Virgin Media
Communications House
Bartley Way
Bartley Way Business Park
Hook
RG27 9UP

Nic Green
Ofcom
Floor 4
Competition Group
Riverside House
2A Southwark Bridge Road
London SE1 9HA

1st June 2010

Dear Nic,

<u>Review of the Wholesale Local Access Market</u>

Virgin Media is pleased to respond to the above consultation. We set out below our overall thoughts on the matter, with our responses to the specific questions posed by Ofcom following.

The development and deployment of broadband services in the UK, and the networks and infrastructure that are required to support them, are critical to enabling the competitiveness, productivity and continued prosperity of the UK's economy. It is vital therefore that the regulatory framework applying to such services is fit for purpose and achieves the right balance between promoting competition and investment, and ensuring that the necessary safeguards for both citizen consumers and purchasers of wholesale services from dominant providers are in place.

This review of the Wholesale Local Access ('WLA') market arguably comes at a critical time in the evolution of broadband services in the UK. Deployment of next generation, superfast services is under way, with the UK effectively having entered a transitionary phase between current and next generation access ('NGA'). Virgin Media is at the forefront of this deployment of NGA. We have made substantial investments in our network, including an upgrade to DOCSIS 3 technology, which has resulted in the availability of 50Mb/s broadband services to approximately half of the UK population. This has helped not only to stimulate investment by other providers, most notably BT, but has also been instrumental in the UK being ranked among the top countries, particularly in Europe, for NGA roll out and availability.

Moreover, Virgin Media continues to pioneer and innovate in superfast broadband services. Investment in our network is continuing, with the confirmed launch of a 100Mb/s broadband service during the course of 2010 and a broadening of the footprint of our 200Mb/s pilot – the results of which are proving very useful in developing our approach to future technologies, applications and services[1].

As Ofcom will be aware, Virgin Media has also announced plans to extend its network reach. We have identified an additional **[✂]** new homes adjacent to our existing network or in 'infill' areas to which we plan to extend our network in the short term. We are also investigating how we could broaden our network reach further still and have in particular identified significant opportunities for doing so **[✂]**, subject to the relevant legislative and regulatory regimes facilitating deployment of our network **[✂]**, and to BT's passive products being fit for purpose and appropriately priced.

Furthermore, these studies have revealed tangible interest and support among local communities, who are enthused by the prospect of receiving superfast broadband services **[✂]**. In this regard, we recently commenced a trial of our services using overhead delivery to a rural community in Berkshire[2]. This has been very well received by the local community involved and is proving invaluable in informing our understanding of the options for expanding our network footprint and delivering our services to a wider customer base.

We welcome Ofcom's stated intention in reviewing the WLA market of promoting competition and investment in new 'super-fast' broadband networks. We believe that this objective should extend not only to new investments but should also reflect the need to avoid undermining investments that have already been made – and in this regard Ofcom's general policy of intervening only where absolutely necessary should prevail. However, we recognise also that Ofcom must address any competition issues that it identifies as a result of this review in order to protect both customers of dominant providers and, ultimately, end consumers. It is critical, therefore, that the right balance is struck between the key policy objectives.

Summary

We set out our responses to the specific questions posed by Ofcom below. Broadly speaking, we support the proposals that Ofcom has made in the consultation document and believe that it has in general achieved an appropriate balance between allowing markets to evolve organically against a commercial backdrop, and applying regulation where competition issues exist. In this regard, we broadly concur with the proposed market structure and scope and with the outcome of Ofcom's assessment of SMP.

We also believe that Ofcom is correct to propose a complementary set of remedies on BT, given the multiple access options and solutions that will be available and the fact that, as a result in particular of the challenging economics of NGA deployment, there is unlikely to be one single remedy that will satisfy the requirement of addressing competition issues across all areas.

In terms of the specific remedies that Ofcom is intending to apply to BT, we agree in principle with those that have been proposed – and we particularly welcome the establishment of a Passive Infrastructure Access ('PIA') remedy. However, we consider that there are certain key shortcomings in the intended remedy construct resulting in a need for the requirements and conditions relating to the proposed PIA

[1] http://pressoffice.virginmedia.com/phoenix.zhtml?c=205406&p=irol-newsArticle&ID=1395257&highlight=

[2] http://pressoffice.virginmedia.com/phoenix.zhtml?c=205406&p=irol-newsArticle&ID=1401380&highlight=

product to be enhanced. In particular, we are concerned that there is a significant prospect of an unduly protracted development and implementation period arising which could frustrate the ambitions of those CPs seeking to deploy competing infrastructure and, ultimately, delay the benefits that such a remedy would deliver. We also believe that there is a very real risk of the PIA product being unfit for purpose.

These concerns have arisen as a consequence of the proposed timetable and development framework being, in Virgin Media's view, insufficiently ambitious, and the requirements for the associated Reference Offer ('RO') being too vague and open to interpretation. As we have set out above, we believe that the provision of passive access products **[✂]** would enable significant opportunities for further deployment of NGA services to be realised.
We are strongly of the view that in order for this to occur, Ofcom must be more prescriptive in setting out the requirements for the associated remedy and product, and should pursue a more aggressive delivery timetable. In respect of the former of these, we have set out in our response a number of examples of the additional specificity that we believe should be included within the remedy and the requirements for the RO. In this regard we would hope, in conjunction with this consultation response, to follow up with Ofcom bilaterally concerning the detail of these specific requirements. In any event, we strongly encourage Ofcom to engage with prospective purchasers of the PIA product in the course of considering responses to this consultation, with a view to understanding the specific product requirements, and thus incorporating them within the final Statement.

