

Wholesale market for low bandwidth AISBO in the Hull area

Introduction

8.559 As discussed in Section 7, we are now proposing to find no undertakings has SMP in the high bandwidth AISBO market in Hull. The revised SMP finding is being subject to a public consultation until the 13 January 2009.

8.560 Below we conclude the review of the low bandwidth AISBO market in Hull. We first summarise our proposals, then consider the respondents views and provide our response to the points raised. Finally, having regard for all the responses and available evidence, we set out the conclusions of our review.

8.561 We also set out how we consider the remedies we are imposing on KCOM comply with the legal tests set out in the Act, and how, in identifying the appropriate remedies, we have taken account of the ERG Wholesale Leased Lines Common position.

Summary of January 2008 proposals

8.562 In paragraphs 8.411 to 8.430 of the January 2008 consultation we reviewed the regulatory options, which remedies should apply, and we considered the relevant Communications Act tests for the low and high wholesale AISBO markets in Hull, following a proposed finding of SMP on KCOM in the markets for low and high bandwidth AISBO in the Hull area.

Options assessment

8.563 The regulatory options considered were:

- No regulation;
- Status quo; and
- Variations and additional measures, including introducing a mechanism that would link the price of wholesale AISBO services in the Hull area to a suitable benchmark for competitive prices. A candidate for such a benchmark would be BT's wholesale AISBO prices. Differences between KCOM's charges and BT's would require an objective justification, related for example to the costs of supply. This benchmark would be taken into account in the event of a dispute relating to KCOM's charges for AISBO services, rather than used for ex ante regulation.

8.564 When we considered the potential impact on stakeholders, we considered that the third option, comprising variations and additional measures, best met our objectives.

8.565 On the basis of our assessment, we concluded that the appropriate action was to introduce the proposed variations and additional measures.

Proposed Remedies

8.566 We proposed that KCOM should be subject to the following SMP obligations:

- General access obligation to supply wholesale products upon request;

- No undue discrimination;
- Cost orientation;
- A requirement to publish a reference offer; and
- A requirement to publish technical information.

8.567 In addition, we set out at paragraphs 8.421 to 8.426 of the January 2008 consultation our proposed intention to consider some form of control over KCOM's prices for wholesale AISBO services, and, in particular, a benchmarking mechanism that would link the price of KCOM's services to that of BT.

Responses to the consultations and Ofcom's response

Regulation of wholesale AISBOs

8.568 KCOM opposed the proposed regulation for wholesale AISBOs in Hull, including the adoption of a price benchmark for its wholesale prices. Instead, it offered the opportunity to discuss voluntary undertakings on the pricing of wholesale AISBO services.

8.569 With respect to the imposition of remedies in relation to low bandwidth AISBO in the Hull area, where we have found KCOM to have SMP, Section 87(1) of the Act provides that, where Ofcom has made a determination that a person has SMP in the market reviewed, it must set such SMP conditions as it considers appropriate and as authorised by the Act. We do not think therefore that the option of no regulation is available to us. We discuss further below how we consider that the remedies we are imposing on KCOM meet the legal tests set out in the Act, including how reliance on Competition Law alone is not appropriate for this market.

8.570 We have engaged on KCOM on the opportunity of revising our original proposals and considered the option of voluntary undertakings would achieve the same objective but with a reduced burden on KCOM. KCOM has produced a set of proposals for the future of pricing of AISBO products in Hull which will be subject to consultation in the Leased Lines Charge Controls consultation document to be published at the same time as this Statement.

Review of proposals for remedies

8.571 In this sub Section we summarise the key arguments in support of our conclusions on the appropriate remedies. Our fuller analysis of the remedies was set out in paragraphs 8.431 to 8.438 of the January 2008 consultation.

8.572 We set out our policy objectives in paragraphs 8.33 to 8.37 of the January 2008 consultation. Given we have found in Section 7 that KCOM has SMP in these market, we consider that regulation should have the following aims in this market:

- to protect wholesale customers and, via the retail market, consumers from the exploitation of that SMP, for example to protect them from excessive prices;
- to promote competition in the retail market by ensuring that SMP in this wholesale market is not leveraged into the retail market; and
- to promote competition in this wholesale market.

Wholesale Access

8.573 Without an obligation to provide wholesale services to rival CPs, KCOM is likely to have an incentive to refuse to provide access and leverage its market power into the downstream retail market. In order to meet the objective of promoting competition in the retail market, an obligation to provide network access is required.

Prohibition of undue discrimination

8.574 The obligation to provide wholesale access on its own would be insufficient to promote retail competition. Without further regulation, KCOM would be able to give preferential treatment to its own downstream divisions. In particular, it could engage in price and non-price discrimination practices that could push rivals out of the downstream market, and restrict competition in the downstream market. We therefore consider the prohibition of undue discriminate is justified to prevent KCOM from distorting competition by favouring its own retail business.

Cost orientation

8.575 The most obvious way in which KCOM could abuse its SMP position is through excessively high charges. Some restriction on the level of charges is therefore appropriate.

Requirement to publish a reference offer and technical information

8.576 Without transparency obligations such as the one to publish a reference offer and technical information, it would be difficult to detect anti competitive behaviour such as price and non price discrimination. Because of KCOM's market power there would be a high risk that it could engage in such behaviour. Ex ante transparency obligations on a reference offer and technical information make it easier for other CPs to compete with KCOM in the retail market on an equal footing. Ofcom therefore considers it appropriate to impose these transparency obligations on KCOM.

