Review of the fixed narrowband services wholesale markets

BT Response to the Ofcom Consultation dated 19 March 2009

4 June 2009

NON-CONFIDENTIAL VERSION

Executive Summary

The wholesale narrowband markets have undergone fundamental change since Ofcom's last review in 2003. Ofcom accepted Undertakings from BT in September 2005 ("the Undertakings") which have changed the way in which BT operates and provides wholesale services. Importantly, BT functionally separated its access and backhaul facilities into Openreach and now provides certain services on an Equivalence of Inputs (EOI) basis.

Greater competition has developed at the wholesale level. The number of Communications Providers (CPs) in the market has significantly increased, many deploying their own infrastructure to deeper points in the network, and several now wholesale their own services. The demand for Local Loop Unbundling (LLU) and broadband services has exploded since 2003. The investment and innovation of services has lead to greater end-user choice, increased switching between suppliers and price competition. Over the near term, we believe the markets will continue to evolve rapidly, although potentially unpredictably.

The high level of regulation applied to the wholesale narrowband markets has been an important factor driving the increasingly competitive landscape. As the benefits are now being realised, any new or additional regulation on BT would not be proportionate or appropriate.

BT supports the following aspects of Ofcom's consultation entitled "Review of the fixed narrowband services wholesale markets" (the "Ofcom Consultation"):

- The movement towards deregulation of the relevant conveyance and transit markets.
    - BT notes the larger CPs no longer rely on interconnection at the tandem layer, rather interconnection is overwhelmingly at the Digital Local Exchange (DLE).
    - Many CPs no longer rely upon BT for transit or conveyance as they either directly interconnect or use third parties.
    - BT agrees with Ofcom's finding of fully competitive markets for Wholesale Transit Services and for Local Tandem Conveyance and Transit.
- Ofcom's view that cost-orientation should only apply to the basic elements of the Wholesale Line Rental (WLR) products and not to value-added services and features, giving BT more incentive to invest in these features. BT expects these principles to also be reflected in the upcoming WLR Charge Control consultation;
- Ofcom's proposal to reduce the notification period from 90 days to 28 days, which will provide greater flexibility for BT to respond to its customers' requests;
- Ofcom's proposal to move to an industry-agreed Statements of Requirements process; and
- Although long overdue, BT welcomes Ofcom's deregulation of FRIACO services.

However, BT has the following key concerns, which it hopes Ofcom will address in its final statement.

- Ofcom has failed to set out a clear and consistent approach to cost orientation. Until Ofcom provides clear guidance on its proposed approach, there is no regulatory certainty for BT or industry on this matter and it is difficult for BT to meaningfully comment on Ofcom's proposed approach;

- BT disagrees with the Ofcom proposals to apply additional pricing regulation to ISDN30, considering that the arguments lack objective justification. BT also considers that Ofcom has failed in its duty to have regard to the principles of proportionality, necessity and appropriateness;

- BT considers that Ofcom has failed to carry out sufficient in-depth, forward-looking market analysis in regard to market definition, particularly in relation to ISDN2 and ISDN30. Ofcom's starting point is the BT product, rather than the service being provided;

- BT is concerned that Ofcom's treatment of both fixed-mobile call substitution and the growth of VoIP services does not take proper account of likely developments in what is meant to be a forward-looking view. BT considers that Ofcom should be prepared to review the market again within the proposed four-year control period, if further significant changes to market structure become evident and BT proposes an objective trigger for this review with respect to fixed-mobile substitution;

- Ofcom has failed to take into account fully the issues raised by Next Generation Access (NGA) and BT considers that this should be specifically excluded from the remedy to supply WLR; and

- In BT's view, the content of any WLR KPIs and the manner in which they are provided should be an industry agreed process, rather than being mandated by Ofcom. Furthermore, BT opposes any attempt by Ofcom to mandate the supply of the KPI Online tool.

Detailed responses to Ofcom's questions

BT has below provided its responses to the questions posed in the Ofcom Consultation.

