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Ofcom Business Connectivity Market Review Call for Inputs:

MBNL and Everything Everywhere Consultation Response

Mobile Broadband Network Limited (**MBNL**) and Everything Everywhere Limited (**EE**) welcome the opportunity to respond to Ofcom's consultation *Business Connectivity Market Review Call for Inputs*, released on 21 April 2011.

MBNL is a joint venture between EE and Hutchison 3G UK Limited (**Three**), which is responsible for the operation of the joint EE and Three 3G radio access network (**RAN**).

Except where comments are stated as relating exclusively to EE's core network or retail operations, the comments in this response represent the mutually agreed position of EE and Three and represent the best interests of MBNL.

In terms of the significance of this BCMR to EE's retail business, business connectivity services are of main relevance to EE's mobile business. However, they are also an input into some of our retail VPN offerings for business customers (see the response to Consultation Question 1.3 below).

Those parts of this response marked with  and highlighted in yellow are confidential to MBNL. Those parts of this response marked with  and highlighted in green are confidential to EE.

Executive Summary

- Since the last business connectivity market review (**BCMR**)¹, there has been a strong growth in our acquisition of alternative interface symmetric broadband origination (**AISBO**) services, with many of our business connectivity requirements previously met by traditional interface symmetric broadband origination (**TISBO**) services now being met with generally more cost effective AISBO services – particularly at higher bandwidths. However, there remain many instances where it is not cost effective or suitable for us to replace legacy TISBO services with AISBO services, notably because of a lack of competition, resulting in low geographical availability and pricing structures that are both high and supplier biased. Continued regulation of both markets to encourage competitive supply and to remedy market distortions where competition is unlikely to materialise during the course of the next BCMR therefore remains important.
- Since the last BCMR, we have experienced an ever growing need for business connectivity bandwidth. Mobile backhaul now offers over 20Mbps download and 5.8 Mbps upload rates, but to deliver these we need high capacity Ethernet backhaul circuits from our base station cell sites. These needs will increase considerably with the deployment of Long Term Evolution (**LTE**) (4G) mobile services in the UK, which will be one of the most important developments to take place in the lifetime of the new BCMR.  
- Currently, competitive supply of above 1 Gbps AISBO services is limited to particular pockets in densely populated urban areas, where there is an existing critical mass of corporate and government retail business demand as well as MNO core network requirements for such services. However, the

¹ Business Connectivity Market Review Statement and Consultation, 8 December 2008

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need for such services to be supplied outside of urban areas is growing. For LTE backhaul, MNOs will require these services throughout the UK, including in many rural areas where only BT has infrastructure deployed. This may suggest replication of BT's current significant market power (**SMP**) status for low bandwidth AISBOs in the high bandwidth AISBO market.

- We do not feel that the competitive landscape for the supply of wholesale business connectivity services has improved in any material respect since the last BCMR. In particular, we note that competitive providers of point to point Ethernet services severely struggle to replicate the efficiencies that BT can generate by providing its Ethernet business connectivity services over an existing national 21CN core network, the costs of which are shared by many other BT services.
- In those areas and at those bandwidths at which BT and KCOM have SMP, we still believe that their charges for the regulated wholesale business connectivity services that we purchase / which are inputs into the non-regulated wholesale business connectivity services that we purchase are priced well above cost. Allowing BT and KCOM to premium price high value leased lines means that MNOs are restricted in deploying their own high speed broadband services. This is contrary to Government policy and consumer expectations.
- We therefore feel that it is imperative that the outcomes of this BCMR involve imposition of remedies for SMP which:
 - Impose tighter, stricter, more transparent and more actively enforced charge controls and non-discrimination obligations on the supply of AISBO and TISBO services in the relevant non-competitive markets; and
 - In conjunction with these remedies, in order to genuinely improve the prospects of these markets becoming more competitive during the lifetime of this next BCMR, mandate regulated access to the upstream input products required to stimulate such competition. In particular, this should involve extension of Physical Infrastructure Access (**PIA**) for use for competitive wholesale leased line supply, and we would also suggest that it should include re-examination of access to dark fibre, as well as regulated access to upstream Wave Division Multiplex (**WDM**) products.

Response to Consultation Questions

Question 1: Do you agree with our “no material change” considerations as set out above? In particular, do you agree with Ofcom that:

1.1 The characteristics of Traditional and Alternative Interface products are such that separate markets continue to exist for TI and AI products?