Conclusions

8.577 Having considered all responses to the consultations, and having reviewed all evidence available to us, we conclude that the most appropriate remedies are as set out in the January and July 2008 consultations. In reaching our decision we have taken account of the considerations described in paragraph 8.109 above. The reasons for our conclusion were set out in paragraphs 8.431 to 8.438 of the January 2008 consultation.

8.578 Ofcom has therefore decided that KCOM should be subject to the following obligations in the market for low bandwidth AISBO in the Hull area:

- a general access obligation to supply wholesale products upon request;
- a requirement not to unduly discriminate;
- a requirement to publish a reference offer; and
- a requirement to publish technical information.

- 8.579 In addition, we are consulting in the separate Leased Lines Charge Controls consultation on the opportunity to accept KCOM's proposed voluntary undertakings on the price of wholesale low bandwidth AISBO in the Hull area.

Communications Act tests

Introduction

- 8.580 It is our view that the regulatory obligations we are imposing on KCOM comply with the requirements set out in the Act. In the paragraphs that follow, we first consider how we believe they comply with Section 87(1) of the Act. Secondly, we consider, as suggested by recital 27 of the Framework Directive, whether competition law remedies alone would suffice to address the concerns and competition problems we have identified, and give our reasons why we think it would not. We then set out, individually for each of the obligations we are imposing on KCOM, how we believe it meets the appropriate legal tests under Section 47(2) of the Act. Finally, We set out how we believe the cost orientation obligation we are imposing on KCOM meets the further test set out in Section 88 of the Act.

SMP Conditions are appropriate

- 8.581 Section 87(1) of the Act provides that, where Ofcom has made a determination that a person has SMP in the market reviewed, it must set such SMP conditions as it considers appropriate and as authorised by the Act. This implements Article 8 of the Access Directive.
- 8.582 Having considered all responses to the consultations and all evidence available to us, we have identified in Section 7 KCOM as having SMP in these wholesale low bandwidth AISBO market. For the reasons set out in paragraphs 8.431 to 8.438 of the January 2008 consultation, and reviewed in paragraph 8.574 above, we believe it is appropriate to impose such conditions on KCOM in relation to the objective we have set out to achieve in this review. In particular, in relation to the promotion of greater competition in the downstream retail market, which, we consider, would bring substantial benefits to end users by increasing their access to a competitive choice of prices and providers.
- 8.583 Finally, when considering what should be the appropriate remedies, we have had regard to the considerations set out in paragraph 8.109 of this Section.

Reliance on Competition Law alone not sufficient

- 8.584 For broadly the same reasons set out at paragraph 8.550 above when discussing the inadequacy of Competition Law alone for wholesale markets where we had found BT to have SMP, we consider that reliance on Competition Law alone is not sufficient in this market.

Tests under Section 47(2) of the Act

- 8.585 We set out in details in the table below how we think each remedy passes the relevant Communications Act tests. In particular, how we believe each obligation we are imposing on KCOM meets the tests set out in Section 47(2) of the Act, according to which each obligation must be:
- objectively justifiable in relation to the networks, services or facilities to which it relates;

- not such as to discriminate unduly against particular persons or a particular description of persons;
- proportionate to what the condition is intended to achieve; and
- in relation to what it is intended to achieve, transparent.

Table 8.21: Summary of Ofcom’s reasons for believing that the test of Section 47 (2) of the Act is met for the obligations imposed on KCOM as a result of it having SMP in the market for low bandwidth AISBO in the Hull area

<i>Is it objectively justifiable in relation to the networks, services and facilities which it relates?</i>	<i>Is it such as not to discriminate unduly against particular persons or a particular description of persons?</i>	<i>Is it proportionate to what the condition is intended to achieve?</i>	<i>In relation to what it is intended to achieve, is it transparent?</i>
<i>Obligation to provide access</i>			
<p>The obligation is objectively justifiable as, in the absence of this condition, KCOM might refuse to supply AISBO terminating segments, which would prevent effective competition in the retail market. By ensuring that OCPs can gain access to KCOM's wholesale services on fair and reasonable terms, it will enable OCPs to compete in the retail leased lines market. By enabling OCPs to compete fairly with KCOM, it puts pressure on KCOM to reduce costs and so promotes efficiency, confers the greatest possible benefits on end-users and promotes effective and sustainable competition.</p>	<p>The obligation does not discriminate unduly as it applies only to an operator which have SMP in the relevant market and which therefore would be able to, and would have an incentive to, distort competition by denying access on fair and reasonable terms.</p>	<p>The obligation is proportionate since KCOM is not required to provide access if the request is unreasonable and because Ofcom does not consider that other operators will install competing facilities to an extent to undermine KCOM's SMP. In the absence of Ex-ante regulation, entry barriers and KCOM's SMP mean that competition might never become established.</p>	<p>The obligation is transparent since the condition has been drafted for maximum clarity and because the purpose of the obligation and the reasons for imposing it are clearly explained in this document.</p>
<i>Non discrimination</i>			
<p>The requirement is justified because otherwise KCOM, as a vertically</p>	<p>The requirement does not discriminate unduly as it applies only to operators who, by</p>	<p>The requirement is proportionate in that only discrimination which is unduly is prohibited and</p>	<p>The requirement is transparent since the condition has been drafted for maximum</p>

