wireless argued within its response to this consultation that Ofcom within its analysis groups together ADSL services used by large business customers, which differ substantially in the service they provide. Cable&Wireless believes that there is a distinct demand for large business DSL based wholesale services which include ADSL, SDSL and EFM services. All of these services are relevant to the supply of business connectivity services and relevant to this market review.

We include below our expectations of our supply decisions during the course of the life of the market review:

Buying decision matrix

Speed	Price	Availability	Bandwidth	Solution
10Mbit/s	Medium to High	High	Symmetrical	EFM WES PPC
Sub 10Mbit/s 2/4Mbit/s 6/8Mbit/s increments	Medium	Medium	Symmetrical	EFM PPC EFM WES
Sub 2Mbit/s	Low	Medium	Asymmetrical or Symmetrical	ADSL2plus or SDSL

Sub 2Mbit/s connections are generally required for local/small branch office of large corporations. For example large retail stores would have SDSL connections with ADSL backup in case of failure of the first line. If a retailer did not require backup the main connection would more likely be ADSL. The purpose of these connections is essentially electronic point of sale and IP voice conveyance.

The first choice medium for sub 10Mbit/s connections will become EFM in the future where the capability exists. The second choice technology then depends upon the circuit bandwidth. For up to 4Mbit/s a PPC would be used. For above 6 and 8Mbit/s increments a WES circuit would be the second choice. These decisions are entirely based upon price.

For 10Mbit/s connections our first choice connection would be via EFM. WES circuits would be used in areas where EFM is not available. PPCs would only be used where the circuit distance is too great to use WES.

Having considered in greater detail the appropriate treatment of business broadband access services we now believe that these should be grouped together to form a specific wholesale market (high end ADSL, SDSL and EFM) as these services are relevant leased line alternatives. This combination of (retail and wholesale) business broadband access services are likely to be provided by a sub set of the wider LLUO community. The distinguishing factors between these services and those that fall within the WBA market is that business broadband provides bandwidth connectivity rather than internet access and most importantly that the service at every level (configuration – line repair, MSAN repair, backhaul resilience availability, proactive service monitoring, 24 hour network management availability (for fault reporting and resolution)) are business grade. Whether or not a service is included in the wider business connectivity market is contingent upon its ability to impose a competitive constraint upon the more narrowly defined leased lines services. Broadband access in the form of ADSL and SDSL access already provide a competitive

constraint with existing substitution in evidence from other leased line types to these services. As EFM is rolled out and developed over the course of the next market review period the scope for constraint and substitution increases further as the bandwidth capability of EFM is far greater than ADSL and SDSL and of course EFM provides symmetric services. The availability of EFM strengthens and increases the potential of wholesale business broadband access as a serious traditional leased lines substitute service.

FIBRE

Ofcom should then examine fibre based services. This includes the majority of TISBO circuits provided at 2Mbit/s and above and AISBO services of 10Mbit/s and above. This market can be further split into access, backhaul (or it may be appropriate to consider this under an alternative heading as it includes connectivity between non BT sites) and trunk.

A number of operators have deployed their own fibre. There is extensive deployment in trunk (under a true definition rather than the one driven by PPC price structure), less, but still significant, in backhaul and when compared with that of BT a relatively small amount in access.

One of Ofcom's policy objectives is to encourage infrastructure competition at the deepest level where it can be effective and sustainable. Cable&Wireless believe that infrastructure based competition is not likely to be sustainable within the access layer, that is beyond the BT Fibre MSAN sites within its proposed 21CN network. The extent to which infrastructure competition will be effective in backhaul will vary from place to place but there are always likely to remain a material number of BT's local exchanges where they retain SMP in backhaul. However, in order to ensure that Communications Providers can take advantage of economies of scale and scope in backhaul it is preferable to disaggregate access and backhaul services. In this way LLU operators will be able to combine their LLU

traffic with their AISBO and TISBO traffic onto a single backhaul link that they either provide themselves, buy from BT or source in a wholesale merchant market.

Cable&Wireless believe that considering the markets in this way is more appropriate than the existing market breaks between AISBO and TISBO and between different bandwidths. Particularly over the next review period the differences between AISBO and TISBO will reduce further and of vital importance to end users will be a smooth and efficient transfer from capability that delivers the services they use today to those required for tomorrow. Communications Providers require regulatory solutions that facilitate and encourage this transition. Importantly it is the underlying fibre that is the asset that cannot be economically replicated and the equipment that terminates the services can be purchased and deployed by other Communications Providers almost as easily and cost effectively as it can by BT.

2.7 CHANGES TO THE DEFINITION OF TRUNK

In this market review Ofcom proposes a change to the definition of the trunk market. Cable&Wireless understand that in the last review Ofcom expected trunk to become competitive and indeed the EU Commission has now removed trunk from the list of recommended markets that NRAs are required to review. However, as Ofcom correctly identifies in this review trunk has not become competitive in the way that had been anticipated.

The reason that trunk remains an uncompetitive market is not a lack of alternative trunk capability within the UK but instead it is entirely down to the specific and arbitrary pricing structure that is in place for PPCs. Many PPCs themselves, some of the interconnect infrastructure and the platforms in Communications Providers' networks were put in place before the definition of PPC trunk was established and it has not been practical or

economic to re-arrange networks to avoid the purchase of it. BT has taken advantage of this fact by refusing to reduce trunk prices to an acceptable level.

The changes proposed would reduce the amount of trunk that needs to be purchased by aggregating several Tier 1 nodes into a single aggregation area. Cable&Wireless believe that it is sensible to seek an alternative definition for trunk that is more in line with the trunk networks built by all Communications Providers rather than just that of BT.

The proposal is not entirely clear. We understand from subsequent discussions with Ofcom that all TISBO circuits, internal and external, will still have to be assumed to route via their respective tier 1 nodes for the purpose of pricing. This is fundamental as if pricing (and the decision of how much is trunk and how much is terminating) were to be based upon the actual routing, rather than the theoretical it would remove the transparency of price that is in place today. This means that the only change that will result will concern circuits that are currently assumed to route between two tier 1 nodes considered to be within the same aggregation area. Hence, while it will reduce the amount of trunk purchased, particularly in London, it will not enable operators to avoid purchasing trunk altogether. We provided some additional detail in Annex 1.

