# The Bit Commons response to Ofcom's Call for Inputs on Communication services for SME's. January 2<sup>nd</sup>

The Bit Commons thanks Ofcom for the opportunity to respond to this call for inputs on Communication services for SME's. The Bit Commons has already responded to the Business Connectivity market review (BCMR) call for inputs and the associated consultation.

The Bit Commons is currently working with a number of business parks and office blocks owners where SME's are struggling to get the affordable connectivity they need. I have drafted this response and copied to peers at Tech City (representing over 1,000 SME's) in Shoreditch and the Corporation of London representing a further 1,500. They may also support the points raised but may do after the January the 2<sup>nd</sup> deadline set for responses to this call for inputs. I will also copy this draft response to other Cities who have already made it clear to Ofcom in the earlier call for inputs for the Business Connectivity review that the supply of connectivity to SME's in inadequate and the over dependence on BT is matter of ongoing concern.

The Bit Commons currently works in that area of the market, where the fixed line access (copper) fails to deliver a broadband service, while the private circuits (Business Connectivity) are beyond the financial reach and technical need of most SME's. For illustrative purposes it can be stated as follows. Customers paying c£50 a month for a non-functioning broadband connection (e.g. <5Mbps) do not see why they should need to pay excess connection charges and rentals of more than £350 a month for a private circuit. The sentiment is 'why not either fix the copper infrastructure or replace it with another access medium upon which a good connection to the internet can be sustained?'

In this response I will draw on my experience in areas in the geographic first 1% e.g. Perseverance Works, in Shoreditch, which Ofcom make reference to in there Infrastructure Report and the final 1% - Fell End in Cumbria where BT have delivered a FTTP GPON solution to some very remote farmsteads. While there was a need to invest in both of these cases, SME's benefitted most from an appreciation of what was possible and the long term benefits of world-class connectivity.

The Bit Commons finds it a little peculiar that the research conducted by Jigsaw for Ofcom, did not first to set out some measure for 'world-class' or 'best in Europe'. Measuring satisfaction levels against existing services without reference to how these could be packaged in the future suggests we are happy to make do and mend with what exists today rather than seeking the most from the technology and creating conditions for SME's to readily upgrade their access or purchase for example a converged service.

#### Q1. What are the communications needs of SMEs and how may these differ by: business size; sector and business model; location; other relevant factors?

The basic building block for communication services in a building is a fixed connection capable of supporting as much connectivity as possible. The 'world-class' benchmark will be an ability to

purchase 100Mbps symmetric services from a choice of ISP for less than a £100 a month. This standard is being set in many developed cities and indeed in some rural areas.

How this connectivity is then used is a matter for individual customers. The 90 plus tenants in Perseverance Works (PW) each have different needs, but the generic requirement is to send and receive large data files, support real times services when needed and have the capacity available and the freedom to try new applications without waiting for contracts to terminate. The PW network can support services up to 1Gbps with spare fibres to add more capacity if needed. PW network is also plumbed into the Fluidata wholesale platform where some 50 application providers can offer over the top services.

# Q2. How do the needs of SMEs for communications services differ from (a) residential consumers and (b) large enterprises?

Bill Gates said in 1983 that his aim was to put a PC in every home. The reality now is that every bedroom with a teenager in occupation is networked to every other connected bedroom should they wish to begin communicating or exchanging information.

The basic connectivity need is met by a 10Mbps or more broadband connection and a secured wifi router.

The over the top services used for communication, research, hosting content, publishing material are really matter of scale. A budding musician or artist will be using all that is available at home and school. The process by which they professionalise there work will thus be no different to how an SME will need to develop their own business.

The differences will be the degree to which work is outsourced and built to a spec but in a great many cases the differences will not be as great on examination as one would expect to see, but one of scale.

The move may well be marked by a move to the use of static ip addresses and its use to act as a content host on the internet.

Is the use of static IP address a business or is it an advanced residential application? If as a nation we have an ambition to lead and innovate, then there should be no hesitation but suggest that of course home users can create and host material on the internet.

It is a great gift of IP networking that it is inherently simple and should be permitted to develop in a manner that equates an office worker in a major corporation with a home worker. There is no difference so why would we support conditions that would create such a difference?