<p>integrated operator, would be able to distort competition by discriminating against its rivals to the benefit of its own (downstream) divisions, e.g. through charging other operators higher prices than it charges KCOM retail division. It also ensures that KCOM does not abuse its SMP position by charging excessive prices or offering inadequate quality of service to particular groups of customer and, via the retail market, to end users. The requirement therefore promotes competition and furthers the interests of consumers.</p>	<p>possessing SMP in the relevant market, would be able to, and would have an incentive to, distort competition by discriminating against competitors.</p>	<p>because it is the least onerous obligation required to address this particular risk of harm to competition. Ex ante regulation is more effective than ex post competition law where, as here, entry barriers and SMP mean that otherwise, effective competition might never become established.</p>	<p>clarity and because the purpose of the obligation and the reasons for imposing it are clearly explained in this document.</p>
<p><i>Cost orientation</i></p>			
<p>The requirement is justified because, given its SMP position, KCOM might set individual charges at excessively high or anti-competitively low levels.</p>	<p>The requirement does not discriminate unduly as it applies only to operators who, by possessing SMP in the relevant market, would be able to, and would have an incentive to, distort competition by setting charges which are not based on costs.</p>	<p>The requirement is proportionate because, by taking into account costs, including an appropriate contribution to the recovery of common costs and a reasonable return on investment, the cost orientation condition allows KCOM's charges to be proportionate to the extent of KCOM's investment in the provision of the relevant services. Ex ante regulation is necessary for the reasons set out above.</p>	<p>The requirement is transparent since the condition has been drafted for maximum clarity and because the purpose and meaning of the obligation and the reasons for imposing it are clearly explained in this document.</p>
<p><i>Transparency obligations</i></p>			
<p>These obligations are justified in that they provide certainty to operators and prevent KCOM withholding</p>	<p>The obligations do not discriminate unduly as they apply only to operators who, by possessing SMP in the relevant market, would be able to, and would</p>	<p>The obligations are proportionate as the information which KCOM is obliged to publish is necessary to enable OCPs to make effective use of the network</p>	<p>The obligation is transparent since the condition has been drafted for maximum clarity and because the purpose and meaning of the</p>

<p>information from customers and competitors, or misusing information in a way which could harm competition. In addition, they facilitate Ofcom's monitoring of compliance with the other obligations, notably the obligation not to unduly discriminate.</p>	<p>have an incentive to, exploit customers and distort competition by withholding or misusing information.</p>	<p>access which KCOM is also required to provide. The transparency obligations therefore support the other conditions imposed to address KCOM's SMP in this market. Without this information, OCPs could be unable to compete fairly with KCOM.</p>	<p>obligation and the reasons for imposing it are clearly explained in this document.</p>
--	--	---	---

Test under Section 88 of the Act

8.586 Section 88 of the Act, which implements Article 13 of the Access Directive, further requires that, when considering a cost orientation obligation, we are able to demonstrate that:

- there is a risk of adverse effect from price distortion; and
- that the cost orientation obligation is appropriate to: promote efficiency, promote sustainable competition, and conferring the greatest possible benefits on end-users.

8.587 Paragraph (3) of Section 88 further argues that there is a relevant risk of adverse effects arising from price distortion if the dominant provider might:

- So fix and maintain some or all of its prices at an excessively high level, or
- So impose a price squeeze, as to have adverse consequences for end-users of public electronic communications services.

8.588 As discussed in Section 7, where we assessed SMP in these markets, it appears from the market analysis that there is a relevant risk of adverse effects arising from price distortion. In particular, we have identified the risk that KCOM, given its market power, could engage in price discrimination between its downstream arms and its competitors when granting access to its network. We think therefore that without an obligation to orient prices to costs, KCOM could, given its scale and scope advantages, afford to price below cost to deter further entry and push competitors out of the market (i.e. margin squeeze). It could also price above cost, which would result in higher prices for end users in retail markets, given the reliance of the market on KCOM's wholesale access services. Given that the dominant provider might engage in such practices, we think that we have identified a relevant risk of adverse effects arising from price distortions ex Section 88(3).

8.589 It also appears that the setting of the condition is appropriate for the purposes of promoting efficiency, promoting sustainable competition and conferring the greatest possible benefits on the end-users of public electronic communications services. We set out why we think this condition is appropriate in paragraph 8.164 of the January 2008 consultation.

8.590 As required by Section 88(1)(b) of the Act, Ofcom considers that this obligation fulfils the following requirements:

- promotes efficiency, by promoting cost based pricing and efficient market entry; and
- confers the greatest possible benefits on the end-users by ensuring that providers competing for customers in the retail market are not exploited by KCOM setting unreasonable conditions in the wholesale market.

8.591 The cost orientation condition that Ofcom is imposing will require that, unless Ofcom directs otherwise, KCOM shall set all charges such that they are reasonably derived from the costs of provision based on a forward looking long run incremental cost approach and allowing an appropriate mark up for the recovery of common costs. If a charge were set below the long run incremental cost of supply, then some customers may buy that product when they would not have been prepared to pay the full long run incremental costs of providing it. This is likely to be inefficient and result in a loss for society as a whole. Moreover, such a low charge is likely to be inconsistent with promoting sustainable wholesale competition, because it could mean that an equally efficient competitor is prevented from entering the market because it is unable to recover its incremental costs. By promoting efficiency and ensuring that competition is not distorted, requiring charges not to be below long run incremental costs will tend to confer the greatest benefits on end users. If a charge were above long run incremental costs plus an appropriate mark up, then it is higher than it needs to be in order to produce the service and this is unlikely to be in consumers' interests. If there were particular circumstances that mean that a charge set on the basis of long run incremental costs plus an appropriate mark up would not be appropriate, and would be detrimental to consumers' interests, then the condition allows Ofcom to direct that the charges are not required to be set on that basis.