Some uncertainty remains over the proposed definition when it comes to the analysis that Ofcom need to undertake on other Communications Providers' circuits to determine how much is trunk versus terminating. Clarity is also required as to whether and how the new definition will be used to define trunk in the AISBO market. Cable&Wireless request that Ofcom provide much more clarity on these issues in its final statement and in the meantime will be happy to discuss the issue further.

2.8 GEOGRAPHIC ANALYSIS AND CELA

Ofcom has found it appropriate to review the presence of sub national markets for the provision of wholesale services. The key components to Ofcom's analysis are; wholesale service shares; the impact of alternative infrastructure and BT's pricing policies. We agree that these are relevant factors which Ofcom should review, however we do caution over the data and assumptions that Ofcom holds around these factors.

In order to determine the level of potential wholesale competition in the UK Ofcom undertook a number of steps of analysis: CPs network flex points were mapped; the locations of businesses with more than 250 employees were mapped; a buffer of 250m was drawn around each business premise; the number of CPs available within each business buffer area was calculated.

Cable&Wireless has a number of concerns regarding the overall robustness of this analysis. There are five important issues that we cover in more detail below:

- The number of premises considered within Ofcom's analysis appears very low leading to concerns over its robustness;
- The 250m dig distance used within Ofcom's network reach analysis is much too long and will lead to an incorrect definition of CELA;
- Aggregation at the postcode level is not appropriate. The postcode sectors used by Ofcom are very large in comparison with the proper dig distance and therefore there can be no expectation that conditions of competition are homogeneous over the area;
- A competitive wholesale merchant market will not exist in the way in which Ofcom anticipates, in practice only buildings that are already connected will be included and therefore Ofcom's assumption that two competitors to BT is sufficient is incorrect; and

- If any markets can be disaggregated by geography it will be the very highest bandwidth markets which will first justify this approach, therefore, if Ofcom can establish a robust approach to geographic analysis it must use it in these markets.

THE NUMBER OF PREMISES LOOKS TOO LOW

Starting firstly with the plotting of business sites, Ofcom has obtained its information from the Experian business database. Ofcom identifies that the information sourced provide 157,000 unique business premises belonging to a sub set of circa 103,000 individual businesses. We query whether the Experian business database holds the complete range of business premises that Ofcom ought to have awareness of. We know from BT's published regulatory accounts that BT sells 600,000 RBS, PPC and WES local ends internally and externally of which about 375,000 are served on fibre. In addition, customer sites will also be linked with CPs own direct connections and broadband (ADSL and SDSL) connections. Clearly a single site may have multiple connections but still the numbers do not correlate. We have asked Ofcom to confirm whether the data includes the following key sites in order to understand the materiality of the missing data. In our view the following represent key business locations:

1. BT network premises – local exchange sites / MSAN/METRO sites
2. Mobile network operator network premise – radio base station sites
3. Broadcast network premises
4. CCTV camera locations and monitoring centres
5. Telehouses
6. Internet peering houses

Should it transpire that the Experian database does not capture the full detail of the categories above, Ofcom needs to augment the data it holds to ensure that the full data for these locations is added. It is highly likely that some of these premises will require 45Mbit/s services, and if Ofcom continues to find bandwidth breaks in the TISBO and

AISBO markets then it is essential that the higher bandwidths are also analysed in this manner.

THE BUILD DISTANCE OF 250M IS MUCH TOO LONG

Secondly Ofcom uses a build distance of 250m radial. This assumption is critical to the creation of the boundary around the proposed CELA area. We have serious concerns over the dig distances that Ofcom is proposing. Cable&Wireless assume that Ofcom have arrived at this distance based upon discussions with CPs but if that is the case we question whether the correct questions have been asked. In our view the use of a 250m radial distance as an economic distance to dig is an order of magnitude too high.

The cost of installing new duct and fibre is clearly a fundamental input into the decision of what an economic dig distance really is. Ofcom identifies costs per metre in the range of £50 to £135m and the possibility of wayleave costs too. These costs do not necessarily appear out of line but they are not the only costs to be taken into account. We make the following points:

- Cost per metre varies particularly by terrain and by implication geography. Central London is the most expensive area and so figures towards the top end of Ofcom's range are appropriate here but where Ofcom extends its analysis to other parts of the country the lower figures will become more relevant;
- In addition to the 'per metre' cost and the cost of obtaining a wayleave it is necessary to also consider the cost of planning and surveying the route and the costs associated with arranging roadworks.
- The dig will typically take the circuit back to the closest point, but it is still necessary to provide fibre back to the serving exchange. The cost of this will include a share of the cost of the main distribution cable and often other new fibre cable that needs to be installed within existing duct. The distances for new cable can often be long

and although the cost per metre will be much less than for a dig the cost is still material;

- In London many buildings are multi tenanted and the cost of cabling between floors can be very significant; and
- The cost of electronics, both in the network and at the end user site, must also be taken into account.

The cost of self-providing network is one part of the equation. There are a number of other very important factors to be taken into account in order to estimate the appropriate dig distance. These include:

- The straight-line distance is not the distance that is actually dug. In practice there is rarely a straight line route from the flex point to the building and the route must follow the natural obstacles;
- The contract length is fundamental, BT is in a strong position to assume that even if it loses the retail business it will at least maintain it on a wholesale basis but other CPs cannot be so sure;
- Wholesale contracts are generally driven by BT's 12 month minimum period for PPCs therefore the dig distance will be much shorter for wholesale than retail digs. In practice it will be very rare for a wholesale sale at 45Mbit/s to justify a new dig and therefore the wholesale merchant market will be much smaller than Ofcom has assumed in its analysis to date;
- The correct benchmark to compare the cost of self provision against is the efficient forward looking price of the alternative product that would be purchased. In areas like central London, particularly for LLU operators with a presence in exchanges, this will often mean a PPC local end only, or a WES Local Access circuit. Furthermore, as the RGL report has shown that PPC prices are too high, it is not today's price that should be used but the price Ofcom would set if it were to decide a charge control were justified. We note that this implies build distance should vary with bandwidth; and

- The time to provide is also a key factor. Particularly in built up areas the planning and administration required to arrange a new dig could be very significant and take several months whereas if BT already have fibre to the premises it is clearly a much quicker process.

Cable&Wireless strongly urge Ofcom to take a very close look at the issues that we have raised above and the impact they have on the economic build distance. It will be relatively simple for Ofcom to create its own model to estimate build distances and the sensitivity to the various assumptions. We are certain that this will result in a very much reduced build distance for 45Mbit/s circuits within Central London. We provide some analysis of our recent digs in annex 2.