We agree with Ofcom's observations that substitution of alternative interface (AI) Ethernet products for traditional interface (TI) time-division multiplex (TDM) based products has continued strongly since completion of Ofcom's last BCMR in 2008.

In our experience, there has been and continues to be increasing substitution of AI products for TI products, [REDACTED] [REDACTED]

[REDACTED] [REDACTED]

[REDACTED] [REDACTED]

[REDACTED] [REDACTED]

Overall, in our experience, although there is a degree of substitution of AI for TI products, there are still some significant barriers to switching TI products for AI products that are likely to endure throughout the course of the next BCMR period. In particular, barriers are posed by resilience requirements (e.g. in the metro layer), where a site is out of reach of the EAD distance criteria, or where the costs to put fibre into a site would be prohibitive. [REDACTED] [REDACTED]

Accordingly, at this stage we are inclined to agree with Ofcom's conclusion that AI and TI products continue to be in separate markets, even though as stated significant substitution is starting to take place.

1.2 We should retain the main bandwidth breaks for traditional interface products but combine 34/45 Mbit/s and 155 Mbit/s services?

We understand that on Ofcom's proposal, the wholesale TISBO market would be divided according to the following bandwidth breaks:

- Up to and including 2 Mbps and 8 Mbps;
- Above 8 Mbps and up to and including 155 Mbps; and
- Above 155 Mbps and up to and including 622 Mbps.

We agree with Ofcom's view that there would seem to be scope to combine the up to 34/45 Mbps and up to 155 Mbps TISBO markets as per the above. We have a few remaining legacy 34/45 Mbps services, but over time have replaced many of these with better value 155 Mbps services.

The shift to AI solutions is being driven by market demands for data services. As a result the demand for higher bandwidth TI services and products is being reduced. This has meant that there is a need for increased geographic and pricing competition at higher bandwidths for AI products and services, and that the bandwidth breaks for TI products are becoming less relevant.

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1.3 VPNs continue to be outside the business connectivity markets? Please explain why.

At the retail level, EE supplies four VPN products across both the T-Mobile and Orange Brands. These are targeted at the B2B sector:

- OWE (Orange Wirefree Extension) and Integrated Extension Connection (T-Mobile), which are voice VPN products; and
- OVLD (Orange Link Voice and Data) and T-Mobile Office Link, which are VPN products which provide direct connectivity for data traffic from a customer site to the Orange or T-Mobile network. OLVD from Orange can provide both voice and data connectivity.

Leased lines can be a required input for both the voice and data VPNs as these provide improved functionality and an additional layer of security and resilience over an indirect tunnelled access option.

To some extent, an internet based VPN tunnel can serve the same retail end-user requirements as a leased line – but not if the customer requires the degree of reliability, security and resilience afforded by a dedicated leased line.



We therefore do not think that there has been any material change to the market circumstances leading Ofcom to conclude in the last BCMR that VPNs continue to be outside the business connectivity market (§§3.18-3.22)

Question 2: What are your views on the extent to which broadband products can be used effectively for the delivery of business connectivity? How do you think this might change over the next 3 to 4 years?

In terms of EE's retail business connectivity offerings to business customers, we believe that asymmetric broadband services are getting closer to becoming a suitable substitute for retail leased lines. However, we do not believe that they are yet substitutable, nor that they are likely to achieve full substitutability during the course of the next 3 to 4 years.

Asymmetric broadband services based on next generation network (**NGN**) technology and offering upload speeds of 10 Mb/s offer bandwidths that are comparable to those offered by leased lines. However, there are still many areas in the UK that are not covered by a fibre-to-the-cabinet (**FTTC**) or fibre-to-the-premises (**FTTP**) NGN to support such broadband offerings, and which are highly unlikely to become covered in the next 3 to 4 years. In addition, even in those areas where high-speed NGN based asymmetric broadband services are supported, those broadband services currently do not support, and we do not believe in the next 3 to 4 years are likely to be able to support, the service level agreements (**SLAs**), resilience, quality of access, robustness, down-time connectivity and self-healing functions that business customers require and receive from leased lines (e.g. to support "mission critical" business functions). In this regard, we believe that the factors leading Ofcom to determine that ADSL services belong in a separate market to leased lines in the last BCMR (§§3.23-3.30) are still likely to be valid during the course of this BCMR.

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At the wholesale level, we do not use broadband services for cell site network infrastructure, as they do not meet the required capacity and performance criteria. We do not believe that broadband services are substitutable for leased lines for these purposes, and we do not believe that this is likely to change materially during the next 3 to 4 years.