Account taken of the ERG Wholesale Leased Lines Common Position

8.592 In accordance with ERG's Statement of 12 October 2006¹¹⁴, while ERG Common Positions are not binding, ERG members must take the utmost account of them. Table 8.19 below summarises how Ofcom has taken into account the ERG WLL CP in proposing the regulatory remedies for this market.

Table 8.22 Account taken of the ERG Wholesale Leased Lines Common Position

Objective of remedy	Account taken by Ofcom
Assurance of supply	The requirement to provide Network Access on reasonable request should provide competitors with reasonable certainty of ongoing supply of wholesale leased lines in order to give them confidence to enter the market.
Level playing field	The requirement not to unduly discriminate, together with the Discrimination Guidelines, should ensure that entrants will be able to compete on a level playing field.
Avoidance of unfair first-mover advantage	The requirement not to unduly discriminate, together with the Discrimination Guidelines, should ensure that there is no unfair first-

¹¹⁴ ERG(06)51.

	mover advantage.
Transparency of terms and conditions	The requirement to publish a Reference Offer and the requirement to notify charges, terms and conditions in advance should provide clarity of terms and conditions of wholesale leased lines.
Reasonableness of technical parameters of access	The requirement to publish a Reference Offer and technical information along with the obligation to provide access products upon request should ensure that the technical parameters of access are reasonable.
Fair and coherent access pricing	The price commitments offered by KCOM should ensure that pricing of wholesale SMP TISBO services in Hull is fair and reasonable in view of the future declining demand conditions for those products.
Reasonable quality of access products	The requirement not to unduly discriminate, together with the Discrimination Guidelines and the requirement to publish a Reference Offer should ensure that access products are of reasonable quality.

Interconnection services relating to KCOM’s provision of services in the wholesale TISBO and AISBO markets

8.593 We have not received any comments on the proposal not to regulate these services in the TISBO markets where KCOM has been found to have SMP. We therefore confirm that Ofcom will continue not to regulate such services, and will rely on the general obligation on KCOM to provide access in wholesale TISBO markets in Hull. This general obligation will provide requesting parties with a regulatory safeguard against KCOM’s market power in negotiating for such products and services, should the demand for them arise.

Cost accounting and accounting separation obligations to apply to BT and KCOM

Summary of proposals

8.594 In paragraphs 8.440 to 8.453 of the January 2008 consultation we reviewed the cost accounting and accounting separation requirements that should apply to BT and KCOM in the markets where they have been found to have SMP. We present a summary below.

Existing framework

8.595 Under the existing framework, BT and KCOM are required to produce a range of outputs, the purpose of which is to support compliance with no undue discrimination and cost orientation obligations in SMP markets. Those outputs include the following:

8.596 Generic cost orientation & non-discrimination requirements:

- Preparation of a variety of financial statements;

- Preparation of extensive supporting documentation explaining how the financial statements have been put together;
- Provision of an independent assurance statement;
- Publication of most of the information; and
- Preparation of reconciliation statements;

8.597 Cost orientation specific requirements:

- Preparation of service level cost data compared to average charges
- Preparation of costs of network components used to deliver services
- Analysis of service cost stack by component

8.598 Non-discrimination specific requirements:

- Analysis of internal and external sales including volume data.

Proposals

8.599 Our proposals in this area were as follows:

- The current regulatory accounting framework should continue to be used for compliance reporting on the designated markets;
- We believe further reporting (to Ofcom only) on downstream activities which receive leased line charges as cost inputs is necessary, and intend to examine this issue further in a separate consultation;
- The weaknesses we have identified in the PPC transfer charging regime should be addressed by BT through improvements in the regulatory accounting system, which will be explained and consulted on in a separate consultation; and
- Cost accounting obligations in the retail market for low bandwidth TI circuits outside Hull and the wholesale markets for TISBOs in the Hull area should only apply in the event of a breach of the voluntary undertakings on pricing proposed in those markets by BT and KCOM respectively, as described above.

8.600 Paragraph 8.453 of the January 2008 consultation has a discussion of how we thought the proposed remedies met the Communications Act tests.

Review of our proposals and conclusions

8.601 We have received no comments from respondents on the proposed approach to cost accounting separation. We therefore consider that it is appropriate to implement our proposals in their original form.

8.602 Maintaining a “fit for purpose” reporting regime is essential and improvements to the reporting of services covered by the January 2008 consultation were incorporated in BT’s 2007/08 regulatory financial statements. Reference was made in the January 2008 consultation to the likelihood that further reporting changes would be needed

following completion of this review. However, BT's 2007/08 financial statements were still based on the previous market definitions and obligations.

- 8.603 We plan to review in detail BT's and KCOM's regulatory accounting obligations following publication of this statement. Where we believe changes are required then these will be subject to a separate consultation in advance of BT and KCOM publishing their 2008/09 regulatory financial statements in July 2009.