AGGREGATION AT THE POSTCODE SECTOR LEVEL IS NOT APPROPRIATE

Ofcom has chosen to aggregate demand at the postcode sector level for the purposes of assessing market definition. We have serious concerns about this approach. The competitive conditions for any building are dependant upon the number of operators within economic reach of the building. As we have argued above, particularly for 45Mbit/s in central London, this distance is very short, crucially it is very small in relation to the postcode sector used within the aggregation.

Using Ofcom's current approach there can be no certainty that the competitive conditions within any postcode aggregation sector are homogeneous; one building can have 5 CPs within easy reach and another might only have BT. Clearly this does not meet the guidelines set out by the Commission concerning market definition. In addition it raises further concerns over Ofcom's ability to extend its analysis beyond London, if the size of postcode sectors increases more significantly than dig distance in other parts of the country the problem will get even worse.

Cable&Wireless believes that Ofcom needs to look at the market on a building by building basis to undertake a proper analysis of competitive conditions but clearly such an approach has some major practical issues. As an alternative Ofcom may consider retaining the postcode sector by changing the way in which the analysis is undertaken. Instead of considering the average number of CPs within economic dig distance of each building Ofcom could look at the minimum number of CPs that are within reach of any building within the postcode sector. An approach such as this would ensure that the results of the analysis are not impacted by a few buildings which have many CPs within reach (for example due to proximity to a particularly popular fibre route) masking the fact that others have no alternative suppliers at all.

MORE THAN TWO COMPETING FIBRE PROVIDERS ARE REQUIRED

In the assessment of competitive conditions Ofcom has looked for postcode sectors where the average number of CPs that can connect to each business site is two or more, in addition to BT. These postcode sectors have been used to guide the definition of the CELA geographic area. The justification for the fact that three Communications Providers in total are adequate for the competitive conditions to be considered sufficiently different are not clear but the figure certainly does not appear consistent with other areas of Ofcom's regulatory policy.

Earlier in this section we explained that a operators would be very unlikely to dig to new business premises to support sales within a wholesale merchant market, the risks are too great given the typically short contract terms. This means that Ofcom's assumption that a wholesale merchant market will exist is incorrect; at best a different network reach analysis should be done to establish which buildings are already connected with alternative fibre, as that will provide the best indication of the scope of any wholesale merchant market. This means that the only operators who will have security of supply in the CELA geographic

area are those with a vertically integrated fibre access capability that covers the whole of the area.

This is vital when the nature of the retail business connectivity markets covered by this review are concerned; these are national markets. It is simply not possible to sell an IP-VPN but say you can't provide the connection to the London office, or to offer a retail leased line, but say you can only offer ends outside London. This is very different to the residential broadband market where it is perfectly possible to offer service in some parts of the country and not others, it means that in business connectivity markets a reliable wholesale merchant market is fundamental.

In the absence of a reliable wholesale merchant market Cable&Wireless believe that the number of competitors required to justify sufficiently different competitive conditions for separate markets to exist must be greater than that required in the very different Wholesale Broadband Access market. In that market Ofcom decided that three competitors to BT was sufficient. We also note that in mobile markets, where a national coverage is also required, licences have been granted to five operators to encourage competition.

Ofcom should re-assess the number of competitors that are required to create sufficiently different competitive conditions in the light of our comments above, in particular the lack of a wholesale merchant market and with reference to other areas of Ofcom policy making.

SUB NATIONAL MARKETS FOR 155MBIT/S TISBO AND ABOVE 1GBIT/S AISBO SERVICES

We have discussed in previous sections that we disagree with the findings that 155Mbit/s TISBO and above 1Gbit/s AISBO services have nation-wide competing supply. We believe that (in part) the failure of the information used by Ofcom in its analysis has led to

the incorrect conclusion over the bandwidth breaks and in turn the competitiveness of the markets.

The evidence of this is clear to us from our experience of operating in the business connectivity markets. We know that it is sometimes completely uneconomic to dig to site for 155Mbit/s access when considered against either the retail value of the contract or the cost of buying a PPC from BT and that furthermore often no alternative providers exist. We also know that for some BT exchanges, that we have already chosen to unbundle for LLU, purchasing backhaul from BT is the only economic option. This evidence strongly suggests that BT continue to have SMP at least when it comes to these specific locations. We provide an example for 155Mbit/s circuits in annex 3.

This therefore suggests that if Ofcom is correct in its analysis of these markets and that the very high bandwidth markets are separate then at the very least some material geographic differences in competitive conditions must exist. If Ofcom is able to develop a robust approach to geographic analysis then it is clear that these higher bandwidth markets are the very first that should be assessed for geographic disaggregation.

To be clear Cable&Wireless remains of the view that the geographic differences in competitive conditions are not sufficiently material to justify any such disaggregation except in the case where a separate market were identified in connectivity to Communications Provider sites (e.g. backhaul). The position that Ofcom sees in its analysis of the market today has largely come about due to the inefficient investment signals provided by excessive wholesale prices to date and any disaggregation should be done on a forward looking basis. However, to the extent that such variations are more material than we think then it is clear they will be most significant where the highest bandwidth services are concerned.

2.9 SOLUTION FOR WHOLESALE MARKETS IN THIS REVIEW

Cable&Wireless is aware that we have raised some very significant issues concerning the market definition and SMP assessment and for Ofcom to take them all into account within this market review is unlikely to be practical. Therefore we are keen to discuss further with Ofcom the best way to proceed in order to conclude this market review, and implement the measures Ofcom is proposing, as quickly as possible.

The issue of the bandwidth breaks is clearly a difficult one, we have been unable to provide firm evidence to justify an alternative view just as Ofcom have failed to provide evidence to justify their proposal. While we remain of the view that the next time the market is reviewed the wholesale markets should be defined with a different emphasis for this review it may be possible to adjust Ofcom's current methodology in such a way as to overcome the problems.

Firstly the issues that result from the poor quality of data are less likely to be material in the low bandwidth TISBO and AISBO markets and therefore Ofcom there will hopefully be nothing to delay progress in those markets.

In the 45Mbit/s TISBO market the geographic analysis can be redone using revised assumptions based upon our comments in this response and Ofcom's discussions with other stakeholders. We hope that the work involved in this will not be too time consuming and we expect it will result in either a smaller CELA zone or possibly one that is so small that it is not proportionate to proceed with it. However, we do not consider either outcome to be a major change.