Question 5.1: Do you agree with Ofcom's assessment that there are separate markets for analogue, ISDN2 and ISDN30 wholesale exchange lines and that there are separate geographic markets for the UK excluding the Hull Area and the Hull Area? If not, please explain why.

In summary, BT does not consider that Ofcom has undertaken a complete and robust analysis of the market definitions for these services. We:

- agree that there is a distinct market for analogue wholesale exchange lines, although Ofcom has not fully explained its reasons for a single market as opposed to separate residential and business markets; and

- consider that Ofcom has not undertaken sufficient market analysis in relation to the ISDN2 and ISDN30 markets, in particular it has not considered alternative services in the market nor taken a forward-looking view.

BT considers that both the ISDN2 and ISDN30 products are moving towards the end of their life cycle and will soon be replaced by newer technologies. Ofcom has started from the point of the existing BT product, rather than from the view of the service. Ofcom has failed to consider alternative services in the market, and as the newer technologies continue to evolve, any forward-looking analysis would show that the services provided by these newer technologies are increasingly substitutable for ISDN2 and ISDN30 at the retail level and, at the very least, are constraining BT's supply and pricing of legacy ISDN products at the wholesale level.

Any market analysis should be forward-looking and should be defined prospectively, taking into account expected or foreseeable technological or economic developments over a reasonable time horizon. Had Ofcom undertaken a full and proper market analysis on this basis, this would clearly have demonstrated that imposing additional SMP remedies for ISDN30 would be disproportionate.

BT provides comments on each product below.

<u>Analogue exchange lines</u>

In summary, BT accepts that there is a distinct market for analogue wholesale exchange lines. However, BT believes that Ofcom has not undertaken the appropriate analysis to conclude that a single residential and business market now exists. In principle, BT does not object to a simplification of the market definition to a single residential and business market, providing that any remedies that Ofcom proposes enable BT to continue to supply wholesale services with price, functional and service differences to cater separately for residential and business end-users. It is also important that any consequences following from this revised market definition and into Ofcom's WLR Charge Control consultation do not drive undue and unnecessary product changes to the detriment of CPs or end-users.

A single analogue exchange line can support traditional voice services as well as some data traffic (e.g. dial-up internet, facsimile) over copper[1]. At the wholesale level, Openreach offers two products for these exchange lines, known as Basic and Premium analogue exchange line services which can be purchased as single lines or, in the case of the Premium product, as multi-lines.

Analogue lines are the most common types of exchange lines installed in homes and businesses across the United Kingdom. Presently, BT provides over 22 million analogue exchange lines with the significant majority being Basic lines. Basic lines are generally used by residential and Small Office/ Home Office (SoHo) end-users and Premium lines by business end-users.

BT is currently experiencing a decline in the demand for wholesale analogue exchange lines. This is driven by several factors, including the movement to Metallic Path Facilities (MPF), the hand-back of second lines previously used for services such as facsimile or dial-up internet, the movement towards mobile-only households[2] and other factors associated with the prevailing economic climate. Discussions with industry on the potential for an xMPF-type product may also impact future demand.[3] BT expects this downward trend to continue over the medium to longer term.

BT has invested significantly in further developing its wholesale analogue exchange line offerings. As noted in the Ofcom Consultation, BT delivered WLR2, which was confirmed by Ofcom as having met the ‘Fit-for-purpose’ criteria, in July 2005. Since that time, Ofcom has accepted a set of Undertakings from BT under the Enterprise Act 2002 which aims to (amongst other things) functionally separate BT’s upstream division providing wholesale access and backhaul products (Openreach) and to provide certain services on an EOI basis, which include wholesale exchange line services (referred to as WLR3).

BT is currently migrating its customer base to the EOI product and the rest of industry will also migrate over the next two years, given the announced closure of the WLR2 platform by 30 June 2011. Therefore, at the end of this market review period, BT will only provide WLR3 analogue exchange line services on an EOI basis to all CPs.