Question 3: What are your views on the existence of a break in the market for Ethernet services provided at speeds above 1 Gbit/s; and the extent to which WDM-based products are part of the business connectivity market? If you consider they are, do you think they are part of the Traditional Interface market, the Alternative Interface market, or constitute a separate market within the business connectivity market? How do you think this might change over the next 3 to 4 years, given the rate of growth in bandwidth demand?

Break in the market for Ethernet services above 1 Gbps

We believe that there continue to be separate wholesale markets for AISBO services of:

- speeds up to and including 1 Gbps (low bandwidth AISBOs); and
- speeds above 1 Gbps (high bandwidth AISBOs).

We further believe that this position is likely to endure over the next 3 to 4 years. However, in contrast to the last BCMR, we believe that it may be the case that BT will have SMP in the high bandwidth AISBO market as well as in the low bandwidth AISBO market.

[REDACTED]

However, one of the most important changes in the market for high bandwidth AISBOs that will occur in the current BCMR period as compared to the last BCMR will be the deployment of LTE mobile services.

[REDACTED]

In the last BCMR, Ofcom acknowledged that the market for high bandwidth AISBOs at that time was concentrated in London and other major urban areas where a number of competing operators to BT had their infrastructure, and that once demand spread to areas where alternative infrastructures were less well developed, competitive conditions were likely to resemble those in the low bandwidth market (§3.143).

These comments align with our experience. [REDACTED]

However, in the last BCMR, Ofcom nevertheless concluded that the market for high bandwidth AISBOs was competitive, on the basis that it was unlikely in the lifetime of that BCMR that a significant demand for circuits above 1 Gbps would appear outside major urban areas, where large users such as financial institutions and government offices were located (§3.145).

This position will change significantly with the deployment of LTE, [REDACTED], including in rural areas where BT is the only supplier with network coverage. We further note in this regard the potential attractiveness of LTE as a long term complementary solution to fixed broadband technology for customers in rural areas who currently get

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low speeds or are unable to get broadband altogether and the trials that we have started with BT in this respect in the St Newlyn East area of South Newquay, Cornwall.

WDM based products

We understand that BT provides, through BT Global Services, three Dense WDM (**DWDM**) based products to retail customers, as follows:

- Wavestream Connect for connections of up to 35 km;
- Wavestream Regional for connections of up to 70 km; and
- Wavestream National for connections of above 70 km.²

We do not currently purchase any of BT's retail Wavestream products. However, we note that BT has only been exempted from providing its Wavestream National product on an Equivalence of Inputs (**Eol**) basis by Ofcom on the basis that the exemption may be reviewed if BT is found to have SMP in the upcoming BCMR.³ Similarly, Ofcom is currently consulting on a further proposal to exempt BT from providing its Optical Spectrum Access (**OSA**) input product into Wavestream Connect and its Optical Spectrum Extension Access (**OSEA**) input product into Wavestream Regional on an Eol basis pending the outcome of the upcoming BCMR.⁴ We therefore believe that it is important for Ofcom to consider whether retail WDM based products and the underlying WDM based wholesale input products do now form part of the business connectivity market in the UK.

Furthermore, we note that, in the last BCMR, Ofcom detailed BT's plans to move all of its wholesale Ethernet portfolio from a point to point dedicated architecture to a shared (backhaul) architecture based on WDM through project "ORCHID" (§§3.131-3.139), and further noted that WDM was a highly efficient transmission technology used by BT to support the backhaul element of AISBO and TISBO services and core links (§5.102).

In our experience as a significant purchaser of BT Wholesale's MEAS, competitive providers of point to point Ethernet services severely struggle to replicate the efficiencies that BT can generate by providing its Ethernet business connectivity services over a national 21CN core network, the costs of which are shared by many other BT services.

To the extent that other providers can offer competitive services in certain geographic areas, they require a critical mass of sites with them in each area, which we cannot necessarily offer, especially in less densely populated areas. Hence, the only way to incentivise competitive service provision in these areas is for us to offer to pay for the build out of their infrastructure into those regions, which can be cost prohibitive.

Accordingly, the component of the MEAS that we buy from BT that involves conveyance of these Ethernet services over BT's core network is both unregulated, and not subject to any strong competitive pressure from alternative Ethernet services providers.

