

## Ofcom consultation

### Proposed Variation to and Exemption from BT's Undertakings under the Enterprise Act 2002 related to Fibre-to-the-Premises and Fibre Integrated Reception System

#### Response of BSKyB

##### Summary

1. There is a serious risk that adopting the proposed variation could unwind some of the benefit delivered by the Undertakings to the detriment of consumers. Openreach has already demonstrated that once it is allowed complete control of active electronics, as it has been for Fibre-to-the-cabinet ("FTTC"), it acts upon its incentive to move downstream, and fails to make available products which are in keeping with the Undertakings - those which facilitate investment by other operators in competing infrastructure at the deepest level where competition can be effective and sustainable.
2. Providing incentives to invest in Next Generation Access ("NGA") does not justify a total departure from the regulation established by the Telecoms Review. The Undertakings should, in general, continue to be based on the same approach in relation to NGA-based wholesale products as applies to copper-based products. This requires that any relaxation of the Undertakings in relation to Fibre-to-the-premise ("FTTP") services should be accompanied by explicit requirements in the Undertakings that:
  - Openreach should sell products in the fibre value chain that are the most upstream products that could form the basis for effective and sustainable competition downstream, and that it should sell only these products (i.e. it should not also sell products downstream of these). Other BT divisions would, of course, be free to offer such wholesale products; and
  - a requirement that Openreach should sell these products on an equivalence of input basis.

##### **There is a serious risk that adopting the proposed variation could unwind some of the benefit delivered by the Undertakings to the detriment of consumers**

3. The basis of the regulation that emerged from Ofcom's Strategic Review of Telecommunications ("the Telecoms Review") was to identify the part of BT that was an undoubted natural monopoly - in particular, based on (a) activities that are incontestable, and (b) assets that it is not economic for other operators to replicate, the majority of which were inherited by BT at privatisation and in relation to which BT faced (and continues to face) little business risk.
4. The objective of the new approach to regulation was to create effective, sustainable competition based on investment by other operators in competing infrastructure. In order to achieve this objective, a firm boundary was drawn around the natural

monopoly part of BT's business, and the following key types of regulation applied to the newly created entity (Openreach):

- a requirement that Openreach offer exactly the same products to BT and other Communications Providers ("CPs") – the principle of 'Equivalence of Input' ("EoI");
  - precise definition of the products that Openreach would and would not offer in the copper product stack; and
  - a requirement that Openreach would not control active electronics.
5. This approach to regulation has served UK consumers and the communications industry well with a clear, transformational shift in the level of competition, delivering considerable welfare gains. Ofcom recognised this in its recent evaluation of the results of the Telecoms Review. Ofcom stated:

*"While not the sole contributing factor to benefits experienced by consumers and businesses, we consider that the Undertakings have played a role in bringing about greater choice and take-up of services, choice of suppliers, products and packages and increased value for money. Competition has played an important factor in the take-up of fixed telecommunications services. Benefits include:*

**Increased take-up of new services and packages:** *Fixed broadband adoption has continued its growth reaching over 60% of UK households at the end of 2008 from 41% at the end of 2005. Over 5.5 million broadband connections at the end of 2008 were provided by operators other than BT who have deployed infrastructure at BT's local exchanges. The percentage of the UK population which has access to broadband services today is in the high nineties. The range and choice of bundled propositions continues to grow with some 40% of households today taking a bundle of a minimum of two services by the end of March 2008. Use of data services in the corporate market has also continued to increase since 2005, with the increase between 2005 and 2007 being dominated by demand for Ethernet and IP VPN networking services.*

**Greater affordability:** *Competition between 2005 and 2007 led to a fall in the cost of a basket of residential fixed voice services on average by 10.5% in real terms each year. Within that basket residential broadband services decreasing on average by 16.3% per annum, while at the same time average speeds have increased. The average cost of a fixed line voice call has fallen by some 10.2% each year in real terms over the same period. Similarly, while the indicative price for an 8 Mbit/s service was as much as £30 per month in 2006, the same speed of service could be obtained for as little as £5.99 per month in early 2009."*<sup>1</sup>

6. At the time of the Telecoms Review, however, it was not clear how to apply the Undertakings to NGA, with only a set of vague provisions aimed at governing this area. This was partly a consequence of uncertainty about the prospects for investment in NGA at that time, but also based on recognition that the issues raised

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<sup>1</sup> Paragraph 1.7, "Impact of the Strategic Review of Telecoms – Implementation Review", Ofcom, 29 May 2009. [http://www.ofcom.org.uk/telecoms/btundertakings/impact\\_srt/impact\\_srt\\_fulldoc.pdf](http://www.ofcom.org.uk/telecoms/btundertakings/impact_srt/impact_srt_fulldoc.pdf).

by NGA-based wholesale products were likely to be different to those raised by copper-based products.