Opportunities to foster deeper level of competition in wholesale business markets

- 8.604 One of the issues considered in the course of this market review is whether Ofcom should review the market for dark fibre in the access for the purpose of promoting greater competition in wholesale leased lines markets.
- 8.605 We presented in Annex 10 to the January 2008 consultation a discussion of this issue, and invited stakeholders' to comment on the option of a market review for dark fibre in the access network, and in particular on the following related issues:
- benefits for consumers;
 - nature of the access obligation;
 - consistency with regulatory principles;
 - compatibility with other regulations;
 - impact on investment incentives; and
 - pricing issues.
- 8.606 For a full discussion, see paragraphs 8.454 to 8.463 of the January 2008 consultation.

Review of responses to the January 2008 consultation

- 8.607 In the January 2008 consultation, we asked stakeholders the following question:

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?

- 8.608 Several stakeholders provided a response to this question, and there were wide-ranging views on the subject of a potential dark fibre review.
- 8.609 BT and three other respondents opposed any potential review of dark fibre. Some respondents were presently unconvinced of the merits of a dark fibre remedy and requested clarification before such a review is considered.
- 8.610 Several respondents however expressed support for a dark fibre review.

8.611 Ofcom has considered the responses received on this proposal, and believes that at this time it is not appropriate to further explore the opportunity for a dark fibre review for the purpose of improving competition in wholesale leased lines access markets. We set out below our arguments.

Discussion and Conclusions

8.612 In the January 2008 consultation, we asked stakeholders to comment on the issue of whether Ofcom should review the dark fibre market, with a view to mandating a dark fibre access product in case we found undertakings with SMP in the market. In particular, we asked stakeholders to come forward with evidence that access to deeper remedies would benefit competition, and, ultimately, end users.

8.613 The majority of stakeholders expressed support for a review of dark fibre. However, not all CPs could at this stage see the benefits of such a review. BT and three other respondents were opposed to such a review, or could not see the benefits at this stage.

8.614 In our view, the key issue to consider is not whether a dark fibre review and a potential dark fibre access remedy (Layer 1 remedy) would be good *per se*, but:

- i) whether it would bring in additional benefits compared with the current approach to wholesale business markets based on WESs, PPCs etc. (Layer 2 remedies); and
- ii) whether these mainly dynamic benefits would outweigh the largely static costs involved in providing services on the basis of dark fibre.

8.615 The table below summarizes the pros and cons of a dark fibre review at this stage based on the analysis presented in the consultation document and the responses received from stakeholders.

Table 8.23 Pros and cons of a dark fibre review for the purpose of promoting competition in wholesale leased lines access markets

PROS	CONS
Greater depth of competition: more control of infrastructure and upgrade plans for equipment; more control over maintenance & repair;	Lower breadth of competition i.e. fewer competitors
Leveraging of existing “unused” access fibre & ducting from BT (there is no clear evidence at present in support of this argument ¹¹⁵)	Disruption to market & working of remedies
Innovation	Benefits of access to deeper remedies in wholesale business markets uncertain
Better quality of service and better (and lower) pricing for wholesale products	Intrusive regulation, would not meet the support of BT and could impact BT’s implementation of the Undertakings
	There is no international experience at present in countries with comparable telecom markets showing how a dark fibre remedy might benefit competition

8.616 The most common arguments put forward by CPs in support of a dark fibre review were: better control of infrastructure, improved quality of service and better (and lower) pricing.

8.617 On the issue of control of infrastructure, we consider that OCPs would gain more control over the transmission layer infrastructure (i.e. the boxes that enable the transmission of data and/or voice traffic), but that the underlying infrastructure would still be under BT’s ultimate control. Given that BT has access at least to the same transmission equipment and lower prices than others because of its scale, it is not clear whether the economic benefits of controlling the transmission equipment would be significant.

8.618 On quality of service, Ofcom has already been working to improve BT’s service provision through the Openreach Ethernet portfolio SLAs/SLGs project, and we are adopting a similar approach for BT Wholesale’s products such as PPCs.

8.619 On better (and lower) pricing, the charge control project is planning to address OCPs concerns through considering a new set of charge controls, which would cover also the Openreach Ethernet portfolio.

8.620 With respect to the issue of depth vs. breadth of competition, because of the economies of scale and scope involved in purchasing the equipment and running it, it can be argued that such a review, in the event that it led to the introduction of a dark

¹¹⁵ Anecdotal evidence obtained from BT concerning the incidence of construction charges for new fibre-based wholesale products in the access (PPCs, WESs) points to BT having to dig and lay new fibre in 9 out of 10 cases. Even if this is not to be taken face value, it does not support the view that BT has an extensive “idle” access fibre infrastructure other than those already in use for fibre-based wholesale products.

fibre remedy, would only benefit a small number of the current competitors in this market with a risk of greatly reducing the breadth of competition in downstream markets.

- 8.621 While the greater scope for innovation was mentioned by most respondents as a key advantage of having a dark fibre remedy compared with the current set of remedies (PPCs, WESs, BESs etc.), respondents did not provide any compelling arguments or evidence that explained what form such innovation would take, or, crucially, how any benefits would flow through to end users. In the absence of more compelling arguments in support of greater innovation, and considering the potentially disruptive and intrusive nature of a dark fibre remedy, we do not consider the case for proceeding with a review of the market for access dark fibre to be strong at this time.
- 8.622 It is also worth noting that the only major telecoms market in Europe where dark fibre in the access is available as an input, Sweden, has had a very specific set of conditions supporting the development of a dark fibre market: fuelled by public subsidies since the late '90s a market for dark fibre has emerged, characterized by local public/private infrastructure monopolies with an obligation to supply third party access. Crucially, the market for dark fibre pre dated the opening up of the incumbent's leased lines network. This experience is not therefore conclusive as to what effect the introduction of a dark fibre remedy might have on the market and competition in the presence of wholesale regulation.
- 8.623 Having considered stakeholders responses, and having evaluated their arguments, we feel that at this stage, a review of dark fibre for the purpose of promoting competition in wholesale leased lines access markets is not warranted. The improved competitive conditions that we believe should follow from the implementation of the new regulatory remedies for leased lines, as described in this Section, will address two of the main issues (pricing and quality of service) which have prompted some stakeholders to advocate a dark fibre review.
- 8.624 Our conclusions are strictly relevant to a dark fibre review for the purpose of promoting competition in downstream markets for leased lines, and are without prejudice to the possibility in the future for Ofcom to review the dark fibre market in the UK for reasons other than promoting competition in these markets.