² Ofcom Consultation - Request from BT for exemption from the Undertakings under the Enterprise Act 2002 for certain high bandwidth access services, 31 May 2011 §2.9.

³ Ofcom Statement – Exemption from BT's Undertakings under the Enterprise Act 2002 related to Wavestream National, 14 December 2014.

⁴ Ofcom Consultation - Request from BT for exemption from the Undertakings under the Enterprise Act 2002 for certain high bandwidth access services, 31 May 2011 §4.21

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On this basis, we believe that as part of this BCMR, it is important for Ofcom to investigate whether requiring BT to provide wholesale WDM based products to competitive providers of AISBO and TISBO services (not just to providers of retail WDM products competitive with BT's Wavestream products) may be an appropriate remedy for stimulating competitive supply of wholesale AISBO and TISBO services in those markets in which BT is found to continue to have SMP. This remedy should be considered alongside investigation by Ofcom of the extension of PIA for use for competitive wholesale leased line supply, and re-examination of the need for BT to provide access to its dark fibre.

Question 4: Do you consider that:

4.1 There is still a separate market for trunk segments provided with a Traditional Interface which warrants SMP assessment for the purpose of considering ex-ante regulation;

4.2 The trunk routes identified in the last market review are still relevant to inform the definition of the trunk market; and

4.3 The analysis and identification of Trunk Aggregation Nodes carried out in the last BCMR are still relevant for competition and market entry. Please explain why.

[X] [X]

Question 5: Do you think that separate markets could now exist for access and backhaul products? If you do, please explain why.

In the last BCMR, we understand that Ofcom defined the backhaul component of TISBO and AISBO services as being from the BT Local Serving Exchange (**LSE**) to another communications provider's network node, via a Point of Connection (**POC**), and the access component as being from the LSE to a 3rd party customer premises (Figures 2.4 and 2.5).

We do not consider that there is any clear distinction along these lines between the access and backhaul components of the AISBO and TISBO products that MNOs purchase. For example, we agree with Ofcom's conclusion in the last BCMR that the wholesale services employed for RBS backhaul are essentially the same as those captured by Ofcom's TISBO definition (§5.9)

Question 6: Do you think that separate markets could now exist for broadband backhaul products and, separately, for mobile backhaul products? If so, please explain your reasons.

Mobile backhaul requirements involve different performance parameters (e.g. specific requirements re delay and latency) than fixed backhaul products such as those for broadband that do not require guarantee of throughput. Because of the large geographic spread of MNO requirements for backhaul, we also cannot offer leased line providers the same opportunities for scale efficiencies as when they build infrastructure to support broadband backhaul / serve the needs of enterprise customers in densely populated urban areas.

[X] [X]

[X] [X]

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Question 7: Do you think there are other sources of demand for symmetric broadband origination outside the services mentioned above which are relevant to our assessment? If so, please explain your reasons.

Not that we can think of at present.

Question 8: Do you agree that the three parts of our analytical approach discussed in paragraph 1.31 are still relevant and continue to provide an effective tool for assessing competitive conditions and for considering regulatory obligations? In particular, do you agree with Ofcom that:

8.1 the approach to identifying geographic markets used in the last BCMR is still appropriate, or is there any additional perspective that we should appraise to inform our competition assessment?

Yes, although we maintain the reservations that we expressed in response to Ofcom's last BCMR as to the robustness of the 'postcode' analysis carried out by Ofcom and continue to believe that Ofcom needs to conduct a robust analysis of the precise boundaries of the identified geographic markets, so as not to erroneously regulate/deregulate the supply of business connectivity services in those geographic markets.

We also reiterate the point we made in response to the last BCMR that, as our RAN is based throughout the UK, both in urban and rural areas, we require business connectivity services to be supplied throughout the UK. As yet, no alternative supplier can match the ubiquity of BT's national network.

8.2 the definition of the CELA from the last BCMR is still relevant? and

Yes, although we maintain the reservations that we expressed in response to Ofcom's last BCMR that the CELA area set out by Ofcom covers too large a geographic region and covers areas which may not actually have effective competition.

8.3 there continues to be a trunk market which is national in scope? Please explain why.

Yes, although note our comments above in response to Question 4. The lack of any transparent competitive trunk pricing being offered to MNOs would to us tend to suggest that there is still no real competition to BT in this market in any part of the UK.

Question 9: Do you think that Ofcom should consider the extent to which other local geographic markets exist in the UK outside the CELA, and excluding Kingston upon Hull? Please explain the reasons for your answer.