7. It is now clear that fibre based products will (at least at some point) replace those provided over copper, particularly in those geographic areas which are most suited to fibre deployment. As more information about Openreach's plans for NGA deployment emerges, and experience in the results of relaxation of the Undertakings in relation to FTTC products emerges, it is now also apparent that significant relaxation of the regulation introduced by the Undertakings in relation to NGA-based wholesale products risks jeopardising the gains to consumers that resulted from the Undertakings, in terms of both price competition and innovation.
8. In terms of price competition, the current Openreach proposals for NGA-based wholesale broadband and voice products (Generic Ethernet Access ["GEA"] and Voice over NGA ["VoNGA"] respectively) restrict parts of the value chain from competition that, with more appropriate wholesale products, would be effectively and sustainably competitive.
9. In relation to innovation, the Openreach product specifications for GEA and VoNGA are so tightly controlled that CPs buying these products will have little scope to innovate and differentiate their service offerings. For example, CPs may want to offer upload and download speeds other than those available through the GEA specification. They may also want to innovate and invest around different access technologies (like vectoring or DSM), alternative line cards or different customer premises equipment ("CPE").
10. Because CPs will be unable to innovate themselves, they are reliant on the Statement of Requirement ("SoR") process for further development of functionality. This process is, however, ineffectual for four reasons.
11. Above all, as discussed further below, it does not effectively control the potential for prevarication and outright refusal of reasonable requests for the supply of wholesale products by BT.
12. More generally:
  - (i) whatever Openreach develops is available to all, so, unless these wholesale products are sufficiently flexible to enable CPs to differentiate their services, there is no opportunity to gain competitive advantage downstream;
  - (ii) the SoR process is long and time-consuming, thus delaying any consumer benefits. As discussed further below, it has taken several months for Openreach to respond to the Wires-only and Virtualisation SoRs; and
  - (iii) the greater customer volumes of downstream BT business units (some of which stem from dominance in certain wholesale markets like WBA Markets 1 and 2) means that the innovations downstream BT businesses want may be prioritised. Openreach's approach to VoNGA demonstrates this fact in that it asserts that WLR-based SPs (including BT Retail) need an equivalent product for NGA deployments but at the same time has not committed to developing the products that MPF-based LLU operators require.

13. As a result of a lack of ability on the part of CPs to innovate and differentiate their services from those offered by other operators and to compete on price, there is a risk that in areas in which NGA replaces copper-based wholesale products conditions of high, uniform retail product pricing with limited functional variance will result – a return to the unhealthy competitive conditions that prevailed in relation to broadband services in the UK prior to 2005.

**Openreach has already demonstrated that once it is allowed complete control of active electronics, as it has been for FTTC, it acts upon its incentive to move downstream**

14. Openreach’s behaviour in relation to FTTC, for which the Undertakings have already been varied, demonstrates the type of outcomes that can be expected when Openreach is allowed full control of the active electronics.
15. When the Undertakings were varied in relation to FTTC, it was considered that there were sufficient safeguards to prevent Openreach acting on its incentive to move downstream via the procedures set out in Section 5.54 of the Undertakings, which state:

*“If AS provides a BT Active FTTC Product pursuant to Section 5.52:*

*(i) AS shall ensure that it is developed in accordance with a product roadmap developed through effective and appropriate ongoing consultation with AS’s customers. The consultation process must consider, on an on-going basis, the specification of that product, the Ofcom Ethernet Active Line Access: Updated Technical Requirements published on 3 March 2009 as amended from time to time and monitor the development, operation and deployment of that product.*

*(ii) AS will set out in published guidelines the consultation principles it will follow for consultations related to FTTC. These principles will include the setting out of the objectives of each consultation and the questions it will ask, the decisions they will inform, the timescale and process for responses, and how responses will be considered to ensure transparency. They will provide for a reasonable consultation period of not less than two weeks, other than in exceptional circumstances. They will also provide for publication of a statement explaining the decisions made, together with objective reasons, with clear linkages to the questions raised in the consultation.”*