WLR3 includes additional functionality and services that are not available on WLR2. WLR3 has improved ordering and repair capabilities due to real time Dialogue Services enabling round-the-clock order entry, processing and assurance. CPs are better informed of Openreach’s progress of orders through proactive Keeping Customers Informed (KCI) messages. WLR3 also enables CPs to order line services with value-added features, such as Temporary Lines for events and exhibitions, port-a-cabins at construction sites and ships-in-dock. Lines can also be provided to areas known as ‘hot sites’ such as electricity generating stations or transformer sites. These new services on WLR3 are only available on Premium lines.

In the 2003 market review, Oftel identified separate markets for analogue exchange line services to residential and business consumers. Oftel’s reasons for identifying separate markets were essentially that:

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1 Supplied to the specification in Supplier Information Note (SIN) 351, available at www.sinet.bt

2 Ofcom estimates that 12% consumers have mobile only access with the rate expected to increase at 1% per annum (Ofcom Consultation, paragraph 5.39).

3 BT notes that xMPF is likely to be raised in the upcoming Wholesale Local Access market review.

- Business and residential users typically require a different range of exchange line services;
- It is possible to identify residential and business users;
- Business users expect premium terms and conditions and are prepared to pay for this; and
- Operators serving residential and business customers may be expected to be located in different areas.[4]

BT considers that these reasons for separate residential and business markets remain valid today. Indeed, these are some of the factors used by Ofcom to determine that the competitive conditions for residential and business users are different and to determine two separate markets at the retail level (Ofcom Consultation, paragraphs 5.56 – 5.63).

BT notes that while it has made some changes to the processes for delivering the Basic and Premium wholesale analogue exchange services since 2003, no significant changes have been made that have fundamentally changed the products. Therefore, BT considers that Ofcom has failed to fully articulate its reasons for its proposal to converge the previously separate residential and business markets for wholesale analogue exchange line services.

ISDN2

In summary, BT considers that Ofcom has failed to carry out sufficient analysis on the relevant market. It has taken the current BT ISDN2 product as the starting point and assumed that it provides the correct market definition. It has not looked at possible present or future substitutes to the ISDN2 product nor has it considered whether there are any factors at the retail level which act as indirect constraints on BT at the wholesale level (such as the possible substitutability of broadband for some ISDN2 customers). Consequently, Ofcom's analysis is incomplete.

ISDN2 provides two digital channels with a bandwidth of 64kb/s each and a signalling channel of 16kb/s on a single copper exchange line. At the wholesale level, BT often refers to the product as Wholesale Digital Access and provides it to the European Telecommunications Standard Institute (ETSI) specification, referred to as ISDN2e.

ISDN2 is a BT product that is used for many purposes. For example, the product is used for the provision of multiple voice channels through a PABX, for video-conferencing, for Point of Sales machines in retail outlets, for some stand-alone Automatic Teller Machines (ATM) for banks, and for resilient back-up of other services such as Private Circuits.

Other technologies may be used which provide similar services to ISDN2 including broadband or xDSL services, PSTN, IP-based solutions, and mobile or VoIP where ISDN2 is used to only provide voice.

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4 Oftel, Review of the fixed narrowband wholesale exchange line, call origination, conveyance and transit markets, Explanatory Statement and Notification, 26 August 2003, paragraphs 3.50-3.51.

BT has two main concerns with Ofcom's market analysis in relation to ISDN2:

First, Ofcom's start and end point is that the relevant product market here is Openreach's wholesale ISDN2 exchange line product (instead of the service being provided). It fails to consider (other than a very short section on substitutability between PSTN, ISDN2 and ISDN30) whether any other product is a substitute for ISDN2. The OFT Guidelines on Market Definition state that 'the process of defining a market typically begins by establishing the closest substitutes to the product (or group of products) that is the focus of the investigation'[5]. This is usually done using a SSNIP analysis. However, Ofcom simply states that there are "very few alternatives for users of ISDN2"[6] without apparently carrying any analysis to back up this statement. The SSNIP analysis which Ofcom carries out appears to relate either to wholesale analogue exchange lines or wholesale exchange lines more generally, without a specific SSNIP test for ISDN2.[7]. Consequently, Ofcom assumes that there are no real alternatives to ISDN2 without undertaking the appropriate analysis.