We think that Ofcom should consider this as part of the BCMR. However, we have not observed the emergence of materially more competitive pricing in any new geographic areas outside of CELA since the last BCMR.

Question 10: In the last BCMR, we found no SMP provider in the market for high bandwidth 622 Mbit/s TISBO and high bandwidth AISBO provided at speeds above 1 Gbit/s in the UK and, separately, in Kingston upon Hull. Do you consider that deregulation has worked well in these markets? Do you think that the competitive conditions in these markets have improved, or do you consider

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they have deteriorated? Please explain, providing examples where appropriate, based on your company's first-hand experience.

Please refer to our answer to Question 3 above.

Question 11: In the last BCMR, we also found that BT had no SMP in the CELA for the provision of wholesale leased lines (PPCs) at speeds above 2 and 8 Mbit/s and up to, and including, 155 Mbit/s. Do you consider that deregulation has worked well in these markets? Do you think that the competitive conditions in these markets have improved, or do you consider they have deteriorated? Please explain, providing examples where appropriate, based on your company's first-hand experience.



Question 12: In the last BCMR, we found that BT had SMP in the market for analogue and low bandwidth digital retail leased lines and imposed SMP obligations on BT as a result. The remedies were designed to ensure the continued availability of these legacy products at reasonable prices as well as to provide transparency and regulatory certainty to BT's competitors in this market. Do you have a view as to how these remedies have worked? Do you consider that we should continue to impose regulatory obligations on BT in this market if we were to find SMP or we should rely on wholesale remedies alone? Please explain your answer.

We don't have any views on this question.

Question 13: What are your views on how the current remedies have worked in promoting downstream competition?

We do not believe that the current remedies have been effective in promoting downstream competition in the supply of business connectivity services, and we would be surprised if Ofcom's SMP findings were any different in this BCMR than they were in the last BCMR.

In a large part, we feel that this is due to the fact that the remedies imposed following the last BCMR were not sufficiently focused on stimulating competitive infrastructure deployment by competitors to BT and KCOM, particularly outside major metropolitan areas (which is critical for MNOs). This time round, we feel that it is imperative that Ofcom also puts in place remedies which provide regulated access to upstream inputs to wholesale business connectivity services, including:

- PIA;
- dark fibre; and
- WDM input products.

Initially, we would expect that such remedies would need to be complementary to current SMP obligations (requirements for non-discriminatory, cost oriented pricing, charge controls etc). However, longer term, we would hope that they may facilitate a change to the competitive landscape that could justify roll-back of these more interventionist regulatory requirements.

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Question 14: How effective have the current remedies been in addressing the market failures identified in the last BCMR and in supporting competition and market entry? Please elaborate with some examples

In the last BCMR in 2008 Ofcom found BT to have SMP in the wholesale market for low bandwidth (up to 1 Gbps) AISBOs outside the Hull area, and found KCOM to have SMP in the Hull area.

In this regard, Ofcom extended a charge control to cover the BT services, taking account of that fact that BT was in a position of persistent dominance and earning high returns (£1.39). The charge control required BT to reduce its prices first by certain one off reductions, and then across a basket of low bandwidth AI connection and rental services (including for EAD, Ethernet Backhaul Direct (**EBD**) and Transport Link) by RPI-7%, with a sub-cap on its Backhaul Extension Service (**BES**) of RPI-0% and a sub-cap on each charge of RPI+5%.⁵

In relation to the Hull area, rather than imposing a charge control on KCOM's low bandwidth AISBO services, Ofcom accepted a voluntary commitment from KCOM to decrease the prices of Wholesale Extension Service (**WES**)/ Wholesale End-to-End Extension Service (**WEES**) circuits each year by around RPI-16% over the period to 2012, although noting that this would lead to prices which are still significantly higher than those projected for BT by the end of the period.⁶ Not surprisingly, prices for leased lines in Hull remain prohibitive for MNOs. Wherever possible we use microwave in this area to try to avoid these prohibitive costs, but this is not always possible and is likely to become even less of a satisfactory solution with the higher bandwidths required for LTE deployment. We consider that it is important in this BCMR that Ofcom imposes tighter charge controls on KCOM which bring their prices into line with costs and competitive market pricing, as well as investigating what may be possible to be done to stimulate competitive infrastructure deployment in the Hull area.