The higher bandwidth markets are clearly more problematic. The issues that we have highlighted have the potential to have significant adverse impact on competition in the telecommunications sector and are likely to lead to greater inefficiency and end user harm. If Ofcom is of the view that to address these issues would be a more fundamental change to its draft proposals then we consider it may be possible to proceed in two phases. Firstly, to conclude on the low bandwidth AISBO and TISBO and high bandwidth AISBO but at the same time maintaining the existing regulatory obligations that are in place today for the higher bandwidth markets. The second phase would then involve revising and reconsulting on the very high bandwidth markets.

3 REMEDIES

3.1 CURRENT REMEDIES

In response to finding BT to have SMP in a number of TISBO markets, Ofcom in concluding the 2004 leased lines market review imposed certain regulatory obligations upon BT. During the life time of 2004 market review Ofcom has been conducting its Replicability Review into certain aspects of the PPC product. The outcome of this work has been the identification of key areas where there is potential discrimination between the products /prices which BT uses internally compared to those used by CPs externally.

Cable&Wireless regards many of the findings to be illustrative of BT's failure to comply with the existing SMP conditions and the fact that BT regards itself to have discretion around the application of regulatory rules until it is told otherwise by Ofcom. A clear example of this is BT initial application of differential SG&A rates for internal and external PPC services. Whilst BT has remedied this differential there has been no formal reprimand for the behaviour. More importantly BT continues to apply a local end discount factor to the circuits it purchases as a result of a comment found within the original PPC determination. It is not clear whether the original determination intended that BT discriminate the charge it applies to its own circuits and external circuits. In any event we believe that BT has misinterpreted the application of the point of handover issue in order to estimate the local end discount. Furthermore, if it is legitimate to apply the discount then it should only apply to circuits which make up retail national leased lines rather than circuits for VPNs. This is an ongoing breach of the non discrimination obligation in existence today.

We believe that BT's apparent lack of accurate or robust regulatory accounts has led to major errors in the setting of the current charge control as BT has failed to fully account for the true profitability of the PPC portfolio. We find it inconceivable that BT was not in full comprehension of the true profitability. Cable&Wireless together with Thus commissioned

RGL Forensic Accountants to examine BT's regulatory accounts and together with Ofcom's work on Replicability restate the true profitability of the PPC portfolio. The findings of this study suggest that BT's overall charges are some 26% above cost, clearly failing to meet existing cost orientation obligations.

Where SMP obligations are set we have an expectation that obligations will be adequately enforced. These conditions set in the last market review provide the foundations for the proposals going forward. BT has not been found to contravene any of these obligations yet there has been ongoing (yet to be resolved) investigation and complaint about the products regulated by these SMP obligations. The business connectivity markets are key markets for the UK economy. Cable&Wireless believes that the time has come for Ofcom to act more assertively to problems identified within this market place.

3.2 TISBO REMEDIES

Ofcom proposes to keep the existing regulatory remedies for TISBO services which we fully support. In addition Ofcom proposes to extend the current terminating segment charge control to cover trunk segment charges and auxiliary components such as excess construction charges. We support this extension of the charge controls. Ofcom will be consulting separately upon the charge control however we would like to take this opportunity to stress the importance of sending the correct investment signals to the market. It is widely believed that PPC charges are above cost although the exact amount is yet to be determined by Ofcom. In order to correct for this error in pricing, and to remove incentives from BT for falsely accounting and pricing, it is important that the new charge control starts with the determination of reduced starting charges rather than a glide path to reduced charges. The introduction of a glide path fails to establish genuine market prices for TISBO services or appropriately direct investment in these services, it rewards BT for accounting and information failures / errors and it allows BT to escape efficiency

saving targets by allowing price reductions to come from inflated starting charges rather than process improvements.

Ofcom has recently concluded work which reset BT's SLA and SLG obligations for a number of key services. Ofcom proposes to review the PPC SLA regime. We fully support the focus of similar effort covering PPCs as has been undertaken for LLU and Ethernet.

3.3 AISBO REMEDIES

Cable&Wireless believes that the AISBO low bandwidth market has begun to establish itself. We now have over four years of data in order to fully comprehend the cost basis of these services. We concur with Ofcom that it is now appropriate for the additional requirement of low bandwidth AISBO services to be covered by a charge control. During the last 12 months there has been serious concern around the appropriateness of the pricing within the portfolio. Openreach has rebalanced the charges from those initially offered when the product was launched to market. Looking to the future it is evident that the market is moving to Ethernet connectivity. It is therefore critical that the cost base of these products is fully evaluated by Ofcom when setting the forthcoming charge control in order to avoid more rebalancing in the future.

As discussed in earlier sections our purchasing decisions between TISBO and AISBO services is often forced due to the distance limitations currently imposed on AISBO circuits meaning that where circuits are above 25Km the purchasing decision is restricted to a TISBO circuit. Consequently we welcome the removal of this restriction.

Ofcom proposes to simplify the pricing and notification regime due to obligations from the TSR which require AISBO services to be offered on an EoI basis. Cable&Wireless believe the undertakings act as an overlay to SMP regulation and should not be used as a reason to remove SMP regulation. For this type of remedy SMP obligations are a better solution

not least because the enforcement options for a breach of the undertakings are less suitable. This is not the only reason that the Eol obligation is not a suitable alternative, particularly in the case of backhaul it is far from clear that BT will buy the same product as other Communications Providers. Openreach's focus for Backhaul is on its Orchid network which while it may be of value to all Communications Providers its is specifically designed with BT in mind, others may wish to continue to buy more traditional BES circuits that BT itself may not. As a result we do not agree the notification obligations should be simplified to the extent that Ofcom propose.

The view that BT still has SMP in the high bandwidth AISBO market has already been discussed, and most significant concern relates to its use for backhaul. Ofcom has said to us that they think the undertakings may provide some assistance on this issue as the backhaul products will still be provided on an Eol basis. The situation is not entirely clear, some aspects of the undertakings fall away where BT is no longer found to have SMP and we do not fully understand exactly how BT's commitments will be impacted. We would welcome Ofcom obtaining a detailed confirmation from BT as to exactly which commitments remain. However, as we explained above, even if the Eol commitments remain they may provide little comfort if BT themselves wish to purchase a slightly different product to other Communications Providers.