Second, Ofcom fails to consider whether there are any indirect competitive constraints at the retail level which apply to this market (even though Ofcom itself notes that indirect competitive constraints at the retail level can sometimes be more important than direct competitive constraints[8] and that "consideration of competitive conditions in the retail markets logically precedes the analysis of the wholesale markets"[9]).

BT considers that broadband is the primary alternative for ISDN2. In its Consultation, Ofcom noted that the growth in the use of broadband for internet access by residential users has led to a decline in the use of ISDN2. This is reflected by the fact that Openreach withdrew its only residential ISDN2 product, Digital Home, in July 2007. However, business users also use broadband in place of ISDN2. It has been consistently noted in BT's Regulatory Accounts that there is a "general product migration to broadband that affects all ISDN2 products".[10] Consequently, BT believes that broadband provides an indirect constraint on ISDN2 at the wholesale level, preventing BT from raising its ISDN2 prices (prices have remained at the same level since 2004).

These are key issues in relation to defining the ISDN2 market and so this analysis should have been carried out by Ofcom.

ISDN30

In summary, BT considers that Ofcom has failed to carry out sufficient analysis on the relevant product market. It has taken the current BT ISDN30 product as the starting point and assumed that is the correct market definition. It has not looked at possible substitutes to the ISDN30 product nor has it considered whether there are

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5 Office of Fair Trading (OFT), *Market Definition*, December 2004, paragraph 2.5

6 Ofcom Consultation, paragraph 5.99

7 Refer Ofcom Consultation, paragraphs 5.81-5.87, 5.107-5.114.

8 Ofcom Consultation, paragraph 5.77

9 Ofcom Consultation, paragraph 4.14

10 For example refer BT, Current Cost Financial Statements for 2006, p. 24.

any factors at the retail level which act as indirect constraints on BT at the wholesale level (such as the possible substitutability of new technologies). Consequently, Ofcom's analysis is incomplete.

ISDN30 is a BT product which provides up to 30 independent digital channels with a bandwidth of 64kb/s each and as well as signalling channel. It is provided across a 2Mbit/s bearer which is usually copper or fibre, and sometimes microwave radio. At a wholesale level, BT offers ISDN30 products that conform to the ISDN30e (ETSI) or ISDN30 DASS (Digital Access Signalling System) standards.

ISDN30 is primarily used to route calls to a PABX, although it can also be used for data purposes. It is used by businesses with a requirement for eight lines or more. It has been used extensively by SMEs and large corporates as well as call centres.

As with ISDN2, BT considers that Ofcom has not carried out a thorough market definition analysis. Ofcom is required to identify any substitutes to the starting point in the market definition exercise (the service which ISDN30 provides) but only a limited SSNIP analysis is done in relation to this product (refer Ofcom Consultation, paragraphs 5.100 to 5.102). BT would expect more detailed analysis to be undertaken of the possible alternatives to the BT service.

In BT's view, ISDN30 is not the only access technology that can be used to route calls through a PABX. Currently, ISDN2 services can be used instead of ISDN30 at low levels of channel utilisation. Partial Private Circuits (PPCs) can also be purchased by other CPs to build a viable alternative means of delivering similar service to an ISDN30 and, where economical, CPs can build their own network to the customer's premises to deliver services. Furthermore, CPs can also invest in LLU in order to provide their own exchange lines to customers. None of these alternatives are analysed in detail in the Ofcom Consultation and therefore BT considers that Ofcom has failed to carry out sufficient in-depth market analysis.