Annex 1

Responding to this consultation

How to respond

- A1.1 Ofcom invites written views and comments on the reviewed SMP assessment in relation to the market for high bandwidth AISBO in the Hull area and the proposed finding of no SMP on KCOM. These are to be made **by 5pm on 13 January 2009**.
- A1.2 Ofcom strongly prefers to receive responses using the online web form at <http://www.ofcom.org.uk/consult/condocs/XXXX>, as this helps us to process the responses quickly and efficiently. We would also be grateful if you could assist us by completing a response cover sheet (see Annex 3), to indicate whether or not there are confidentiality issues. This response coversheet is incorporated into the online web form questionnaire.
- A1.3 For larger consultation responses - particularly those with supporting charts, tables or other data - please email business.connectivity.review@ofcom.org.uk attaching your response in Microsoft Word format, together with a consultation response coversheet.
- A1.4 Responses may alternatively be posted or faxed to the address below, marked with the title of the consultation.

Serafino Abate
 4th Floor
 Competition Division
 Riverside House
 2A Southwark Bridge Road
 London SE1 9HA

Fax: 020 7783 4559
- A1.5 Note that we do not need a hard copy in addition to an electronic version. Ofcom will acknowledge receipt of responses if they are submitted using the online web form but not otherwise.
- A1.6 It would be helpful if your response could include direct answers to the questions asked in this document, which are listed together at Annex 4. It would also help if you can explain why you hold your views and how Ofcom's proposals would impact on you.

Further information

- A1.7 If you want to discuss the issues and questions raised in this consultation, or need advice on the appropriate form of response, please contact Serafino Abate on 020 7981 3333.

Confidentiality

- A1.8 We believe it is important for everyone interested in an issue to see the views expressed by consultation respondents. We will therefore usually publish all responses on our website, www.ofcom.org.uk, ideally on receipt. If you think your

response should be kept confidential, can you please specify what part or whether all of your response should be kept confidential, and specify why. Please also place such parts in a separate annex.

- A1.9 If someone asks us to keep part or all of a response confidential, we will treat this request seriously and will try to respect this. But sometimes we will need to publish all responses, including those that are marked as confidential, in order to meet legal obligations.
- A1.10 Please also note that copyright and all other intellectual property in responses will be assumed to be licensed to Ofcom to use. Ofcom's approach on intellectual property rights is explained further on its website at <http://www.ofcom.org.uk/about/account/disclaimer/>

Next steps

- A1.11 Following the end of the consultation period, Ofcom intends to publish a statement later in 2009.
- A1.12 Please note that you can register to receive free mail Updates alerting you to the publications of relevant Ofcom documents. For more details please see: http://www.ofcom.org.uk/static/subscribe/select_list.htm

Ofcom's consultation processes

- A1.13 Ofcom seeks to ensure that responding to a consultation is easy as possible. For more information please see our consultation principles in Annex 2.
- A1.14 If you have any comments or suggestions on how Ofcom conducts its consultations, please call our consultation helpdesk on 020 7981 3003 or e-mail us at consult@ofcom.org.uk . We would particularly welcome thoughts on how Ofcom could more effectively seek the views of those groups or individuals, such as small businesses or particular types of residential consumers, who are less likely to give their opinions through a formal consultation.
- A1.15 If you would like to discuss these issues or Ofcom's consultation processes more generally you can alternatively contact Vicki Nash, Director Scotland, who is Ofcom's consultation champion:

Vicki Nash
Ofcom
Sutherland House
149 St. Vincent Street
Glasgow G2 5NW

Tel: 0141 229 7401
Fax: 0141 229 7433

Email vicki.nash@ofcom.org.uk

Annex 2

Ofcom's consultation principles

A2.1 Ofcom has published the following seven principles that it will follow for each public written consultation:

Before the consultation

A2.2 Where possible, we will hold informal talks with people and organisations before announcing a big consultation to find out whether we are thinking in the right direction. If we do not have enough time to do this, we will hold an open meeting to explain our proposals shortly after announcing the consultation.

During the consultation

A2.3 We will be clear about who we are consulting, why, on what questions and for how long.

A2.4 We will make the consultation document as short and simple as possible with a summary of no more than two pages. We will try to make it as easy as possible to give us a written response. If the consultation is complicated, we may provide a shortened Plain English Guide for smaller organisations or individuals who would otherwise not be able to spare the time to share their views.

A2.5 We will consult for up to 10 weeks depending on the potential impact of our proposals.

A2.6 A person within Ofcom will be in charge of making sure we follow our own guidelines and reach out to the largest number of people and organisations interested in the outcome of our decisions. Ofcom's 'Consultation Champion' will also be the main person to contact with views on the way we run our consultations.