There are also several issues over the availability and pricing of some specific variations of WES product from Openreach that it is essential that Ofcom give some more thought to within this review and the subsequent charge control. We understand that Ofcom has a vision for infrastructure competition as far as the BT local exchange and that vision is shared by Cable&Wireless however several key issues will have a material impact on the viability of such investment:

- Ofcom will be aware that Openreach sell a product called WES Aggregation. The basic service provided by this product is exactly the sort of capability that Communications Providers would undertake themselves if they invest in

infrastructure to the local exchange. However, if Openreach sell WES Aggregation in a manner that cannot be commercially replicated (as is currently the case) then that will potentially chill investment in infrastructure to the local exchange. BT retains the ability make Ofcom's vision for infrastructure competition uneconomic and Ofcom should consider whether it should place obligations upon BT to prevent it; and

- The economic case for local exchange competition is not yet fully justified. While it is clear that the purchase of products such as WES Local Access is viable in some exchanges it is not yet clear that it will be viable in sufficient to enable Communications Providers to be competitive with BT. Ofcom should consider the pros and cons of the extending the concept of WES Local access to enable the circuits to be picked up from distant exchanges as well as the serving exchange. Clearly this is a complex question, one that we do not yet know the answer to, but we suspect it will be an important issues over the next year or so.

Cable&Wireless recognise the changes brought about by BT's investment in 21CN will have major implications upon competition within the markets covered by this review. These issues will cover both the Openreach products and those sold by BT Wholesale and it remains a serious possibility that wholesale AISBO regulation may be required on BT Wholesale products as well as those of Openreach. Many of these issues will unfold during the course of this market review and some are likely to require regulatory intervention over the next couple of years. It is therefore vital that Ofcom continues the work started within this review in order to ensure that any required regulatory remedies are put in place in a timely manner. It will simply not be possible to wait for the next market review.

3.4 EQUIPMENT LOCATION SPACE

We welcome Ofcom's proposals to regulate space in BT's exchanges and are of the view that such a move is essential if competition in the leased lines market is to develop effectively. As Ofcom acknowledges CPs must purchase accommodation in BT's exchanges if they wish to use their own equipment in conjunction with disaggregated services. Accordingly we agree that charging excessive prices for accommodation would have the same effect as charging excessive prices for regulated disaggregated services in each SMP market, thereby undermining the remedies imposed by Ofcom. We therefore believe that extending SMP regulation to cover accommodation services is essential.

However while we welcome Ofcom's proposal we are concerned that the measures do not go far enough. Of particular concern is that the remedy on space will be applied to each of the individual leased line markets where BT has SMP and as such there may still be the potential for BT to be inconsistent in the way that it provides space and allows CPs to use it. Of particular concern is that BT may provide separate space products for different services, for example a separate space product for Ethernet to that for PPC, with both being separate from LLU space. This could lead to both delays in the provision of space and inefficiencies.

Cable&Wireless has previously discussed with Ofcom its concerns and frustrations regarding the provision of space and the need for a single space product to be made available by BT. Ofcom have stated that while a single space product is desirable, they believe they are constrained by the legal structure of SMP regulation from imposing a single product on BT to cover all SMP products. While we understand that Ofcom must ensure it operates within the legal framework we nevertheless are of the view that Ofcom could exercise more flexibility in this regard.

Ofcom states at paragraph 8. 85 that it “believes that costs could be minimised by allowing communications providers to share their co-mingling space across exchange based services i.e. across LLU and AISBO/TISBO and IBH, and encourages BT to consider the removal of such restrictions.”

In our view Ofcom should strongly encourage BT to include within the Undertakings an obligation to meet its requirements for space for SMP products with a single product. This could be justified on the basis of ensuring transparency, efficiency and non-discrimination as between different SMP products. In accordance with its obligations under the Communications Act, in imposing SMP obligations to provide accommodation services Ofcom needs to ensure that this is the regulatory remedy is appropriate for the problem. Experience has shown that individual space products are not an appropriate solution here because of the inefficiencies that arise. A joined up approach to accommodation services would ensure that BT could not circumvent any of its SMP obligations in respect of certain services by for example delaying the provision of space for some products or prioritising orders for others.

An inclusion of an appropriate commitment to provide a single space product in the Undertakings could be further justified on the basis that space in BT’s exchanges is an essential facility in that it cannot be replicated and is indispensable for the provision of services. As such there is a real potential for space to be used by BT to gain an advantage over its competitors thereby weakening the development of competition in the market. Leaving this issue to be dealt with by competition law would not be an adequate measure here. The timescales involved in bringing an infringement action are such that the business that the space was required for would have been long lost by the time the issue could be dealt with under competition law. Moreover there are both resource and cost issues in bringing infringement action.

Given that the risks are identifiable in the onset we are of the view that Ofcom needs to act to prevent the problem developing in the first place. An inclusion of a commitment in the Undertakings could be justified on the basis that an essential facility needs to be carefully managed to ensure that it does not become a bottleneck for the provision of other services. To this extent we ask Ofcom to consider whether a refusal by BT to agree commitments on space in its Undertakings should result in a commitment from Ofcom to launch an own initiative competition investigation into the issue of space provision if CPs keep Ofcom informed of any competition concerns going forward. While we acknowledge that Ofcom cannot impose measures on BT as part of the Undertakings we nevertheless believe that very strong encouragement should be brought to bear on BT to do this.

An alternative approach could be for Ofcom to define space in BT's exchanges as a separate market thereby justifying the provision of single space product to all services both those with and without SMP obligations. As set out above space in BT's exchanges is an essential facility on the basis that it cannot be replicated, it is indispensable for service and is not interchangeable with space elsewhere. As such an SMP obligation could be put in place to ensure that space is provided on the same terms to all services. In the absence of other measures to solve this issue we request that Ofcom looks in detail at whether this approach may provide a viable solution.

Accommodation to non- SMP products.

There is a real concern that in the absence of regulatory obligations to do so BT may refuse CPs use of space for very high bandwidth circuits as Ofcom propose that BT does not have SMP in >1Gbit/s Ethernet. There is a genuine concern that a requirement to connect equipment with 2.5Gbit/s or even 10Gbit/s will not be protected by regulation and space may not be provided or could be provided on unfavourable terms.