In respect of the delivery timetable, we believe that an earlier availability of the PIA product could be facilitated by way of increased mandating of milestones and by encouraging BT to engage with industry at a far earlier point in the development cycle (with such engagement being independent of publication of the final Statement). In the latter regard we note that BT has recently confirmed its intention to organise three workshops to discuss CPs' requirements for the duct and pole access products. Whilst we welcome this encouraging sign from BT we urge Ofcom, to the extent that it is able to, to encourage BT to continue to engage with industry prior to publication of the final Statement, and to ensure that there are real incentives on BT to maintain this level of cooperation throughout the development process.

We are also of the view that in order for purchasing CPs to have sufficient confidence in the PIA product, it must necessarily be subject to a stricter interpretation of the no undue discrimination obligation, consistent with the proposed approach to that remedy as applying to the VULA product.

It is critical that the products that are ultimately offered by BT are useable, support scale deployment and are priced at an appropriate level. With the right product arrangements, access to passive BT infrastructure has the potential to be a real catalyst for the further deployment of NGA in the UK. We therefore encourage Ofcom to ensure that BT does not frustrate the efforts of access seekers or unduly delay the availability of passive infrastructure access products.

We elaborate on these points in our responses to the specific questions posed.

Response to Specific Consultation Questions

Question 1: Do you agree with our proposed product market definition? If not, *please explain why.*

Virgin Media agrees with the proposed product market definition. In particular, we believe that products provided over cable, copper loop and fibre (and combinations thereof) are sufficiently substitutable so as to warrant inclusion in the same market. Further, we believe that cable based broadband access imposes a sufficient (indirect) constraint on the pricing of loop based access such that they should be included alongside each other in the same market.

We agree also that, as a result of the absence of any distinction in the wholesale inputs to the respective downstream products, WLA lines provided for both Business and Residential use reside within the same product market.

Question 2: Do you agree with our proposed geographic market definition? If not, please explain why.

Virgin Media agrees with Ofcom's proposed geographic market definition. We believe that it is appropriate for the market to be defined on a single, national basis (excluding the Hull area) for a number of reasons.

Firstly, we concur with Ofcom's view that a common pricing constraint exists on a national basis. While we note that since the WLA market was last reviewed, sub-national pricing has emerged in the adjacent downstream (Wholesale Broadband Access) market, we do not believe that this is necessarily indicative of price variation in a (hypothetically unregulated) upstream market for WLA.

We recognise that the modified Greenfield approach does not lead to an absolutely definitive conclusion on market definition, however we believe that, in the event that BT voluntarily offered wholesale products in this market, it would be extremely unlikely to introduce geographically differentiated pricing. Indeed, as Ofcom observes at paragraph 3.174, in markets where BT has introduced local pricing, it has principally done so in response to significant competition from multiple alternative operators. In an unregulated WLA market, in which BT experiences significantly less intense levels of competition (i.e. from Virgin Media alone), we do not believe that local pricing would prevail – and that as such, it is appropriate to conclude that a common, national pricing constraint would exist.

Second, we believe that this finding of a common pricing constraint is supported by the fact that there appears also to be evidence of a common pricing constraint at the retail level, despite variances in the level and nature of competition. To the extent that differential retail prices are charged for broadband, this is principally as a result of a high variance in the costs of the wholesale inputs (e.g. LLU verses Bitstream).

Put another way, the key players in the retail provision of broadband appear in general not to apply geographic differentiation to their prices on any basis other than their cost structures. **[✂].** These practices are, we believe, a key relevant factor in the defining of a single, national market for WLA products.

Overall, we do not believe that an incentive to pursue geographically differentiated pricing in the WLA market would exist in a situation in which the existing regulation did not apply. In particular, we believe that both experience of BT's past practices, and evidence from other (unregulated) markets in which competitive conditions are comparable, suggest that BT would not be compelled to introduce sub-national pricing.

We agree, therefore, that Ofcom is correct to define a single, national market for WLA (excluding the Hull area), based in particular on the existence of a common national pricing constraint.

Question 3: Do you agree with our proposals that BT and KCOM have SMP in their respective geographic markets? If not, please explain why.

Virgin Media agrees with Ofcom's proposals that BT and KCOM have SMP in their respective geographic markets.

Question 4: Do you agree with our proposals for the general access requirements that should apply to BT and KCOM respectively? If not, please explain why.

Virgin Media agrees with Ofcom's proposals for the general access requirements to which BT should be subject. We believe that the general obligations that Ofcom suggests should apply to BT are both necessary and proportionate, given the markets that have been defined and the conclusions reached in Ofcom's assessment of SMP.

While we are generally supportive of Ofcom's proposals, we believe that the intention of certain of the remedies, and their practical application, needs to be clarified in order to avoid ambiguity. In this regard, we are of the view that Ofcom should take a sufficiently comprehensive and robust approach to setting and applying the obligations – and should also take into account lessons learned from the application of comparable remedies in other markets.

We do not plan to remark on all of the remedies proposed, however we set out below our observations on, and concerns about those for which we do feel comment is warranted.

<u>Requirement to Provide Network Access on Reasonable Request/Requests for New Network Access</u>

Virgin Media agrees with the proposed (re)application of these remedies. We believe that their existence is particularly important in the context of facilitating the deployment of, and hence competition in, NGA services as it is likely that requirements for new or alternative methods of access will emerge as NGA deployment evolves.

Any CP seeking the provision of new or emerging products, will likely be heavily reliant upon the Requirement to Provide Network Access on Reasonable Request and Requests for New Network Access remedies. As such, we believe that the specific requirements within them must be rigorously enforced and BT should, in particular, be held to account on timing. We note that the proposed Condition relating to the former of these two remedies includes the power for Ofcom to make Directions. In the event that it is necessary for Ofcom to exercise this power, we similarly urge an expeditious approach.

<u>Requirement not to Unduly Discriminate</u>

Virgin Media supports the proposed continued application of this remedy to the WLA market. However, we believe that in order to reassure purchasers of the PIA product that their demands will be treated on an equal basis to those of BT, and thus to underpin the viability of the product, it must be subject to a stricter interpretation of the requirement not to unduly discriminate – consistent with that proposed for the VULA product.