16. Two related examples illustrate the lack of effectiveness of such safeguards.

*The joint industry SoR for a Wires-only wholesale product*

17. In June 2009 CPs submitted a joint industry SoR for a Wires-only wholesale product that would allow CPs greater control and flexibility than is available from Openreach’s proposed GEA product. In contrast to Wires-only which increases the scope for innovation and differentiation, Openreach’s GEA product is excessively controlled and inflexible (demonstrating how Openreach is acting upon its incentive to capture more of the value chain). The main flaws in the GEA design are that:

- it bundles in an Openreach Optical Network Terminal (“ONT”) and, therefore, requires one of its engineers to enter the customer premise (as opposed to CP’s installing their own terminal equipment);
- the range of available speeds offered is inflexible and conservative (e.g. only 2Mbps upstream);
- there is only one choice of access technology available (i.e. 2.5Gbps GPON) which represents a small subset of what could be deployed; and
- CPs have limited capability to control the line card and, as a result, are constrained from differentiating their products.

18. In November 2009, Openreach rejected the Wires-only SoR, effectively forcing its wholesale GEA customers to use Openreach’s CPE, and in clear contradiction of the intention behind Section 5.54 - in particular, in relation to the Active Line Access (“ALA”) Technical Requirements<sup>2</sup> that deal with flexible CPE (one of 5 key ALA characteristics identified by Ofcom). Specifically, Ethernet Active Line Access: Technical Requirement C6 states that;

*“Ethernet ALA shall transport the control protocols and management channels to allow complete management of CPE. Standardisation shall separate the management of physical/Ethernet connectivity from the management of higher level equipment functionality. **This will provide a basis for moving to wires/fibre-only.**”*[Emphasis added]<sup>3</sup>

19. Clause 5.54 of the Undertakings requires Openreach to “consider” these technical requirements but, crucially, does not go as far as to require Openreach to develop products in accordance with these requirements. As a result, and coupled with inherent weaknesses in the SoR process (detailed above), these safeguards cannot ensure that Openreach products meet their customers’ requirements nor conform with the key characteristics that Ofcom consider should be present in any active NGA products.

20. As a result, there is little effective constraint on Openreach moving down the value chain, as it is doing with its GEA product, and by refusing to supply most upstream products (i.e. Wires-only) consumers are deprived of the welfare gains that flow from effective and sustainable competition at the deepest point in the network.

*Development of a suitable NGA wholesale voice product*

21. Similarly, Openreach’s VoNGA proposal does not meet the requirements of some LLU operators, like Sky, who require NGA voice products that afford them the same opportunities to utilise their own infrastructure to control voice traffic as are available through MPF. An MPF operator today uses its own call server to control inbound and outbound calling, features and numbering. These calls are conveyed across the operator’s own network including the same backhaul that it uses for its broadband traffic.

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<sup>2</sup> “Ethernet Active Line Access: Updated Technical Requirements”, Published 3 March 2009:

<sup>3</sup> Page 31, *ibid.*

22. After six months of concerted industry pressure to offer an input upstream of VoNGA, Openreach has agreed to explore an “Open ATA” solution but with no firm commitment as to when, and if, it will be launched. It is, however, still pushing ahead with the development of the existing VoNGA product so that, even if an Open ATA product is launched, it is likely that VoNGA will be available first. As a result, in the first phases of NGA roll out, MPF-based LLU operators will be forced to buy VoNGA in order to supply voice services to their customers. In effect, all the benefits that flow from full LLU will not be replicated in an NGA world until, at least, Open ATA is made available.
23. Moreover, there is no upstream Eol product proposed for VoNGA even though such a product can be readily identified. Therefore, even if Open ATA (or, in the longer term, Wires-only) were to be launched, BT would still be able to act on its incentive to favour the product that its downstream business units purchase (i.e. VoNGA).

**Providing incentives to invest in NGA does not justify a total departure from the regulation established by the Telecoms Review**

24. Sky recognises that NGA deployment is a significant and risky investment, and that it is essential that regulation of BT strikes the right balance between providing BT with incentives to invest, and ensuring that BT continues to face effective competition from other operators.
25. Striking this balance, however, does not require the complete abandonment of the regulation established as a result of the Telecoms Review, as implemented in BT’s Undertakings. The absence of a price control on NGA-based wholesale products provided to competitors is sufficient to remove any regulatory disincentive on BT to make such investments; it is not necessary also to remove such constraints as Eol, and to allow BT to monopolise more of the value chain than it is permitted to in relation to copper-based products in all circumstances.