We are particularly concerned that there is real potential for the provision of space to be used as a means of leveraging market power into markets which will be deregulated under Ofcom's plans. Access to BT's exchanges is essential if competition is to develop in leased lines markets. Refusing access or providing access on unfavourable terms will have real implications for the development of competition as it will directly impact CPs ability to bid for new business. We therefore believe that Ofcom must put in place measures to ensure access is provided on fair and reasonable terms. To this extent we suggest that under the Access Directive (2002/19/EC) Article 12 Ofcom could impose an obligation on BT to meet reasonable requests for access to and use of space. In particular BT could be placed under "an obligation to negotiate in good faith with undertakings requesting access". Applying this approach and in accordance with recital 19 a failure to negotiate in good faith would then give rise to the right to refer the issue for dispute resolution. While not an ideal solution this would at least provide some safeguard. If a CP requests space and is denied or negotiations are protracted or the cost too high, a CP could refer this issue for dispute resolution. This would ensure that any problems would have full visibility by Ofcom. This would not of course deal with the need for a single space product across different services however, our arguments above regarding market definition and essential facilities apply equally to the issue of space for non-SMP products as they do to SMP products.

3.5 NON DISCRIMINATION ON MOBILE

Ofcom proposes to amend the interpretation of the no undue discrimination obligation which would presume that saw tooth discounts are anti-competitive. Cable&Wireless supports this change. The potential to bid for mobile network contracts has been impeded by the existence of these contracts which in essence mean that in order to win a contract a competitor to BT must be able to cost effectively replace all sites or offer a limited number of sites with a discount so great that the sites left with BT do not overall result in a price increase for the MNO.

Within the final statement Ofcom needs to provide clarity as to the legality of existing agreements or agreements entered into just prior to the publishing of the final statement.

3.6 SDSL

Ofcom proposes to review the TISBO charge control with considerations to extend it to cover SDSL products. BT effectively plans to withdraw SDSL from new supply as of March 2009 when a stop sell is imposed upon Datastream. BT has not proposed to offer SDSL via its new 21CN services WB(M)C. Consequently we view the proposal to further regulate SDSL as disproportionate. However we do regard the regulatory treatment of business connectivity wholesale DSL based inputs as very important. The regulatory remedies imposed need to ensure the availability of high end / large business ADSL services nationwide (as nationwide coverage exists already), continued protection for the installed base of SDSL connections, and an extension of the remedies to include all DSL based services such as EFM where these are rolled out. The regulatory remedies we envisage are a mirroring of the obligations proposed for ADSL under the WBA market review:

- requirement to provide network access on reasonable request
- requirement not to unduly discriminate
- requirement to publish a reference offer
- requirement to notify charges, terms and conditions
- transparency as to quality of service
- requirement to publish technical information
- requirement to account separately

Whilst we believe that BT has SMP in business DSL services we believe that there is scope for competition to arise in the future. We therefore deem it inappropriate to regulate the charges for these services beyond a requirement for them to be reasonable or impose charges controls upon these services.

4 OTHER ISSUES

4.1 UNBUNDLED ACCESS FIBRE

Cable&Wireless fully supports proposals to consult further upon the merits of making available dark fibre in the access network a regulatory remedy. We recommend however that the term be rephrased as unbundled access fibre as the term dark fibre may give the impression that the objective is the availability of unlit fibre whereas the intention is the unbundling of fibre access in exactly the same manner as copper access. The existing LLU product should translate across to the unbundling of a fibre product with; the take over of an existing connection; the provision of new connections; and the construction of brand new connections all feasible product options. Our response highlights the viewpoint that with the exception of identifiable business premises and tightly ring fenced / very short distances around Communications Providers networks that BT has nationwide SMP for the provision of fibre services.

In our view the availability of unbundled access fibre in the access network (including both already lit and unlit access fibre) is a natural progression of competition up the ladder of infrastructure investment which is reliant upon regulation, as Ofcom identifies, complementary and directly comparable to the regulation of LLU.

Competing business focused Communications Providers have all invested in similar core network infrastructure. Communications Providers vary in the extent of investments made in direct customer connections (access fibre). Cable&Wireless is probably second in line to BT when considering the number of direct customer connections self supplied. However the scale between the direct connections made by BT and Cable&Wireless makes the level of connections that C&W hold insignificant. In 2001 Partial Private Circuits were introduced into the UK market, this introduction make a significant improvement to the capability of alternative Communications Providers to compete against BT.

Communications Providers extended their network reach in order to more efficiently / cost effectively collect PPC circuits. In 2005 the TSR paved the way for the extension of the competitive boundary beyond the 67 PPC handover nodes to increase to a greater number of local exchange premises (a sub set of the 5578 which economic conditions will determine) via the introduction upon the requirement upon BT to provide both TILLAPS and WES Local Access.

There are a number of obstacles that BT has placed which have prevented the general take up of either of these products in the short term. We discuss these elsewhere.

Presuming however that subsequent to this market review these obstacles are removed we expect that Communications Providers competing against BT will be encouraged to roll out to local exchanges, as BT is doing already, in order to attain an equally competitive cost base. Once at the local exchange for the collection of WES LA and TILLAPs a natural evolution clearly is the availability of unbundled access fibre. As we have witnessed with LLU, access to the raw / deepest network component enables true service innovation. Communications Providers are no longer restricted to technology or vendor choices made by BTW/Openreach (BTGroup). For copper where we have unbundled this has meant that we were able to innovate in the following areas:

- SHDSL (we even sold this to BT)
- ADSL 4MBIT/S AND 6MBIT/S
- ADSL 2PLUS (2 years before BT)
- TIME OF DAY, TIME METERED AND BYTE METERED BROADBAND
- DOUBLE PLAY - VIA MSAN (2 years before BT)
- 2nd 3rd LINE VOICE WITH FULL QOS TO SOFTSWITCH
- MULTICAST TRIALS
- BONDED DSL

Cable&Wireless has a reasonable number of self provided direct customer connections. We value these connections and the capabilities that they provide us. We have recently capitalised upon these connections in our drive for service improvement with our 'on demand' project to dramatically improve lead times for on-net customers. Our interest in unbundled fibre in the access network is due to our desire to innovate in this manner for all of our customers. The ability to make use of unbundled access fibre will provide us with control of the underlying physical connections enabling us to make our own choices concerning vendor equipment and service wrap in a manner that would be impossible (and certainly uneconomic) while we are forced to use Openreach's lit fibre products.

Within earlier parts of our response we have identified reasons as to why in the future we will not witness significant levels of investment in additional competing fibre. Consequently we disagree with Ofcom's commentary in A10.34 and A10.35 that services for residential users based on LLU and business connectivity services based on fibre access are likely to support differing levels of competing infrastructure.