Failure to adopt this approach would, in our view, result in a very real risk of BT using the absence of an absolute prohibition on discrimination to its advantage, and thus favouring its own consumption of the PIA product above the demands of other CPs. We expand on this point in our response to Question 9.

In respect of the proposed stricter application of the no undue discrimination obligation to the VULA product we do not, in principle, have any particular objection to such an approach. However, we believe that should Ofcom proceed to mandate this more rigorous interpretation, it must necessarily take the same approach to the PIA product.

Basis of Charges

We agree with Ofcom's proposal that a Basis of Charges obligation should apply to LLU, SLU and PIA. However we do not agree that VULA should be excluded from this requirement. We believe that the absence of this obligation for VULA would constitute a very real risk of distortionary effects emerging in the market and could, ultimately, undermine alternative investments in infrastructure.

We note that in reaching its provisional conclusion not to require VULA to be subject to cost orientation, Ofcom considers that the prices charged by BT for VULA would be largely constrained by competition at the retail level and CPs' continuing ability, as an alternative, to purchase CGA services from BT on regulated terms. Ofcom concludes, therefore, that any attempt by BT to set excessively high prices would limit its ability to attract traffic to its NGA network, and thereby to recoup its NGA investment.

While we have some concurrence with this view, we believe that in addition to considering the prospect of excessive pricing materialising, Ofcom must necessarily consider the risks and consequential effects of BT pricing below cost. In the event that BT decides to price at an artificially low level, there is a tangible danger that alternative investments in infrastructure will be undermined or disincentivised (and this applies both to investments that have already been made, as well as future investments).

In particular, those CPs that have deployed their own access networks, such as Virgin Media, could experience a significant devaluation of their existing infrastructure and could be less inclined to expand those networks. By the same token, there is a risk that LLU providers will be forced to accelerate their NGA migration plans with a possible consequence that legacy assets will become stranded.

We note also that Ofcom cites the nascence of the VULA product as a key reason why it is not appropriate to apply a Basis of Charges obligation. Ofcom considers that since VULA is different to existing WLA products, and is a less established service and will therefore have a higher degree of uncertainty attached to its provision, it should not be subject to a pricing remedy. We do not agree with this reasoning. In particular, we believe that the fact that the VULA remedy constitutes something of a deviation from the traditional approach to remedies in the WLA market creates a need for some safeguards to be in place and thus actually represents a key reason why it should be subject to a Basis of Charges obligation.

The introduction of a non-physical access remedy to a market which has hitherto been subject solely to physical remedies is a material departure from the norm. While we do not, in principle, object to this approach, we believe that given that such a development is relatively ground breaking, and that the consequential changes to the competitive dynamic of the market are unknown, Ofcom must ensure that certain precautions are in place - in particular as regards the preservation of, and incentives for, the provision of infrastructure based competition.

Such an approach is, we believe, essential to underpinning, and is entirely consistent with, Ofcom's core objective of encouraging investment in infrastructure and thus stimulating infrastructure based competition. We therefore strongly encourage Ofcom to reviews its proposals as regards the application of a Basis of Charges obligation to the VULA product.

Virgin Media is of the view that where a Basis of Charges obligation is applied, Ofcom should take into account experience from recent disputes related to (the interpretation of) cost orientation and should, to the greatest extent possible, take the opportunity to prevent future disputes related to WLA services arising. For example, Ofcom must set any Basis of Charges obligation with an express intention of avoiding a repetition of the situations that have arisen in the Business Connectivity Markets.

Such a requirement is particularly important in the case of the proposed PIA product – the cost structures for which will be new to Ofcom and industry and which have not hitherto been subject to scrutiny. We believe, therefore, that Ofcom’s final Statement must specify exactly what constitutes compliance with the Basis of Charges obligation and thus the criteria and parameters against which it will be judged. In particular, there must be no scope for interpretation around what is required of BT’s pricing – the criteria must therefore be clear and unambiguous. Further, the scope of applicability of the obligation should be definitive and should, for example, specify precisely what constitutes an application of the requirement to ‘each and every charge’.

We welcome Ofcom’s proposal that a Basis of Charges obligation should mean that BT’s prices must, as a first order test, be between DLRIC and DSAC. We believe that this is an appropriate measure upon which to base a *prima facie* assessment of whether the prices for BT services are appropriately based upon their costs of provision. Further, in the context of the WLA market we agree with Ofcom’s suggestion that LRIC+ is a more appropriate accounting approach for a Basis of Charges obligation than use of the EPCR rule.

We urge Ofcom to actively monitor BT’s compliance with its Basis of Charges obligations on a frequent and ongoing basis – not necessarily constrained by the timetable of publication of BT’s Regulatory Financial Statements - and to ensure that the obligations are rigorously enforced. Notwithstanding this view, it is a statement of fact that accurate and timely assessment of this compliance is critically reliant upon the provision of sufficiently detailed, transparent and reliable regulatory financial information. We therefore encourage Ofcom to ensure that BT prepares and presents its accounting information in such a way that satisfies this requirement.

Charge Controls

Virgin Media agrees with the proposed scope of application of Charge Controls in the WLA market. We look forward to engaging with Ofcom via any subsequent consultation on the level and form of such controls.

Requirement to Publish a Reference Offer

Virgin Media agrees with Ofcom's preliminary conclusion that BT should continue to be required to publish Reference Offers for products in the WLA market. However, we have some concerns with the proposed requirements of the RO as applying to PIA products. In particular, we are concerned that absent a more prescriptive and definitive set of requirements, there is significant scope for the development of PIA products to be drawn out and contentious – thus delaying the point at which their benefits can begin to be realised. We expand on these concerns in response to Questions 9 and 12.