Furthermore, Ofcom is required to take a forward-looking view of the market. If it had done this, it would have noted that BT's ISDN30 product is a legacy technology that will ultimately be replaced by newer alternative technologies. The main alternative technologies currently in the retail market to provide voice services to business customers are Hosted VoIP and IP Trunking. Ofcom makes clear that substitutes at the retail level may act as constraints at the wholesale level. However, Ofcom only mentions VOIP in its analysis and then only briefly[11]

Hosted VoIP is a service being offered at the retail level. It generally involves up to 8 voice lines being carried over a single IP connection. Unlike ISDN30, hosted solutions do not require the end-user to procure a fully-functioning PABX (although some IP Customer Premise Equipment is required) and therefore is marketed as providing the benefits of flexible/mobile working.

IP Trunking refers to the use of SIP or H-323 protocols for the delivery of IP traffic across the transport layer of a network. SIP is increasingly offered as part of a converged or unified communications solution for medium to large enterprises whereby voice, data, multimedia, and video are combined onto the same network. The various sites for the corporate customer are connected via an IP or Ethernet virtual private network, generally with Quality of Service guarantees.

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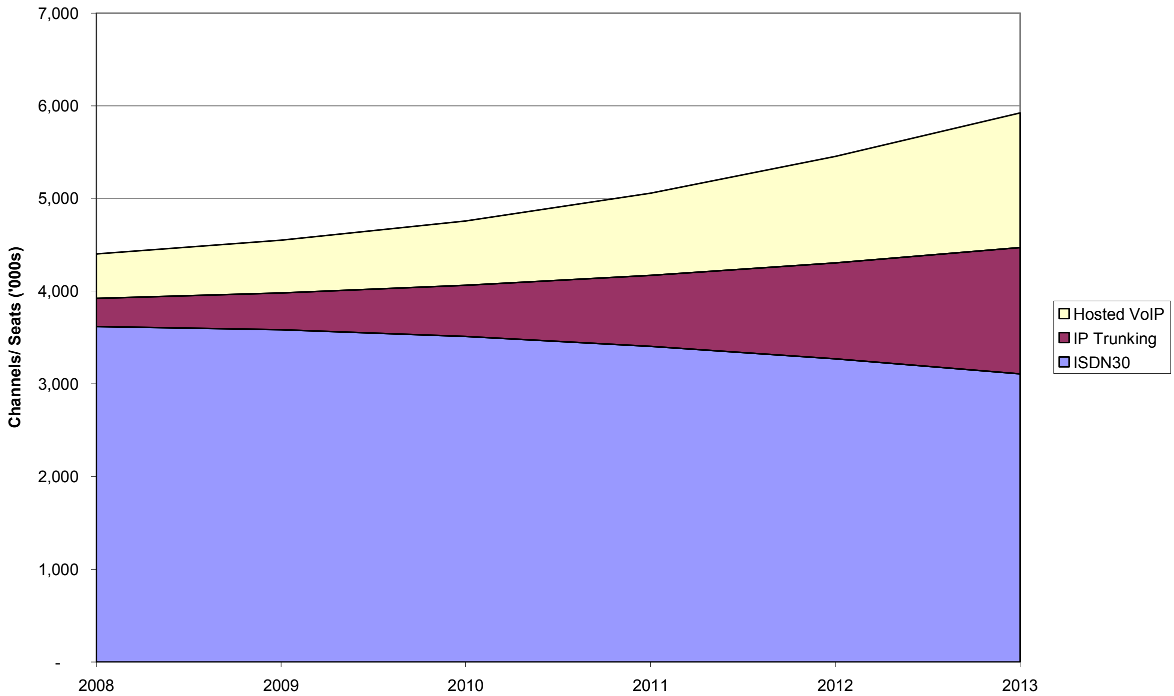
[11] Paragraph 5.126 of the Ofcom Consultation

The movement from legacy technologies to IP Trunking does not necessarily have to be undertaken as part of an upgrade of a wider corporate network. A corporate customer could install a VoIP gateway beside the PABX and move to a SIP trunking solution.