We concur with Ofcom's concern that unbundled access fibre will not be a national solution in the same way the LLU has to date led to geographic concentrations. Our expectations are that similar trends will apply to unbundled access fibre. However within LLU it is evident that companies are working to identify mechanisms that could reduce the fixed costs of unbundling an exchange potentially in the future extending the reach of this remedy. We therefore keep an open mind about the longer term prospects for both copper and fibre unbundling. Indeed for companies such as C&W which are present in both the LLU market and the business connectivity market there are clear synergies in the availability of both remedies and consequential improvement of a joint fibre/copper unbundling solution. Clearly we would desire any regulatory solution to be mindful of the need to share space and other auxiliary services as appropriate.

Ofcom identifies three criteria for assessing the opportunity of an unbundled access fibre remedy and we take this opportunity to comment on these.

Criterion 1 – consistency with regulatory principles

Consideration	Applicability
Needs to be about regulating parts of incumbent's network that cannot be economically replicated	We have portrayed in our response the changing economics of self provision of customer connections. We cannot realistically expect that the economics in place to day of efficient network investment will result in more than a handful of customer sites proving economically viable for additional new connections.
Does the incumbent have entrenched market power?	With the possible exception of a redefined CELA zone BT has and will continue to have entrenched market power.
Effective mechanism to deliver choice, rapid innovation and new services at the deepest level of infrastructure where competition will be effective and sustainable	We have seen the scope of innovation possible for LLU based products. Given the significant value of business markets we can assume that the potential to innovate would be at least as large and more likely larger.

Criterion 2 - consistency with other remedies

Consideration	Applicability
Dark fibre obligations would need to take into consideration Ofcom's competitive findings in markets downstream of unbundled fibre.	In our response to this consultation we expect to convince Ofcom there is far less effective competition than their draft findings suggest. However it would be necessary to take into consideration competition in the provision of high bandwidth service to CP and data centre type locations and possibly within a revised central London zone.
Can competitive issues be dealt with in a more straight forward way eg improvements to existing products, tougher charge controls	It will be necessary to deal with improvements to the existing products regardless of the introduction of dark access fibre as we will not comprehend the potential geographic reach of an unbundled fibre solution. It is highly likely that service and price improvements can be achieved however product innovation will most certainly be restrictive as BT has consistently been unreceptive to proposals by CPs to enable the introduction of limited approved and tested additional NTE choices let alone complete choice.
Would dark fibre chill investments in areas where infrastructure competition exists eg in higher bandwidth markets.	In our response we seek to differentiate between general customer access services and services for CP network

<p>Would dark fibre chill investments in areas where infrastructure competition exists eg in higher bandwidth markets.</p>	<p>In our response we seek to differentiate between general customer access services and services for CP network extension. Where customer access is concerned we argue that investment is already chilled and that the introduction of new 21CN based Ethernet access capabilities will make the case for such investments even worse.</p>
<p>Efficient recover of common costs</p>	<p>There is an important issue here in as much as today BT adopt a value based pricing approach in the way in which they recover their common costs and the supply of unbundled fibre would reduce their ability to do this. However we note that the existing situation actually send the wrong signals to investors, it has already caused much economic inefficiency within the telecommunications markets so this would not necessarily be entirely detrimental.</p>

Criterion 3 – it generates an expected net benefit

Consideration	Applicability
<p>Static costs – direct costs incurred and loss of economies of scale as usage of</p>	<p>There clearly are some inefficiencies that result from any infrastructure competition</p>

<p>Static costs – direct costs incurred and loss of economies of scale as usage of BT equipment declines</p>	<p>There clearly are some inefficiencies that result from any infrastructure competition that is encouraged in markets that are subject to such economies of scale and scope. However, we believe that the biggest economies of scale and scope are seen in the fibre itself, which is off course not duplicated. It is most likely that other CPs will be able to purchase CPE, etc at similar prices to BT. Offsetting any such inefficiencies there will of course be the fact that CPs will not longer be investing in subscale fibre access assets of their own which have recently proved to be very inefficient in themselves.</p>
<p>Dynamic benefits – greater competition leading to increased cost efficiency lower prices and greater service innovation leading to market growth</p>	<p>The real benefit comes in this area, particularly in terms of greater service innovation generating increased value for our customers. Furthermore, the competition will put greater pressure on CPs to operate efficiently reducing the complexity of regulation required. The benefits Ofcom has started to see from LLU competition are available within business connectivity markets.</p>

4.2 COST ORIENTATION

Cable&Wireless note the comment made by Ofcom in paragraph 8.273 on the interpretation of the cost orientation obligation which we assume was written in error. Ofcom suggests that the cost orientation obligation only requires individual prices to be set within the LRIC floor and ceiling. However, our understanding from Ofcom is that the LRIC floors and ceilings represent only a 'first order test.' Furthermore it is established practice that tests are carried out not only based upon individual prices but also based upon combinations of prices. It is quite clear that to do otherwise would result in Ofcom allowing common costs to be recovered many times over which is not what is intended. Ofcom should correct this error in its final statement.

4.3 REMOVAL OF CONDITIONS

Cable&Wireless believe that Ofcom is incorrect to find that BT no longer has SMP in the 45Mbit/s TISBO within CELA, 155Mbit/s TISBO and high bandwidth Ethernet markets. If upon a revised analysis Ofcom still finds that BT no longer has SMP in markets where today SMP obligations exist then it will be necessary for Ofcom to give some consideration to the process for removal of those obligations.

Cable&Wireless believe Ofcom should adopt an approach similar to the one that it had adopted in the Wholesale Broadband Access market review. In that case the obligations remain in place for one year to provide time for Communications Providers to seek arrangements that guarantee a continuity of supply at an appropriate price.

5 ANSWERS TO OFCOM'S 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?

No. We have some concerns over the way in which Ofcom has defined the retail markets that we have identified in section 2.1. Our concerns relate mainly to the lack of evidence provided for the bandwidth breaks and that the definitions used fail to include substantial aspects of the relevant demand that feeds through to the wholesale markets and yet Ofcom draws conclusions about those wholesale markets based upon conclusions drawn in retail.

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

Yes, there are clearly markets for other services such as Virtual Private Networks and corporate internet access that fall under the heading of business connectivity services and drive demand within the wholesale markets considered by this review, these markets are not downstream of retail leased lines, they sit along side them and make use of very similar wholesale inputs.

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

No, we explain our reasoning in section 2.8. Ofcom's approach to use service shares and network reach analysis is a sensible one but the use of a standard 250m radial distance for new builds is overly simplistic and significantly too long. Once Ofcom uses a more appropriate dig distance it will become clear that it is simply not appropriate to consider average conditions over a whole postcode sector.