Transparency as to Quality of Service

Virgin Media agrees with the proposed continued application of the Quality of Service ('QoS') transparency remedy to BT. Such a requirement is in particular critical to monitoring BT's compliance with any undue discrimination obligation and ensuring that the relative service performance that BT provides on an internal basis is comparable to, and consistent with, that provided to its competitors. We welcome the fact that Ofcom is intending to formalise the KPIs that have been developed in conjunction with the OTA and agree that these should be positioned as a minimum obligation on BT. However, we believe that they should be subject to frequent, ongoing review and that Ofcom should be prepared to mandate additional or alternative metrics as appropriate.

Further, we are strongly of the view that BT should be required to report on a minimum set of KPIs for PIA and SLU from launch (either in the form proposed for LLU or in an alternative form dictated by the different product characteristics, as appropriate). In this regard, it is possible that BT will resist such an obligation in the early phases of deployment of these products on the grounds that the products are not sufficiently mature or do not generate significant volumes to be statistically significant. However, we would urge Ofcom to dismiss such claims.

It is vital that any potential discriminatory behaviour is disincentivised from the outset and that BT is, not allowed to take advantage of the situation, in particular the nascence of these products, to favour its own deployment of NGA services – a requirement that is, we believe, of particular importance in the early lifecycle of such upstream inputs. We do not believe that this obligation would be overly onerous for BT. Much of the development work around KPIs has already been undertaken for LLU and we would suggest that this can act as a blueprint for other services in the WLA market.

Requirements for Cost Accounting and Accounting Separation

Virgin Media agrees with the proposal to continue to impose on BT obligations to have Cost Accounting systems and Accounting Separation in relation to the WLA market. As Ofcom points out, imposition of regulatory financial reporting obligations on dominant providers is an important means of ensuring that compliance with obligations relating to cost orientation and non-discrimination can be monitored and assessed.

It is imperative therefore that the information contained within BT's Regulatory Financial Statements is sufficiently transparent and accurate. For example, if a cost orientation obligation is to have the desired effect, stakeholders must have a clear and comprehensive understanding of BT's costs and the attributions thereof. Equally, if the obligation to not unduly discriminate is to be meaningful, there must be transparency as between BT's wholesale and internal transfer prices. The Cost Accounting and Accounting Separation remedies must therefore mandate an appropriate level of detail.

We believe that these requirements will be particularly critical for the prospective period covered by this review as many new products and services are likely to be supplied by BT – the financial and costing information relating to which will not have been visible before. To the extent that the outcome of the WLA review requires any additions or changes to BT's Regulatory Financial Statements, we urge Ofcom to progress and formalise these at the earliest opportunity and to ensure that any amendments made are fit for purpose.

The provision of sufficiently clear and detailed accounting information by BT has the potential to deliver additional consequential benefits. Stakeholders will, of their own accord, be able to more readily investigate suspicions of failure by BT to comply with its regulatory obligations resulting, in all probability, in a reduction in the number of disputes referred to Ofcom. There are numerous incentives, therefore, for ensuring that BT's Regulatory Financial Statements are fit for purpose.

We urge Ofcom to rigorously enforce the Cost Accounting and Accounting Separation obligations and not to hesitate to act should BT fail to comply with its obligations to the full extent required.

Virgin Media has no comment to make regarding the proposed general access requirements as applying to KCOM.

Question 5: Do you agree that Ofcom should impose a new network access obligation on KCOM, that would require it to follow a statement of requirements process to handle requests for new network access in this market? If not, please explain why.

Virgin Media has no comment to make in response to this question.

Question 6: In relation to LLU, do you agree with the assessment and options set out?

Virgin Media agrees with the assessment and options set out by Ofcom.

Question 7: In relation to fibre access, do you agree with the potential unbundling arrangements for the different fibre architectures and the positions/options set out given the current and expected future availability of fibre within BT's access network?

Virgin Media believes that Ofcom has captured the potential unbundling arrangements for the different fibre architectures set out.

Question 8: In relation to SLU, do you agree with the assessment and options set out?

Virgin Media agrees with the assessment and options set out.

Question 9: In relation to PIA, do you agree with the proposed PIA obligation structure and the proposed implementation arrangements?

As Virgin Media has set out elsewhere in this response, we have identified significant opportunities for further NGA deployment using passive products **[✂]** – and thus have a strong and tangible demand for such facilities. Our realisation of these opportunities is critically dependent upon the PIA product being made available in a suitable form from the outset, at an appropriate price, on a strict non-discriminatory basis and absent any undue delay to its development and implementation. Therefore while we welcome the proposed PIA remedy, we are of the view that in order for the maximum benefit to be realised, and for the associated products to be viable, the accompanying no undue discrimination obligation should be applied more rigorously, the timetable for implementation should be subject to greater formalisation and the obligation structure should be more prescriptive and specific, thus reducing the focus on BT proposals/industry negotiation. We believe that Ofcom must ensure that BT does not unduly delay the development of passive products and that it does not create products that are unworkable. We elaborate on these points below.

<u>Application of the No Undue Discrimination Obligation</u>

While we accept that the provision of access to BT infrastructure to third parties should not hamper BT's own NGA deployment plans, we believe that it is equally important to ensure that BT does not favour its own use of the PIA product over that of purchasing CPs. In particular it is critical that access is granted to CPs on the same terms and conditions, using the same processes and systems and to comparable time frames, as BT provides the service to itself. In this regard we support the application of a non-discrimination obligation, however we believe that its proposed form and interpretation are insufficient to establish a suitably level playing field and will not, in particular, provide the reassurance that purchasers (and prospective purchasers) of the PIA product require.

BT's rollout of FTTC and FTTH, and indeed the provision of the VULA product, will require an internal consumption of passive infrastructure elements by Openreach. While we recognise that this self supply arrangement is an inevitable consequence of the functional separation of BT, as brought about by the Undertakings, we believe that it represents a significant risk that BT will be able to prioritise its own provision of passive infrastructure over and above the demands of third party purchasers of the PIA product.