IDC has provided independent estimates of the growth of these technologies compared with ISDN30 for the provision of business voice services in the UK.

Figure 1: IDC forecasts for UK Business Voice Services



IDC's forecasts demonstrate that newer technologies will increasingly be used instead of ISDN30 over the medium term. IDC considers that the economic recession is slowing down the take-up of business VoIP services as capital expenditure has been postponed until the economy improves. BT notes that the change-out time frame for a PABX is generally considered to be 5-7 years and therefore the recession has potentially delayed the movement away from ISDN30 in some areas of the end user market as end-users hold on to existing assets.

Under NGA, BT notes that CPs may also consider the option of purchasing a Super Fast Broadband (SFBB) or Generic Ethernet Access (GEA) service to build an alternative means of delivering voice services to business customers through access to a PABX. This has not been considered by Ofcom.

As with ISDN2, Ofcom's ISDN30 market definition analysis is not complete, as it has not considered alternatives to the ISDN30 product nor considered whether any of these newer technologies at the retail level act as indirect constraints on the ISDN30 market.

Geographic markets

BT agrees with Ofcom's assessment that there are some variations in the competitive conditions for wholesale exchange line services given the presence of cable and/or LLU in some parts of the UK. On a forward looking view, the growth of fully-unbundled LLU lines as well as the rollout of NGA may lead to market fragmentation by geography. In those circumstances it may be that Ofcom could take a sub-national approach, along the lines adopted in the Wholesale Broadband Access review. BT does not believe such an approach is warranted today, but this is another area which Ofcom should keep under review.

Question 5.2: Do you agree with Ofcom's assessment that BT has SMP in analogue, ISDN2 and ISDN30 wholesale exchange lines in the UK excluding the Hull Area? If not, please explain why.

Analogue exchange lines

BT agrees with Ofcom's assessment that it has SMP in the analogue wholesale exchange line market.

ISDN2

Ofcom's assessment of SMP overstates BT's market power in the ISDN2 wholesale exchange line market. It is particularly unsatisfactory that Ofcom ignores the clear and evident substitution of ISDN2 by broadband and other services in defining this market and assessing levels of market power. The extent to which broadband acts as a constraint on ISDN2 is a key question that has not been satisfactorily addressed by Ofcom, and this accordingly impacts on the assessment of SMP.

ISDN30

Ofcom's assessment of SMP overstates BT's market power in the ISDN30 wholesale exchange line market. Ofcom has taken a very narrow approach to defining the market and has discounted the constraint imposed on ISDN30 by the availability and growth of substitutes. This is particularly unsatisfactory as Ofcom proposes the imposition of additional regulation without taking due account of these key factors in assessing SMP.

- BT has provided IDC's independent forecasts for the UK Business Voice Services Market which includes IP-based alternatives (see figure 1 in the response to question 5.1). According to IDC, ISDN30 will constitute approximately 50% of the broader market by 2013. Ofcom has estimated BT's 2007 wholesale market share at 67% in a total market of 3.3m ISDN30 channels (Ofcom Consultation, Table 5.6). The implication is that BT's ISDN30 will account for a significantly smaller proportion of that broader market.

- Substitutes to ISDN30 are available and being provided now. There is consensus that the supply of substitutes will grow at the expense of legacy ISDN30.

- The constraint provided by providers such as Verizon, Cable & Wireless and Virgin Media is not considered by Ofcom and there is limited analysis of the constraint resulting from the option to self-supply.

The above factors demonstrate that BT's market power is less than that suggested by Ofcom.

Question 5.3: Do you agree with Ofcom's assessment that KCOM has SMP in analogue, ISDN2 and ISDN30 wholesale exchange lines in the Hull Area? If not, please explain why.

BT has no comments in response to this question.

Question 5.4: Do you agree with Ofcom's analysis of future developments that may affect these assessments? If not, please explain why.