Outside of Hull, in spite of the charge control and BT's obligations to ensure that its charges are reasonably derived from the costs of provision, BT's Regulatory Accounts suggest that BT's regulated 1 Gbps Ethernet products are still priced very significantly above cost. For example, the prices for WES and BES 1 Gbps Ethernet rentals are considerably higher than both the unaudited LRIC ceiling (i.e. the DSAC) and the audited fully allocated cost.

Service	Year	Average price	DSAC (unaudited)	FAC (audited)	% above DSAC ceiling
WES 1Gbps rental	2009/10	£5,555	£3,028	£2,098	83%
	2008/09	£7,569	£1,822	£1,383	316%
BES 1Gbps rental	2009/10	£4,199	£2,239	£1,935	87%
	2008/09	£4,473	£1,256	£1,660	256%

The connection charges for these circuits tend to be well below the cost floor, and many other Ethernet prices are much closer to cost, and so the overall profitability of

⁵ Leased Lines Charge Control Statement, 2 July 2009, Table 1.1

⁶ Leased Lines Charge Control Statement, 2 July 2009 §§6.4-6.9

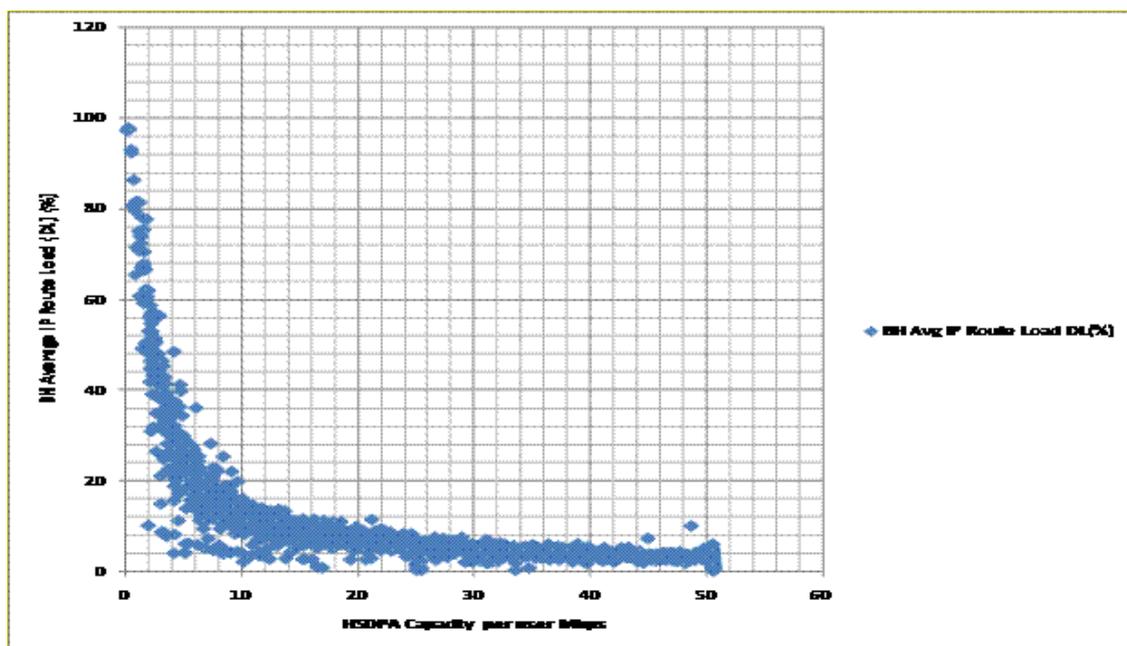
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the AISBO basket does not appear excessive. However, as demonstrated in the recent PPC charging dispute, cost orientation requirements apply to each service within the basket individually.

The current list prices for WES and BES 1Gbps rentals (£5,000 and £3,764 respectively) are still much higher than the relevant DSACs. Accordingly, on the basis of this evidence, it would appear that BT has been overcharging for these services, and is continuing to overcharge.



Allowing BT to premium price high value leased lines means that mobile operators are restricted in deploying their own high speed broadband services. This is contrary to Government policy and consumer expectations. Mobile backhaul now offers over 20Mbps download and 5.8 Mbps upload rates, but to deliver these we need high capacity Ethernet backhaul circuits from our base station cell sites. With BT failing to follow its cost-orientation obligations and Ofcom failing to take appropriate actions (including opening up access to mainly fibre ducts) we are cost restricted in rolling out our high speed services.