Furthermore, geographic markets are only relevant within the wholesale markets and not retail markets.

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

Yes, the geographic scope for retail markets is national.

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?

No. The evidence that separate markets for AISBO and TISBO at the wholesale level is not strong however our main concern is with the bandwidth breaks identified by Ofcom and the implications that result. Ofcom's evidence for the bandwidth breaks in retail markets is very weak and cannot be translated into the wholesale markets. We think the only relevant bandwidth break will be driven by the change in underlying technology used from copper to fibre.

However, if bandwidth breaks can be justified at higher bandwidths then it is vital that Ofcom separates out the demand generated by connectivity to Communications Provider and data centre locations from more normal corporate demand. This type of demand is subject to very different competitive conditions and significantly distorts Ofcom's analysis when considered in the context of the relatively small high bandwidth markets.

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)?

No. We acknowledge that competitive conditions in Central London may be different from most of the rest of the country but the analysis is flawed and therefore the area is likely to be overstated. When the analysis is undertaken properly we suspect that the areas of the UK where competitive conditions are different will be so small that treating them differently will be too hard to justify.

Furthermore, if any wholesale markets justify being broken down into separate geographic areas due to different competitive conditions it will be the very highest bandwidth markets. It is absolutely clear that BT's existing duct and fibre network mean there will be significant parts of the UK and particular BT exchanges where they continue to have SMP no matter what bandwidth is required. If Ofcom is able to undertake any geographic segmentation then it is these markets that must be addressed first.

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

Yes.

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. Cable&Wireless support Ofcom's vision that where properly functioning wholesale regulation exists there should be no SMP in the downstream retail markets, however Ofcom's analysis within the replicability project and this market review have identified some serious issues that demonstrate that the wholesale markets are not yet properly functioning. It is vital that Ofcom correct these issues, this market review is part of that but Ofcom must not stop there and be ready to continue to act if and when problems continue

to exist. Regulation in the retail market should not lapse, but should be removed by a positive Ofcom decision taken on the basis of a future market review.

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

Cable&Wireless believe that BT has SMP in all of the TISBO markets in the UK excluding Hull area. It is possible that there is a justification to find separate geographic markets in the very high bandwidth and high bandwidth markets (notwithstanding the fact that we doubt such bandwidth breaks are justified) and if that is the case BT may not have SMP in some parts of the UK. However, Ofcom's geographic analysis has not yet properly identified these markets for the reasons we provided in section 2.8 and we believe that on proper analysis these areas are likely to be too small to justify a separate treatment through ex-ante regulation.

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

Cable&Wireless believe that BT has SMP in all of the AISBO markets in the UK excluding Hull area. The comments relating to geographic markets within TISBO markets apply equally in the case of AISBO.

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

Yes. Cable&Wireless observe that BT's SMP in trunk is almost exclusively driven by the somewhat arbitrary nature of the PPC pricing structure that makes it uneconomic for purchasers of PPCs to avoid buying trunk segments. Apart from this issue the trunk market should be competitive. The changes Ofcom is proposing for the definition of trunk will go some way to addressing this issue but will not resolve it completely. We discuss this in more detail within section 2.7.

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

The retail market in Hull consists only of circuits that both start and end in Hull and therefore is likely to be relatively small. Given properly functioning wholesale markets the downstream retail markets should be competitive although we note the difficulties that arise from the inefficiencies associated with interconnect when providing short point to point retail circuits. It has not been practical to investigate these issues in the time available and in the absence of evidence that the issues are insignificant we support Ofcom's finding of SMP.

Cable&Wireless note that Ofcom believe that our own market share in the Hull area is particularly high, we do not believe this to be correct. We believe that this is likely to be caused by issues with the data quality provided by ourselves combined with the way Ofcom interpreted it and would welcome a further discussion with Ofcom on this issue.

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

Yes. We believe K-Com does have SMP

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

Yes. We believe K-Com does have SMP

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?

No. On the contrary Cable&Wireless believe that the available evidence points to the fact that BT does have SMP in both the very high bandwidth TISBO and the high bandwidth AISBO markets. BT's ubiquitous duct network and very extensive fibre network mean that it is in by far the best position of any Communications Provider to provide fibre access services. Cable&Wireless' own experience of providing large scale solutions for our customers often results in BT being the only choice for connectivity even at these high bandwidths; in many cases it is simply out of the question to consider self provision. Set against this experience it is absolutely clear that for some buildings, and some BT exchanges (e.g. for backhaul) BT has SMP. Cable&Wireless believe that either Ofcom is incorrect in its finding of no SMP or that it has incorrectly defined the relevant market or its geographic scope in the first place.

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?

Yes. In general we support Ofcom's proposed remedies but we make further comments in section 3.2.

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?

Yes. In general we support Ofcom's proposed remedies but although we do make a number of further comments in section 3.3.

Question 18: Do stakeholders agree with our assessment of the appropriate regulatory option and our proposed remedies for the wholesale trunk market?

Yes. Cable&Wireless believe PPCs in general and trunk circuits in particular are significantly over priced and it is essential that Ofcom step in to control the prices under a charge control. It is not appropriate for Ofcom merely to apply a glide path but it is necessary to set new starting charges based upon the efficiently incurred costs of providing the service.

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?

Cable&Wireless notes Ofcom's proposal to set regulatory obligations in the retail market that will expire without the need for a further market review. The problems identified by Ofcom in the wholesale market that underpins this market are significant and Ofcom should conduct a further review and make a positive decision to remove the retail regulation if and when it is appropriate. With respect to the voluntary undertakings we note that it is important that they come into force on or before the point when the new Direction.

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?

It has not been possible to study this issue within the timescales of the consultation.

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?

It has not been possible to study this issue within the timescales of the consultation.

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?

Yes. Cable&Wireless very much welcomes Ofcom consideration of an unbundled access fibre remedy. The economies of scale and scope that BT enjoys in the access network mean that this asset is not economically replicable whereas the equipment that is used to light the fibre most definitely is. Therefore unbundled access fibre would enable true service differentiation and innovation in the way that LLU has started to provide for copper based services. Ofcom is correct to proceed with caution, but access to unbundled access fibre is the next logical step forward from WES Local Access and Tillap products envisaged by Ofcom in its strategic review of telecommunications. We provide more detail on this issue in section 4.1.

6 CONFIDENTIAL ANNEXES

Please see separate file