Ofcom identifies three future trends which could be expected to impact the assessment of SMP in the fixed wholesale narrowband exchange line markets and concludes that none of these will materially affect the designation of SMP on BT in the period covered by this review. In BT's view, these trends create potential uncertainty in relation to its SMP designations (albeit over an extended period). BT makes the following points:

- Fixed-Mobile Convergence

Mobile phone services are an increasingly influential commodity whose relationship to fixed line services is rapidly maturing. Mobile networks are practically indistinguishable from fixed Next Generation Networks (NGNs) in functionality and cannot be dismissed as irrelevant in assessing BT's fixed line SMP over the next few years. BT further notes that with increasing fixed-mobile convergence, the differing regulatory treatments of fixed line and mobile become increasingly asymmetric and, as a result, unfair for fixed-line operators.

- Next Generation Networks

In NGNs, IP will be used extensively as a transport protocol. This will drive greater demand and use of IP-based solutions, which is likely to be at the expense of BT's legacy ISDN2 and ISDN30 products. This will certainly impact BT's SMP designation in these markets.

- Next Generation Access

In looking at regulation in an NGA world, it is appropriate to consider market definitions and market power. With technology-neutral markets defined at EU level, the prevailing assumption at the outset may be that the existing fixed access markets are applicable and that this will determine views on SMP and where enduring economic bottlenecks exist.

However, the services provided on an NGA network will be fundamentally different from those defined through the wholesale narrowband review. For example, wholesale analogue exchange line services may not necessarily exist in a fibre environment. Therefore, the market definitions defined through the Ofcom Consultation are unlikely to be appropriate in an NGA environment.

Within any market definition framework, it may be that remedies are not needed in all markets. Ofcom has recognised that existing regulation may be impractical or unnecessary for NGA. For example, in deploying Fibre-To-The-Premises (FTTP) architecture, BT intends to supply services using an entirely fibre infrastructure. The lack of copper infrastructure in these circumstances would create difficulties in applying and complying with the SMP conditions required through this review of wholesale narrowband services. Therefore, the 'copper-based' remedies would not be appropriate.

In light of the above, BT seeks absolute clarity from Ofcom that the remedies proposed in the Ofcom Consultation are not intended to be applied in an NGA environment.

Question 6.1: Do you agree with Ofcom's assessment that the relevant call origination market is wholesale call origination on fixed narrowband networks and that there are separate geographic markets for the UK excluding the Hull Area and the Hull Area? If not, please explain why.

Subject to our arguments about fixed-mobile convergence below, we support Ofcom's proposals to adopt more generic, technology-neutral definitions of the Call Origination and Call Termination markets. BT agrees that definitions should be framed along the following lines:

- Call Origination: the conveyance of all signals (including relevant control signals) originating on a customer's exchange line to the first point in the network where those signals can be accessed by another CP.

- Call Termination includes the conveyance of all signals (including relevant control signals) required to terminate calls on a customer's exchange line from the first point in the network where those signals can be accessed by another CP.

While BT agrees that the relevant call origination market is, at least in the short-term, the market for wholesale call origination on fixed narrowband networks, we are disappointed that Ofcom has not recognised the significant impact that mobile call substitution is having on this market and the fact that a single market, particularly at the retail level, may become a reality prior to the next market review.

There has been a steady erosion of the boundary between fixed and mobile calls in both retail and wholesale markets for a number of years. At the retail level, Ofcom says that mobile calls are "just outside" the market for fixed calls. BT's view is that the degree of substitution in fixed markets is greater than this – there is already a level of substitution in that many consumers choose to make calls on mobile networks even when a fixed-line alternative is available and, as noted by Ofcom in its Consultation (see paragraph 5.39), a growing proportion of consumers are choosing to have mobile only access. BT believes that Ofcom has not taken full account of the level of fixed-mobile call substitution that has already taken place. In Annex A to this response we present details of the clear correlation between the decline in fixed call volumes and the growth of mobile – a correlation that is largely driven by price.