In a nutshell, the costs of deploying infrastructure are so high that the remedies identified in the last BCMR have not made any significant improvement for market entry. We strongly believe that only by allowing operators access to BT ducts or fibre to be used to provide such services would this become a practical proposition.

Question 15: How effective have the regulated access products been from an operational perspective? Please provide examples where appropriate to illustrate your answer.

We don't have any views on this question.

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Question 16: Do you consider that the current set of remedies should be simplified? If so, how?

We don't have any views on this question, but see our response to Question 21 as to how we feel that the remedies should be made clearer and more effective.

Question 17: Do you consider that the scope of the charge control was correct in terms of the products and services subject to the control? Has the charge control been effective? Looking ahead, what changes, if any, do you consider would be appropriate for any future charge control(s)?

Please see our response to Question 14.

[REDACTED]

[REDACTED]

[REDACTED]

Question 18: What are your views on the role that passive remedies could play in this market for the promotion of downstream competition? In your view, what implications might adoption of passive remedies have on the provision of active remedies?

We consider that remedies focused on access to the upstream inputs to wholesale business connectivity services such as passive remedies are crucial if there is to be any change in the competitive landscape regarding the supply of these services.

Remedies such as access to BT dark fibre, and ducts for provision of business connectivity services by competitive suppliers like Virgin and Cable and Wireless have the potential to really lower the costs of supply by competitors and truly stimulate a competitive market.

BT have ducts with fibre connections to circa [REDACTED] MBNL sites, of which the costs of connection have already been covered by the fees charged to us by BT. The strongest remedy to reduce costs for competitive suppliers to BT to connect these sites would be to make the fibre available to other operators (without the need for Openreach equipment at each end which increases cost) once the initial contract term has expired and BT has met its initial investment costs.

Note, however, that there are likely to be significant lead times before these remedies would be effective (eg negotiations on suitable prices if not charge controlled etc) so that they would need to be imposed in parallel with rather than instead of current remedies, at least for the purposes of this market review. It would be too dangerous to remove these other safeguards yet.

Question 19: Have business connectivity markets changed since the last review? If so, how? How might business connectivity markets develop during the next four years?

In the most important respect, we do not believe that there has been any change in business connectivity markets since the last BCMR. Competition has not improved since 2008. [REDACTED]

In terms of what has changed, the strongest trends that we have observed involve:

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- An ever growing need for business connectivity bandwidth;
- Strong growth in acquisition of AISBO services; and
- Use of AISBOs to meet business connectivity requirements previously met by TISBO services, particularly at higher (above STM-1) bandwidths.

From our perspective, the most important development that we see taking place in the next four years for the purposes of the BCMR will be the deployment of LTE services in the UK. [REDACTED] We fear that this will result in BT acquiring SMP in the high bandwidth AISBO market as well as in the low bandwidth AISBO market.

Question 20: Do you have any comments about arrangements for withdrawing regulations as TI services reach the end of their lives?

We believe that it is important that BT should be required to continue delivery of legacy T1 services or to provide alternatives at no additional cost to acquirers of these services while they continue to have SMP in the markets in which these services are supplied. [REDACTED]

Question 21: Are there any other issues or views you would like to put forward that are not mentioned in this paper?

From a purely practical perspective, we note that the organic nature of the way in which BT's supply of business connectivity services has evolved, combined with rapid technological change in this area, as well as a certain degree of opacity in which BT divisions are responsible for supplying which business connectivity services, actually makes it quite difficult to work out at times exactly which of BT's current products are required to be supplied in accordance with its SMP conditions and/or EOI terms and then to monitor compliance in this regard. Complexity is also added as a result of the various piecemeal regulatory changes that have been made / which are being proposed to take place prior to the next BCMR.

For example, BT's undertakings currently refer by name to BT's Ethernet based AISBO products WES and WEES and require these products to be provided by Openreach on an EOI basis. However, it is understood that Openreach is currently reviewing its Ethernet service portfolio and has announced that it intends to withdraw WES and WEES below 1Gbps for new supply and has introduced new EAD services at multiple bandwidths up to and including 1 Gbps to supersede these services.⁷ We interpret the Undertakings to extend to these successional EAD services, but it would be helpful for Ofcom to put this beyond any doubt via an appropriate amendment to the Undertakings.