Moreover, given that such internal supply will take place within the bounds of Openreach, detection of any preferential or discriminatory activity will to all intents and purposes be imperceptible to external observers. Given that BT will be in direct competition with many of the purchasers of the PIA product, we are of the view that it will have a very strong incentive to give preference to its own consumption.

We believe that the incentive for, and thus risk of, discriminatory behaviour is particularly acute in the case where BT and PIA-purchasing CPs have concurrent NGA rollout plans in disparate geographies. That is, as well as there being a prospect of such behaviour materialising where BT and purchasing CPs require access to infrastructure in the same geography (or indeed access to the same piece of infrastructure), we believe that there is a very real danger that BT will favour/prioritise the self supply of infrastructure access for the purposes of its own NGA deployment in one geography over the provision of infrastructure access to another CP in a different geography. This concern is, we believe, accentuated by the fact that the majority of third party demand for PIA is likely to be most prevalent in areas where BT has not deployed its NGA network.

As such, we are of the view that in order to prevent discriminatory behaviour, and to ensure an appropriate level of parity in the provision of passive infrastructure, the PIA product should be subject to a more rigorous form of no undue discrimination. That is, a stricter interpretation of the obligation should be adopted such that there is a complete prohibition on discrimination, mirroring the definition of Equivalence of Inputs ("EoI") in the BT Undertakings – as per the proposed approach to VULA.

We note that in arriving at the decision to take this approach to the VULA product, Ofcom considers it to be appropriate on the basis that VULA is expected to be the main basis for competition in NGA-based services for the period covered by this review. Ofcom also considers the approach to be proportionate as VULA is a new product and, as such, there would be no need to re-engineer existing products. Virgin Media believes that these criteria also apply to the PIA product, for the following reasons.

While we do not dispute that fact that VULA is likely to constitute a key basis for competition, we believe that PIA, equally, has the potential to be a principal component in the competitive dynamic of NGA deployment. As we have set out within our response Virgin Media, and we believe other CPs, can demonstrate a significant potential demand for the PIA product. Subject to its terms and specifications being acceptable, we would be willing to substantiate our demand for scale deployments of PIA which would, in the majority of instances, apply to geographies outside of BT's intended NGA deployment footprint. We are therefore of the view that contrary to Ofcom's implied belief, PIA does in fact have the potential to be a key basis for competition.

We note that in concluding in the FTTC (and to a certain extent FTTH) Variation requests that it would be disproportionate to require BT to consume and provide upstream physical products – notably PIA and SLU products – on an EoI basis, Ofcom reached that decision largely on the basis of a perceived lack of industry demand for infrastructure access products. In particular, Ofcom set out its view that there had been no firm expressions of interest in investment based on physical inputs. It went on to conclude that in the absence of serious interest in physical inputs for super-fast broadband, imposing an EoI requirement would be unduly burdensome for BT, without delivering effective and sustainable competition based on physical inputs. While at the time there may well have been little demonstrable demand for, or indeed willingness to make a financial commitment to, physical access products, as Virgin Media stated in its response to the related consultations, this would not necessarily be the case in the future – and this expectation has now materialised. As we have set out above, it is now the case that certain CPs, including Virgin Media, would potentially purchase physical inputs in significant quantities.

It is true to say that BT does not currently, and has not previously offered a passive infrastructure access product in the manner and form being proposed in this case. Therefore we do not believe that there will be any need for BT to re-engineer existing products, processes or systems as to all intents and purposes none exist. Indeed, in this regard we understand that BT does not currently possess a central inventory of its passive infrastructure estate – with records existing in a number of different forms depending on legacy arrangements etc. We believe that it will in all likelihood be necessary for BT to compile such a core repository of its infrastructure estate in order to provide the PIA product – and given that it will essentially be compiling this from scratch, together with the necessary systems and processes to support the product, it would be no more onerous to create them on what would to all intents and purpose be an EoI basis.

In considering BT's FTTC Variation request Ofcom set out its expectation that, in providing any physical FTTC products, BT should use the same components, processes and systems as it uses itself for the purposes of its active FTTC product where reasonably practicable and on a cost-efficient basis. We note that Ofcom considers that a similar expectation should apply when interpreting the application of the no undue discrimination requirement to physical products provided in the WLA market. However, we do not believe that this approach is sufficiently robust and will, in all likelihood, fail to result in the necessary parity of provision of the PIA product. **[✄].**

As we have set out above, we believe that a stricter interpretation of the no undue discrimination obligation is critical in this instance. Such an approach would, we believe, deliver a number of necessary safeguards. In particular it would prevent BT giving preference to its own supply - not just in common areas of demand/on the same piece of infrastructure, but also as between disparate areas of geographical demand. Given the transparency difficulties incumbent in monitoring BT's self supply of PIA it would also place necessary additional responsibility on BT to ensure and demonstrate that it was not discriminating, rather than other CPs having to really on their own detection or suspicions. We are therefore of the view that in order for the PIA product to be viewed as viable by CPs, and thus for demand to be crystallised, a total prohibition on discrimination is required. Such a prohibition should be all encompassing and should extend to the provision of information by BT (e.g. network maps and inventories, survey results etc) as well as charging and delivery timing/arrangements etc. We also believe that such an approach would ensure consistency with the VULA product – and moreover are of the view that if Ofcom proceeds to apply a stricter interpretation to the no undue discrimination remedy in the case of VULA, it must necessarily take the same approach in the case of PIA. Accordingly, we strongly encourage Ofcom to take a more rigorous approach to the application of this remedy in this instance.

<u>Timing of, and Approach to, Development and Implementation of Reference Offer</u>

We believe that the proposed timetable for the implementation of the PIA product is too informal and that the proposed approach to development constitutes a significant risk that availability of the product will be delayed. In Virgin Media's opinion, the development and implementation process should be structured in such a way that the scope for delay is mitigated, in order that the opportunities that the product creates can be realised as soon as possible and, ultimately, communities that are currently unable to receive the benefits of NGA services can do so sooner.