Perhaps Ofcom could pay particular attention to ensure the broadband connectivity can be used within buildings to support improvements to mobile device connectivity and convergence. The need for open Femto cells so all operator devices can connect and use the bandwidth available is a good example of something which is needed but would not appear in any survey.

The principle difference is really about robustness of service and the capacity to either prevent failure through redundancy of service or the capacity to recover from failure quickly. Much of ISP efforts is about creating dependence rather than creating robustness of service.

# Q3: What are the types and degree of network availability issues that affect SMEs, for example issues with specific locations or services and what is the effect of these issues on SMEs' businesses?

If an SME is more than 1.2km from a VDSL cabinet where one exists, or 1.2 km from an exchange then it is unlikely the SME can get a satisfactory connection at an affordable price. While BDUK is working to reduce this distance problem in more than 30,000 rural and not so rural locations and BT PR states they have passed some 21m premises with their commercial rollout, the very nature of VDSL and BT's decision making on a cabinet by cabinet suggests even within the BDUK backed rural rollout and the BT commercial rollout there will be a 13%-20% of those passed unable to avail of a noticeably improved connection speed.

This is not helped where Ofcom decide to piggyback on BT's public relations statements. Where BT decide to invest in some cabinets in an exchange but claim full coverage is something that Ofcom should not ignore but report upon and work to warn customers and Government.

The Bit Commons work in Shoreditch arose from issues involving exchange line only or ELO or sometimes referenced as EOL (exchange only lines). This particular piece of BT legacy network has a high impact on SME's ability to overcome their connectivity challenge in all UK city and town centres. BT to date has shown little appetite or inclination to invest in such areas preferring instead to rely on using private circuits to fix what is a problem of delivering broadband over long lines.

# Q4. What opportunities do communications providers see in serving the SME market and how are these evolving as a result of developments in technology and infrastructure?

Communication providers are very reliant on BT's EAD (Ethernet Access Direct) portfolio. Unfortunately, neither Virgin, Voda/Cable and Wireless or companies like Colt have mature wholesale offerings suitable for Alt-nets to use in the SME sector. Furthermore the current generation of passive infrastructure access is not mature enough to support the provision of fibre access where it being deployed for business broadband to replace what are mis-sold private circuits.

The economic gap between the selling of campus networks using fibre based private circuits and the provision of fibre access to support pro-competitive wholesale models such as the building operator model deployed in Perseverance Works in Shoreditch is too big a gap to bridge. Ofcom's acknowledgement of BT as an efficient operator with significant common costs to which BT is entitled to recover and the consequential impact on private circuit pricing is occurring at the expense of developing a more dynamic market for direct fibre access using passive infrastructure access.

Resolution of these matters does require a number of fundamentals to be addressed. These include the following.

a) Any notion of best in Europe or world class suggests the UK market ought to be capable of supporting a competitive market for 100MBps symmetrical broadband services where the retail price is less than £100 a month, with wholesale prices less than £40 per month.

- b) Communication Providers should be able to re- sell more than 1 wholesale product and platform.
- c) The new fibre access products should be able to replace existing copper access products.
- d) The propositions at a retail should support the convergence of services should such as fixed and mobile propositions hosted on what are in practice wholesale data transport networks.

To this end Ofcom may need to return to test in the context of the broader Business Connectivity review the nature of an efficient operator, and introduce some tests to establish under what conditions the notion of an efficient operator can be used and under what conditions can an incumbent be no longer considered efficient. This matter may easier now, given BT is likely to takeover EE.

#### Q5. How far does the choice, quality and price of products in the retail market meet the needs of SMEs?

The 20% plus of customers destined to be too far from a cabinet or suitable equipped exchange will be disadvantaged in the current market. This is symptomatic of a wider problem which is an over reliance on BT to fix all problems.

This is unfair to BT shareholders and unfair to UK consumers. BT Group has decided to both reduce its commitment to direct fibre access and to amend the positioning of fibre access to be a premium access product. There is no technical or cost reason for such an adjustment.

In these circumstances the consultation on 'passives' which features as a component of the Business Connectivity Market Review does give Ofcom the opportunity to create a more pro-competitive environment for FTTP provision than witnessed for the rollout of FTTC.

#### Q6. Are there challenges for communications providers in targeting the SME sector, and do these vary by geography, SME size and SME sector?