A2.7 If we are not able to follow one of these principles, we will explain why.

After the consultation

A2.8 We think it is important for everyone interested in an issue to see the views of others during a consultation. We would usually publish all the responses we have received on our website. In our statement, we will give reasons for our decisions and will give an account of how the views of those concerned helped shape those decisions.

Annex 3

Consultation response cover sheet

- A3.1 In the interests of transparency and good regulatory practice, we will publish all consultation responses in full on our website, www.ofcom.org.uk.
- A3.2 We have produced a coversheet for responses (see below) and would be very grateful if you could send one with your response (this is incorporated into the online web form if you respond in this way). This will speed up our processing of responses, and help to maintain confidentiality where appropriate.
- A3.3 The quality of consultation can be enhanced by publishing responses before the consultation period closes. In particular, this can help those individuals and organisations with limited resources or familiarity with the issues to respond in a more informed way. Therefore Ofcom would encourage respondents to complete their coversheet in a way that allows Ofcom to publish their responses upon receipt, rather than waiting until the consultation period has ended.
- A3.4 We strongly prefer to receive responses via the online web form which incorporates the coversheet. If you are responding via email, post or fax you can download an electronic copy of this coversheet in Word or RTF format from the 'Consultations' Section of our website at www.ofcom.org.uk/consult/.
- A3.5 Please put any parts of your response you consider should be kept confidential in a separate annex to your response and include your reasons why this part of your response should not be published. This can include information such as your personal background and experience. If you want your name, address, other contact details, or job title to remain confidential, please provide them in your cover sheet only, so that we don't have to edit your response.

Cover sheet for response to an Ofcom consultation

BASIC DETAILS	
Consultation title:	
To (Ofcom contact):	
Name of respondent:	
Representing (self or organisation/s):	
Address (if not received by email):	
CONFIDENTIALITY	
Please tick below what part of your response you consider is confidential, giving your reasons why	
Nothing <input type="checkbox"/>	Name/contact details/job title <input type="checkbox"/>
Whole response <input type="checkbox"/>	Organisation <input type="checkbox"/>
Part of the response <input type="checkbox"/>	If there is no separate annex, which parts?
If you want part of your response, your name or your organisation not to be published, can Ofcom still publish a reference to the contents of your response (including, for any confidential parts, a general summary that does not disclose the specific information or enable you to be identified)?	
DECLARATION	
I confirm that the correspondence supplied with this cover sheet is a formal consultation response that Ofcom can publish. However, in supplying this response, I understand that Ofcom may need to publish all responses, including those which are marked as confidential, in order to meet legal obligations. If I have sent my response by email, Ofcom can disregard any standard e-mail text about not disclosing email contents and attachments.	
Ofcom seeks to publish responses on receipt. If your response is non-confidential (in whole or in part), and you would prefer us to publish your response only once the consultation has ended, please tick here. <input type="checkbox"/>	
Name	Signed (if hard copy)

Annex 4

Consultation question

SMP assessment in the Hull area

Question 1: Do stakeholders agree with our revised proposal not to find any operator to have SMP in the wholesale high bandwidth AISBO markets in the Hull area?

Annex 5

List of respondents to the July 2008 consultation

- BT
- Cable & Wireless (C&W)
- COLT
- European Commission (EC)
- Mobile Broadband Network Limited (MBNL)
- UKCTA
- 2 respondents provided a confidential response.

Annex 6

Geographic analysis

Introduction

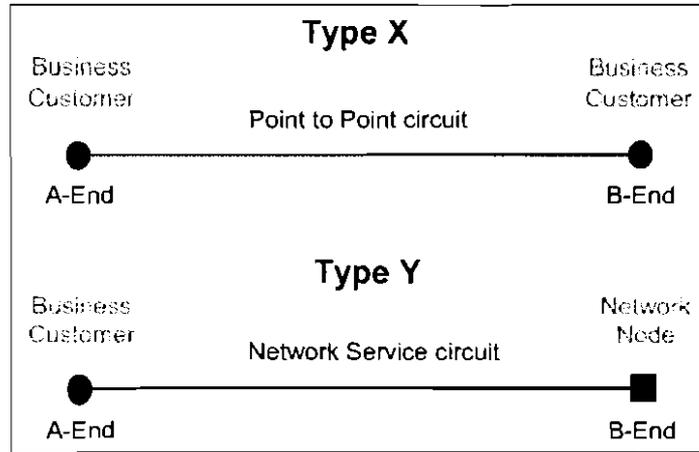
A6.1 In Sections 4 and 6 we have set out the conclusions of our geographic market analysis and subsequent geographic market definitions for the relevant retail and wholesale product markets respectively. In this annex we provide further details of our geographic analysis methodology. We begin by providing details of our analysis of service shares in the relevant retail markets before discussing our analysis of service shares in the wholesale markets. We then set out our approach to analysing network reach, which is a further key component of our geographic market analysis methodology.