As mentioned above, we believe that discussion and consultation between BT and industry and the accompanying product development work should commence immediately, and should not be dependent upon the publication of Ofcom's final Statement. Such an approach has the potential to improve the delivery timetable by a number of months (we understand, for example, that publication of the final Statement is unlikely to occur before September/October 2010). We therefore welcome the announcement by BT of its intention to hold three near-term workshops to discuss CPs' requirements for the duct and pole access products. We would however urge Ofcom to encourage BT to continue this proactive approach and to monitor the progress of these activities so that progress can be reflected in the timetable that will be published in the final Statement.

Whilst the first workshop has yet to be held, and it is thus unclear how many CPs will attend, Virgin Media is strongly of the view that it is necessary for non-BT participants to work together effectively if efficient and productive progress is to be made. Further, if this outcome is to be achieved, we believe that participation should be limited to those CPs with a genuine interest in the PIA product, and who are willing to tangibly demonstrate their demand for it, as opposed to those for whom there is no real interest.

In order to achieve efficient and timely development of the PIA product, we believe that experience from the establishment and launch of Local Loop Unbundling should be taken into account. For example, avoiding a contentious and laborious development and implementation process and ensuring that the PIA product is fit for purpose from the outset should be key objectives. Given its experience of addressing the issues with LLU we would suggest, therefore, that it would be extremely beneficial for the OTA to facilitate discussions between BT and industry and to oversee the development of the product – but, as we set out above, this activity should commence now and involvement of the OTA should not be dependent on the publication of a draft RO or indeed publication of the final Statement.

Virgin Media also believes that in conjunction with the above, to the extent it is able, Ofcom should formalise more of the milestones in the PIA development/implementation process. That is, in addition to formalising the timing of the publication of a draft RO, Ofcom should also mandate additional milestones relating to the publication of a final RO and the launch/availability of the relevant products.

We are also of the view that the development of the specific product aspects of the RO should occur in tandem and to the same timetable. Virgin Media has no particular issue with the establishment of two separate work streams for duct and pole aspects, reflecting the different development approaches that may need to be taken for each product. However, notwithstanding these differences, there will be significant areas of commonality between the two streams and as such we agree with Ofcom's view that they should proceed in parallel and should be closely linked and co-ordinated. Furthermore, we strongly disagree with the suggestion that the elements of the RO relating to pole access will take longer to develop than those relating to duct access. While we do not dispute the fact that engineering factors associated with pole loading and the safety requirements associated with overhead working will require particular focus, we do not believe that these aspects of the product development will be any more onerous or complex than equivalent factors related to duct access. Indeed, it is arguably the case, for example, that assessing the various pole configurations and technical parameters for incorporation within the RO will be easier than the same activity for duct, as visibility of the relevant infrastructure will not require the opening of chambers, accessing of man holes etc. As Ofcom suggests at paragraph 7.207, CPs purchasing the PIA product would, in many instances, require both duct and pole facilitates to serve a particular installation. It is likely, therefore, that there will be material demand for complementary provision of both duct and pole access elements, suggesting that the relevant aspects of the Reference Offer should be developed in parallel, to the same timetable and made available at the same time.

As we have set out elsewhere in our response, we believe that in setting the specific RO content and requirements, Ofcom should be sufficiently prescriptive and definitive such that ambiguity is avoided and the scope for lengthy interpretation debates is minimised. These requirements will also be crucial to ensuring that the products are fit for purpose and viable, as we discuss later in our response.

Pricing

As regards pricing, Virgin Media generally agrees with the approach proposed by Ofcom. For the PIA remedy to deliver its maximum benefit it is essential that it is priced at an appropriate level and that purchasing CPs have both certainty of pricing and confidence that BT is not making excessive returns. In this regard, we welcome the application of a Basis of Charges obligation and support the 'proportional usage' approach to charging for capacity.

We also support the proposed approach to investment risk and believe it is important for investors in infrastructure to be able to take into account the levels of risk that they incur in making those investments. However, as we have set out elsewhere in our response, assessing compliance with, and enforcing a Basis of Charges obligation is critically dependent on the provision of sufficiently detailed and transparent regulatory financial reporting information by BT.

We urge Ofcom therefore to ensure that BT provides the necessary information and that such information is made available on a timely basis. The need for transparency and clarity are particularly important requirements in the case of the PIA remedy as the related cost stacks will hitherto not have been subject to scrutiny and will be relatively unfamiliar to stakeholders.

To the extent that Ofcom is required to subsequently intervene or otherwise become involved in the setting of prices relating to the PIA product, we would highlight the need for such involvement or intervention to be timely and expedient. In order to provide the appropriate input it will be necessary for Ofcom to have sufficient visibility of the underlying costing and other financial information – and ideally to have had sight of, and be familiar with such information in advance. We therefore encourage Ofcom to take a proactive approach to this matter such that it sources the relevant information from BT at the earliest possible opportunity and does not, for example, wait for a dispute to be submitted.

Proposed Form and Scope of PIA Obligation

Virgin Media generally concurs with the high level principles and design objectives that Ofcom suggests should underpin the PIA obligation. We agree with the proposed geographic scope and believe that the concept of technology neutrality is an important inclusion, as it will afford access seekers a choice in the technology that they use to extend their networks. **[✄]**

As we have set out above, Virgin Media has a potential large scale demand for access to BT's passive infrastructure. While the realisation of this demand is dependent upon a number of factors, assuming the right product wrap and commercial terms prevail, we would expect BT to be able to cater for it. In this regard, we welcome Ofcom's stated expectation at paragraph 7.204 that BT will ensure that investments in operational processes and associated OSS are commensurate with demand.