**The Undertakings should continue to be based on the same approach in relation to NGA-based wholesale products as apply to copper-based products**

26. Other than in respect of controlling charges, in order to ensure the realisation of the objectives of the Telecoms Review in the future the Undertakings need to continue to require that:
- (i) products are offered at the deepest level of infrastructure at which competition would be effective and sustainable;
  - (ii) these products are offered on an Eol basis; and
  - (iii) downstream products are not offered by Openreach.
27. In principle, the deepest level of infrastructure at which competition would be effective and sustainable should be based on access to purely passive inputs (such as duct access or final drop sharing). The more control that CPs can exert over infrastructure, the greater the scope for innovation with improved prospects for effective and sustainable competition. Competition based on purely passive inputs is, however, unlikely to be viable in all circumstances in relation to NGA-based wholesale products. Much will depend on local conditions as a CP’s business case

for adoption of FTTP based on passive inputs will be highly sensitive to factors such as housing density, duct conditions and expected penetration rates. It is, therefore, necessary to vary BT's undertakings to allow Openreach to supply an active FTTP product, including control of active electronics.

28. The key issue to be addressed with such a departure from the regulation embodied in the Undertakings, is how, in such circumstances, to ensure that such a departure does not result in a greater degree of control by BT of the value chain than is appropriate. As the examples above in relation to the relaxation of the Undertakings in relation to FTTC demonstrate, unfettered control will inevitably result in BT extending its control along the value chain in circumstances where there are viable upstream products that could be offered.
29. Certain LLU operators have already explained to Openreach the GEA and VoNGA products that they consider should be offered by BT as viable upstream alternatives to those being developed. In relation to GEA products, Wires-only, Open ATA, flexible product speeds, CP installation of CPE, Virtualisation, Chassis Sharing, options for different access technologies and wavelength unbundling are the most prominent examples of CP requirements which, in the most part, have been rejected, delayed or offered on prohibitive commercial terms by Openreach. Typically, these products accord with Ofcom's principles, as set out in its "Ethernet Active Line Access: Updated Technical Requirements" document. These more flexible GEA products, with a thin layer of Openreach control, may be sufficient where passive inputs are not viable.
30. A product set of this type offers the prospect of significant consumer benefits, including:
  - greater scope for innovation as Openreach's customers would have the ability to differentiate; for example, in relation to CPE, access technologies, line speed and quality of service;
  - greater price competition due to the greater part of the value chain over which competition would extend;
  - greater cost efficiencies and a better in-home installation environment through the ability to bundle equipment and capabilities (for example, to build into CPE an operators' own ATA, router etc); and
  - improved fault diagnosis and repair through giving CPs control of line monitoring and management, and allowing them to differentiate on these features.
31. These proposals are much more aligned with the principles of the Telecoms Review than Openreach's current set of GEA and VoNGA propositions. They would allow CPs to innovate and differentiate their service offerings – both in functionality and in service levels. CPs would be able to bundle equipment and functions together to enable scope economies. Moreover, as competition is based on more of the value chain than under Openreach's proposals, there will be increased price competition between CPs. It is these products that represent the most upstream point today where competition can be sustainable and effective.

32. Accordingly, Sky considers that, if BT's Undertakings are varied in relation to FTTP, any such variation must include explicit requirements written into the Undertakings:

- a clear statement, written on the face of the Undertakings, that Openreach should sell products in the fibre value chain that are the most upstream products that could form the basis for effective and sustainable competition downstream, and that it should sell only these products (i.e. it should not also sell products downstream of these). Other BT divisions would, of course, be free to offer such wholesale products; and
- a requirement that Openreach should sell these products on an equivalence of input basis.

**It would not be possible to implement the required changes via market reviews**

33. While it is possible that the Wholesale Local Access market review could introduce remedies obliging BT to supply the most upstream products today where competition could be effective and sustainable, it is the Undertakings that are uniquely able to require those products are supplied on an Eol basis and for anything downstream to be supplied outside of Openreach.

34. This is because the suite of SMP remedies available to Ofcom does not include obligations that can deal with BT's functional separation nor with Eol. It was precisely for this reason that the Undertakings were developed during the Telecoms Review.

35. The implementation of the new European Framework could introduce functional separation and Eol remedies into the range of available SMP remedies at an NRA's disposal but it is unlikely that the framework will be in place in time for the market reviews next year. So, for the time being, the Undertakings are the only place where these matters can be dealt with.

**Sky**

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