Retail service share analysis

- A6.2 We collected empirical data from BT and 22 Other Communications Providers (OCP). The retail market data gathered from operators included approximately 247,000 TI retail leased line records and approximately 48,000 AI retail leased line records. There are also 114,000 records that were subsequently considered to be outside the leased line markets defined by Ofcom.¹¹⁶
- A6.3 This analysis looked at the retail service share at postal sector level.
- A6.4 The output of the retail service share analysis shows the detailed breakdown of operators' shares of 'retail service ends' for each postal sector in the UK. A 'retail service end' is defined as the customer end point (i.e. customer site) served within a given leased line market.
- A6.5 There are two main types of retail leased line services considered:
- Point-to-point retail leased line (Type X), which is a circuit that connects two business customer sites (i.e. both ends are business customers' ends); and
 - Retail network services (Type Y), which is a circuit that connects a business customer into the operator's network node (i.e. one end is a network node)

¹¹⁶ These included circuits that are used to support PSTN telephone circuits, IP VPNs, ISDN circuits, Dark fibre services, ATM, Frame Relay and ADSL/Cable Modem circuits.

Figure A6.1: Retail leased line services



- A6.6 A point-to-point retail leased line (Type X) used to connect two business customer sites contributes two customer end-points to the total service end counts, while a leased line used to connect a business customer site to an operator’s network would contribute one end-point to the total service end count.
- A6.7 Both these types of retail services can be provided using TI e.g. primarily based on SDH, or AI e.g. primarily based on Ethernet technologies.
- A6.8 Ofcom has so far considered the retail market definitions as shown in Table A6.1 below.

Table A6.1 – Retail market definition

	Market	Bandwidth Breaks	Type of Circuits
1	TI Low	Up to and including 2Mbps and 8Mbps	Analogue Digital SDH/PDH (PPCs) SDSL (symmetric IPStream/datastream)
2	TI High	Above 8Mbps up to and including 45Mbps	Digital SDH/PDH (PPCs)
3	TI very high 155Mbit/s	Above 45Mbps up to and including 155Mbit/s	Digital SDH/PDH (PPCs)
4	TI very high 622Mbit/s	Above 155Mbit/s	Digital SDH/PDH (PPCs)
5	AI Low	Up to and including 1Gbp/s	Ethernet circuits (WES/WEES)
6	AI High	Above 1Gbp/s	Ethernet circuits

			(WES/WEES)
--	--	--	------------

A6.9 The methodology to estimate the operator retail service shares consists of the following four steps:

- i) Data cleansing
- ii) Aggregation by postal sector
- iii) Uplift of data
- iv) BT retail service share calculation.

Step 1: Data cleansing

A6.10 The data submitted by the different operators from which we requested information was not consistent. This is because the way different operators capture and store data is different to one another. Therefore, the first step in our market analysis was to manipulate the raw data received into a structure suitable for Ofcom's intended analysis.

A6.11 The following tasks were carried out to ensure the data received is presented in a consistent format:

- o Circuits considered to be outside the leased line markets as defined by Ofcom were removed;
- o The circuit bandwidths were checked, to ensure they are all consistently recorded in the same unit. The bandwidths were converted to a common format, expressed in Mbps (megabits per second);
- o Postcode correction was carried out to remedy the common detectable errors made when using automated batch processing techniques to record postcode data;
- o Circuit end point analysis was carried out to identify the non-customer end-points and exclude these from the service share calculations. End-points located at Datacentres, such as Telehouses, Telelinks or Teleticity sites are also excluded. Where operators had not provided data on the type of end-point being served, any network end-points were identified using the operator flex point information that was provided;
- o Extraction of the postal sector from the postcode data; and
- o For the retail market share, the circuits sold by OCPs were compared to the circuits sold by BT to ensure that double-counting does not occur; to identify circuits bought by OCP from BT that are re-sold to end customers. If this is the case, the circuit would be recorded as being sold by BT rather than the OCP. The circuits are compared using the Circuit Identifiers, as requested in the Information Request.

Step 2: Aggregation by Postal Sectors

- A6.12 Following the data cleansing of the data submitted, the retail customer ends (A-End and B-End of the leased line) are identified.
- A6.13 The postal sectors are extracted from the postcode data for each circuit. If the postcode is not supplied, then the postal sector is used. Otherwise, the area or town is used to geocode the customer end.
- A6.14 We opted to aggregate at the postal sector level when conducting the geographic analysis. The intention would be to aggregate these postal sectors into larger geographic areas when defining the boundaries of separate geographic markets.
- A6.15 There are a total of around 10,000 postal sectors in the UK, including Northern Ireland. A summary of postal measures are shown below:

Table A6.2: UK Postal Measure

Geographic Unit	Number	Example
Postcode	1,752,003	SE1 9HA
Postal Sector	c.10,000	SE1 9
Postal District	3,064	SE1
Postal Area	124	SE

- A6.16 Typically, a retail circuit has two customer ends. If each end is in a different postal sector, then each end is allocated to the relevant postal sector. If both ends are in the same postal sector, then both ends are allocated to that postal sector.
- A6.17 The number of retail customer ends in each postal sector is calculated for each operator. This is done for each defined market.

Step 3: Uplift of Data

- A6.18 Some of the data supplied by the operators were missing or incomplete. This could be in terms of geographic, product or bandwidth information. In this case, the data are uplifted.
- A6.19 Product/bandwidth uplift – where the product name or bandwidth has not been provided by the operator, the circuits with unknown bandwidth is allocated to the bandwidth in proportion to the operator’s overall circuit distribution.
- A6.20 Geographic uplift – where postcode information has not been provided, the circuits with unknown geographic data are distributed across the postal sectors in proportion to the operator’s geographic distribution.
- A6.21 Although the overall uplift required was relatively small in terms of the national market, Ofcom recognises that there could be pockets of locations where the accuracy of market size and subsequent market share calculations could have been compromised as a result of applying uplifts in this manner. These uplift errors could