We interpret this expectation as being generically applicable to all demand scenarios (i.e. that on the one hand, BT should not be required to spend large sums on OSS unless there is clear evidence of demand, but on the other BT should invest as appropriate in OSS to meet demand where it is tangible/proven). While we agree that it would be unreasonable to require BT to provide for scale deployment absent of a tangible demand, in the situation where a CP was willing to make a commitment, we believe that Ofcom should require BT to satisfy such demand in a timely and efficient manner. This should include, for example, the ability to serve multiple towns via one order utilising, where required, a complementary set of different infrastructure. We support, in principle, the establishment of a demand forecasting process, however we believe that the functioning and criteria of such a process must be fully thought out in order, in particular, that the right balance is struck between binding and discretionary aspects. While we agree that there are positive elements to the CPS and LLU demand forecasting processes that could usefully be employed in the case of PIA, we believe that lessons should be learned such that the delays and contentions that arose in the implementation and development of those processes are avoided.

In Virgin Media's view, it would be appropriate to establish a trigger for industrialisation of the PIA product by BT, such that if a CP makes a request for PIA in order to serve in excess of, say, 40,000 homes in a given geography, and makes a commitment to this, the industrialisation process would be initiated.

<u>Reference Offer Minimum Specific Requirements and Content</u>

As we set out above, we believe that certain of the requirements that Ofcom has set out for inclusion in the Reference Offer need to be expanded and clarified in order to avoid ambiguity/scope for interpretation and to ensure that the associated products are fit for purpose from the outset.

As they currently stand, Ofcom's proposals for the content of the RO contain too great an emphasis on requiring BT to make proposals to industry and relying on industry/BT to come to an agreement amongst themselves. Experience has shown that BT and its prospective customers have conflicting interests when developing new products and invariably struggle to reach agreement on many product aspects.

This has the potential to lead to both an unduly drawn out development/implementation phase and the provision of products that are not fit for purpose – both of which characteristics were very well demonstrated in the case of the development of LLU products. It is vital, therefore, that the lessons from LLU implementation in particular are learned and that Ofcom takes a more prescriptive approach to setting the specific RO requirements to which BT will be subject and enhances/expands certain of them as appropriate – informed, we would suggest, by the OTA. We would hope, in tandem with this consultation response, to be able to engage with Ofcom as regards the more substantive detail of these requirements, but we set out high level examples of aspects that we believe require explicit focus below.

Independent administering/delivery of the PIA product – Virgin Media believes that provision of the PIA product could be significantly enhanced if it was administered and delivered by an independent third party contractor. (This would, of course, be subject to any approach of this type not materially increasing the cost of the product). Such an arrangement would, we suggest, allow activity to be scaled up and down quickly and flexibly, independent of BT's own plans for NGA rollout. Clearly BT would need to set the rules and policies as applying to any third party intermediary, but there is no reason why purchasers of PIA should not engage directly with that intermediary. For this arrangement to work, the contractor must have access to the same systems and information, on the same terms and timescales, as BT itself. Such an approach would, we believe, be mutually beneficial as it would provide additional reassurance to purchasers as regards concerns about discrimination and would address many of BT's resourcing issues.

Two tier approach/scale differentiation – Virgin Media believes that there would be significant benefits in establishing a two tier approach to the provision of PIA. That is, there would be one approach for small scale orders of less than, for example, 40,000 homes passed, with an alternative process for orders in excess of this level (the latter incorporating elements of automation and industrialisation). As we set out above, Virgin Media will potentially have scale demand for the PIA product. We therefore would not want the realisation of that demand to be encumbered or frustrated by processes that were unable to cope with the scale. By the same token, in the case of those CPs with lower volume requirements, it may not be appropriate or feasible for them to adopt automated or industrialised processes.

Capacity Reservation Rules - We welcome Ofcom's proposal that capacity reservation rules should be symmetrical and should avoid unnecessarily sterilising spare capacity, and that BT and CPs should be able to reserve spare capacity on an equal basis. We agree in principle with Ofcom's proposals for the 'ground rules' and approach to new infrastructure construction (i.e. in situations of congested infrastructure, in new build locations where infrastructure does not currently exist, in over-build situations and for sharing of newly deployed infrastructure). However, we believe that Ofcom should be far more prescriptive in setting its expectations for the approach to be taken in these instances. As we have previously highlighted, the current requirements contain much reliance on BT making proposals to industry which, based on previous experience, we would suggested is likely to result in drawn out and contentious discussions and may, in any event, ultimately require Ofcom to intervene in a more prescriptive form.

In respect of ordering, we again urge Ofcom to be more prescriptive in setting its requirements of BT and to be informed, to an appreciable extent, by experiences from LLU.

As we set out above, we believe it is imperative that BT is not permitted to favour its own consumption of passive access over that of purchasing CPs – and that this requirement should apply as between different geographies, as well as to provision in the same geography/on the same piece of infrastructure.

Infrastructure information process - If PIA is to be a viable remedy, CPs must have access to sufficient information in order to be able to fully evaluate the suitability of using passive products to support their own NGA network deployments. It is therefore vital that the RO is sufficiently detailed and transparent and provides for the making available of network maps and diagrams, inventories, survey results etc – all of which must be available without undue delay, and on a strict non-discriminatory basis. We request therefore that Ofcom is more prescriptive about this requirement and takes into account, in particular, lessons learned from the implementation of LLU.

Procedures for the provision of information to CPs about spare capacity, including arrangements for visual surveys of physical infrastructure to determine spare capacity – Virgin Media believes that it is imperative that the survey process is efficient and timely and that there are no prohibitive costs attached to it. In particular, BT must be required to ensure that supporting information on its network inventory is sufficiently comprehensive and complementary to any survey activity, and that the costs of collating such information are not recovered via survey charges. In addition, BT should not be afforded the ability to load any costs onto survey work that would have the effect of undermining the viability of the underlying opportunity or disincentivising a request for access in the first place.
Further, we are of the view that BT must be required to maintain a dynamic database of survey results, that is updated as and when the results of a survey of a particular piece of infrastructure are received, and that there must be an incentive on BT not to use surveys to slow down or frustrate the purchase and provision of PIA. In this regard, we believe that Ofcom should be more prescriptive in specifying the survey process and criteria, informed in particular by its research into the provision of passive infrastructure in overseas jurisdictions.