Furthermore, we note that Ofcom has recently issued a consultation on BT's request for an exemption under the Undertakings for "certain high bandwidth access services".⁸ Ofcom's consultation initially suggests that the exemption request covers only two AISBO services, WES and WEES (§1.2). However, further on in the consultation, it seems that the exemption request may in fact be broader than this, covering all of BT's "Ethernet-based access services providing bandwidths above 1 Gbit/s", including but not limited to BT's WES and WEES 2.5 Gbps and 10 Gbps

⁷ Ofcom Consultation - Request from BT for exemption from the Undertakings under the Enterprise Act 2002 for certain high bandwidth access services, 31 May 2011 §2.6

⁸ Ofcom Consultation - Request from BT for exemption from the Undertakings under the Enterprise Act 2002 for certain high bandwidth access services, 31 May 2011

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AISBOs (§2.4), but excluding “high bandwidth backhaul services”, explained to include BT’s BES, EBD, Openreach Backhaul Network Service (**BNS**) and Broadcast Access (§2.7).

On BES, which we understand to relate to the “Wholesale Extension Service Backhaul Product” that Openreach is required to offer on an EOI basis under the Undertakings, we note that Openreach is also withdrawing this product from new supply as of this month, and is replacing it with EAD.⁹ Again, we interpret the Undertakings to extend to these successional EAD services, but it would be helpful for Ofcom to put this beyond any doubt.

Finally, we note the Ofcom statement issued on 2 June 2011 on changes to BT’s regulatory reporting requirements stated to be for the purpose of “improving” the presentation of BT’s AISBO regulatory accounts (§1.3(iii)), which now removes separate reporting of BT’s BNS backhaul connection and rental services and reduces the granularity of BT’s BES reporting (reporting only for BES 1000 Mbps rental and BES “other” rental, but not separately for BES 100 Mbps rental and amalgamating connection fees for all BES bandwidths).¹⁰

BT’s cost accounting obligations in relation to the AISBO services in which it has been found to have SMP are designed to require BT to demonstrate cost orientation and non-discrimination. Yet in Ofcom’s statement, it acknowledges that (through responses made to it which were in fact outside of the scope of its consultation), Ofcom has become aware that:

- BT does not report separately on its internal usage of EBD, as EBD is only used by BT as an input to its wholesale products; and
- BT only reports on EAD connection and rental as two separate categories, and not split according to the bandwidths of 10 Mbps, 100 Mbps and 1 Gbps – even though for 4 of these 6 product categories, BT’s revenues in 2010/2011 were in the range of £10m to \$20 m, and thus in excess of Ofcom’s guidance reporting threshold (§§3.11-3.14)

The net result of all of this is that BT has gone from a position of having clear obligations to provide defined WES, WEES and BES products on an EOI basis and with clear and transparent accounting separation obligations in reporting on these products; to

- Withdrawing from new supply its regulated WES, WEES and BES services;
- Reducing the granularity of BT’s reporting on those BES services that it continues to supply;
- Seeking to remove from its EOI obligations its above 1 Gbit/s AISBO services (except for backhaul AISBO services);
- Introducing new EAD AISBO services which are less clearly regulated under the Undertakings, and in relation to which BT currently provides no separated

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http://www.openreach.co.uk/orpg/home/products/ethernet-services/wholesale-extension-services/wes/downloads/WES_BES_WEES_withdrawal_fact_sheet.pdf

¹⁰ <http://stakeholders.ofcom.org.uk/binaries/consultations/bt-kcom-reporting/statement/statement.pdf>

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accounts according to bandwidth for its connection and rental charges in apparent contravention of its SMP obligations;

- Amalgamating the reporting of its AISBO backhaul services, such that the only product offered for new supply which is separately reported on is EBD, in relation to which BT does not report on internal usage, and the connection and rental charges for which are amalgamated for all bandwidths;
- Providing amalgamated connection and rental figures for all other SMP AISBO services provided by BT under the non-descript headings “Other Ethernet” and “Other Services”; and
- Supplying many AISBO products, such as the MEAS used by MNOs, as part of an unregulated managed service supplied by BT divisions other than Openreach.

We do not find this to be a conducive regulatory environment for the facilitation of active understanding, monitoring and enforcement of BT’s SMP and EOI obligations in relation to business connectivity services.

In order to better address the market failures in the current business connectivity markets, we would accordingly urge Ofcom (in the next BCMR or if possible sooner) to consider ways in which Ofcom can make these obligations clearer for practical purposes, and ensure that their purpose and effectiveness is not undermined by technological change; piecemeal regulatory changes which do not consider the entire regulatory context of these obligations; and/or non-enforcement of those obligations imposed.