The lack of true passive access to BT infrastructure presents great challenges for any Communication Provider trying to meet the needs of SME's.

# Q7. Are there issues facing retail providers in engaging with wholesale providers in order to offer retail products which meet the needs of SMEs?

Ofcom have provided adequate references of their own when introducing quality of service and provision of service dates for BT through the 2014 Fixed Line Access market review.

### Q8. How far does the quality of service delivered by communications providers meet the needs of SMEs?

When services are working or can be fixed within the timescales (end of next working day) then quality needs in terms of provision can be met. The provision of private circuits appears to be subject to c30% failure by Openreach with respect to time to deliver. The provision of a working mobile service inside buildings can again be subject to many failures and erratic service.

#### Q9. What issues face SMEs in ensuring that they have appropriate SLAs and are able to gain redress when quality of service falls below the standards expected?

Connectivity services to the internet should include the following basic information

- a) Access speed or throughput to the handover point.
- b) Planned peak hour bandwidth (throughput) per registered user and per active as per ISP planning rules.
- c) Packet loss, jitter and delay measures for average and peak hour usage for package sold, measured to the Internet Gateway.
- d) MOSS scores to the internet gateway where VOIP (Voice and Video over the internet) is offered.
- e) Capacity to prioritise traffic on router is under the customers control.

None of this information is readily available to SME's at present.

Q10. What products and service enhancements to standard retail products and services are available, at what indicative price points, to deliver on SMEs' quality of service needs (e.g. in terms of technical product characteristics or fault resolution)?

Please see the answer to question 9. To meet world class benchmarks then 100Mbps symmetrical broadband services should be wholesaled for less than £40 per month while retail ISP packages made available for less than £100 a month. The services should be of sufficient quality to support migration from legacy PSTN services.

Q11: What information is available to SMEs to enable them to select communications services appropriate for their business needs? Please identify any additional information or measures which you consider would enhance transparency for SMEs and your reasons for this view?

The additional needed is set out in question 9 and 10.

Q12. What factors do SMEs take into account when they are considering changing their communications service or provider. Please identify any that you consider may deter SMEs from switching and your reasons for this view?

There is no real choice beyond BT Openreach or Virgin. The retail ISP re-sell BT and their service is only as good as the underlying access line.

Q13. What evidence is there of issues where bad practices by communications providers causes harm to SMEs?

The mis-selling of private circuits to solve a copper attenuation problem is widespread. The lack of full passive infrastructure access to address this matter needs to be addressed in the business connectivity market review.

Q14. Are there any other issues in relation to the provision of communications services to SMEs, or SMEs' experience of these services, which you consider should be included within our assessment?

The decision by BT to selectively deploy VDSL cabinets while changing its mind on the provision of FTTP should be acknowledged and the consequences explained in Ofcom's Infrastructure Report.

Now published. The matter needs to be dealt with in the next report. This reality should encourage Ofcom to seek out others to come forward and to support such efforts by amending the market definitions to acknowledge a possible market failure to deliver direct fibre access services. This would reinforce the need for greater provisions for passive infrastructure access.

# Q15. For any issues identified in response to any of the questions above do you have any views on how they may be resolved?

The role of building owners in upgrading infrastructure, particularly for the provision of direct fibre access through sites and buildings should be examined. The opportunity to create a pro-competitive environment by separating the provision of passive infrastructure from the services run over that passive infrastructure is something that is being pursued vigorously in other markers including France.

If BT is happy to use the generous FLAM cost settlement using copper replacement cost as a reason to slow investment in FTTP, then Ofcom should look to alternative models. The building owner model offers much potential provided it is accompanied by a supportive passive infrastructure products and an industry backed and commonly owned wholesale platform.

Note the building owner model is not a Campus Network built using private circuits. The building owner model assumes affordable direct fibre access is how the best or world class connectivity is defined. It assumes the incumbent (BT) will find it impossible to make a business case for anything other than a selective investment in FTTC.

The building owner model switches the responsibility to the landlord for the provision and ownership of on-site fibre bearing passive infrastructure in a manner that is usable by all network operators. It flows from defining what 'best' or world class might be.

I hope these comments are useful and constructive to this important consultation.

End. 2/1/2015.