Processes for the installation and recovery of cables and associated equipment – Virgin Media believes that there should be greater scope for CPs to undertake more activity of their own accord. While we understand that the security and integrity of BT's network must be preserved we believe, for example, that there would be significant scope for cost and efficiency savings if CPs were to be permitted to undertake their own deployment and recovery of equipment, subject to adherence to the appropriate conditions.

Virgin Media believes that the benefits of Ofcom adopting a more prescriptive approach to the setting of the minimum requirements to be contained within the RO could be numerous. As well as facilitating a more efficient and timely product development and implementation process, it would also potentially reduce the need for subsequent intervention by Ofcom, in the event that BT and CPs were unable to agree on particular product aspects. We therefore urge Ofcom to refine and enhance its list of requirements such that there is less scope for interpretation and thus disagreement.

Question 10: In relation to VULA, do you agree that VULA may be a necessary access remedy in the WLA market and if so, do you agree with the key characteristics identified and how these currently relate to BT's GEA products?

We believe that, subject to its specification and accompanying terms and conditions, it might be appropriate to require BT to offer a non-physical access product such as VULA in the WLA market. However we believe that should Ofcom proceed to do so, it must not be at the expense of facilitating true infrastructure based competition and it must not, for example, jeopardise the viability of the proposed PIA remedy.

As regards VULA specifically, we are of the view that in the absence of more detailed information about the product specification and terms and conditions, it is difficult to comment definitively on its appropriateness. We had previously formed a moderately positive view of BT's proposed GEA product based, largely, on our understanding of the handover structure and the high level commercial terms. Assuming a comparable structure/approach was to prevail in the case of the VULA product, we would be likely to reach the same conclusions. However, we believe that there may be some inconsistency in respect of the proposed arrangements for the handover of traffic in particular. Ofcom appears to be of the view that BT's GEA product extends between the end user premise and the local serving exchange (i.e. it does not include any element of aggregation) – in which case a purchasing CP would need to interconnect with 800-1000 (NGA) local serving exchanges in order to achieve total coverage of BT's NGA footprint. On this basis, Ofcom considers that BT's GEA product would be compatible with the 'localness' requirements of the proposed VULA product.

In contrast, we had been lead to believe that a CP purchasing GEA could achieve total coverage by interconnecting to points of handover totalling around one sixth of this number of local serving exchanges. If that is not the case, the economics of the VULA product will take on a different context – particularly for those CPs that do not have a deep penetration of local exchange interconnectivity. We urge Ofcom, therefore, to clarify the handover arrangements for the GEA product and thus the implications for the proposed VULA product.

Regardless of this issue, on the basis that Ofcom believes that any non-physical access product offered in the WLA market should, de facto, not include any element of aggregation, we request that Ofcom clarifies its expectation as regards which division of BT would or should offer a more aggregated version of such access.

Question 11: Do you agree with the framework for considering specific access remedies on BT?

Virgin Media broadly agrees with the framework used in the consideration of specific access remedies on BT. However, we believe that in applying this framework to the consideration of potential remedies, Ofcom has not apportioned sufficient emphasis to the objectives of ensuring the right NGA remedies are introduced, early enough, and of keeping options open. Our concerns in respect of these objectives manifest themselves in the proposed approach to, and timetable for development of the PIA product as we have set out elsewhere in our response.

Question 12: Do you agree that there is a need to have a complementary set of access remedies and if so, do you agree with the proposed set of remedies on BT?

Virgin Media agrees that it is necessary to apply a complementary set of access remedies. As Ofcom highlights, the concurrent existence (in the medium term at least) of Current Generation Access and Next Generation Access infrastructure, which will be a consequence of the onset of BT's NGA deployment, will result in a variety of access and network configuration scenarios and technologies.

This suggests that multiple remedies are warranted, as no single access remedy is likely to be sufficient to address the competition issues that Ofcom has identified in all circumstances. Furthermore, this mixed economy of technologies, together with the uncertainty around the order in which NGA roll-out will occur and lack of clarity around incremental roll-out of NGA by BT necessarily requires in Virgin's opinion, a broad set of remedies in order to achieve Ofcom's investment and competition objectives.

In this regard we would by way of example highlight the fact that the current planned NGA rollout by BT will largely overbuild Virgin Media's existing NGA deployment. VULA will thus play an important role in increasing choice in those areas, but will not address the challenge of expanding NGA reach. Additional, passive infrastructure remedies will therefore provide an important tool in the extension of NGA coverage.

While Virgin Media agrees that it is appropriate to apply the listed set of remedies to BT, we believe that the form and content of certain of the remedies needs to be enhanced, as we have set out elsewhere in our response. In particular, in the case of the PIA remedy, we are concerned that Ofcom's proposals are not sufficiently prescriptive, nor will they result in a sufficiently timely delivery of the relevant passive products. We refer to our comments on these points in our response to Question 9.

Question 13: Do you agree that no specific access remedies should be imposed on KCOM in the WLA market at this time? Could any remedies on KCOM at the WLA market level address the competition issues that we have identified?

Virgin Media has no comment to make in response to this question.

Question 14: Do you agree with our assessment against the legal tests for each specific remedy, as set out in Section 9?

Virgin Media agrees with Ofcom's assessment against the legal tests for each specific remedy, as set out in Section 9 of the consultation document.

Virgin Media welcomes the opportunity to respond to this consultation, and we would of course be happy to discuss the matter further or expand on any of the points that we have made. Please do not hesitate to contact me should you wish to do so.

Yours sincerely,

Andrew Wileman.

For and on behalf of Virgin Media.