With the erosion of the price premium for mobile calls, it is evident that mobile call services do constrain the retail fixed market. On a forward-looking view we would expect this trend to continue and perhaps to accelerate, as behavioural differences between fixed and mobile usage continue to erode, so that mobile calls would no longer be "just outside" the fixed market but would be part of the same product market. If that convergence were to happen at the retail level, such that there was a single calls market, then the same substitution could exist at the wholesale level and the wholesale market would then need to be redefined as a single calls origination market.

In such a converged wholesale market, BT is highly unlikely to be able to exercise any market power. It remains uncertain as to when this situation will arise, but BT believes that it may well happen within the period to be covered by Ofcom's current review.

BT's major concern, therefore, is that Ofcom's market definition and SMP assessment becomes out-of-touch with market reality and BT is left facing all the burdens of SMP regulation while its major competitors (both fixed and mobile) would be free to act on the basis of commercial self-interest.

In order to minimise this risk, BT proposes that Ofcom should explicitly specify a threshold measure that would trigger a further review of the wholesale narrowband calls market. Given the strong correlation between fixed and mobile call volumes, we suggest a simple objective measure based on the proportion of calls traffic. BT believes that if the proportion of mobile traffic reaches 60% then Ofcom should conduct a further review of the market.

In relation to the issue of a single geographic market (excluding Hull), BT acknowledges that it is difficult to draw firm conclusions about the level of market differentiation in different geographic areas. On a forward looking view, the growth of fully-unbundled LLU lines as well as the rollout of NGA may lead to market fragmentation by geography. In those circumstances it may be that Ofcom could take a sub-national approach, along the lines adopted in the Wholesale Broadband Access review. BT does not believe such an approach is warranted today, but this is another area which Ofcom should keep under review.

BT agrees with Ofcom that it is appropriate to include alternative fixed networks in the relevant market before assessing the issue of market power in the call origination market (Ofcom Consultation, paragraph 6.79). This methodology is also consistent with Ofcom's approach in the wholesale broadband access market review.

BT believes that Ofcom understates the case for including indirect constraints from fixed alternate networks in the market definition for call origination. Specifically, the application of the Hypothetical Monopolist Test (HMT) in a vertical chain of production is a somewhat imperfect tool to use to define a product market definition boundary given the arbitrary nature of the price increase and the arbitrary proportion of the flow-through down to the retail level. Where this is a 'modest' amount, then as Ofcom suggests, it becomes even less obvious whether there would be any retail reaction at all (Ofcom Consultation, paragraph 6.50).

However, the strict assumption of the HMT is that, beyond the service in question, all other services (even where not traded) are priced at the competitive level and so it is not obvious that a price rise of the service in question would be absorbed at the retail level. If the focus of investigation is across BT's network (as distinct from all fixed networks) then strong retail price competition would arise from BT raising its prices for the service in question, and switching would indeed occur instead of absorbing the price rise. This would be more the case if the hypothetical price increase was greater than the 5-10% assumed by Ofcom (given that the cost of call origination accounts for no more than 30% of the cost of a retail call). If the HMT increase was for example 20% then the price increase at the retail level will be higher than the 1.5-3% assumed by Ofcom and this price increase would not be absorbed. In turn, this would elicit higher substitution to alternative fixed networks and give greater justification for their inclusion in the relevant market.

BT therefore believes that Ofcom ought to include indirect constraints from fixed alternate networks in the product market definition for call origination, and has not sufficiently justified why it is appropriate to exclude those indirect constraints.

Question 6.2: Do you agree with Ofcom's assessment that BT has SMP in wholesale call origination on fixed narrowband networks in the UK excluding the Hull Area? If not, please explain why.

As noted above and in Annex A, BT believes that mobile calls already provide a substantial constraint on BT's pricing in wholesale call origination, thus reducing any market power that might exist to a greater extent than Ofcom notes. Although BT does currently have market power on the market defined by Ofcom (i.e. excluding mobile calls), it is likely that in the near term this position will continue to erode. Current trends suggest that mobile calls substitution, as well as the constraining influence of IP-based voice services, will directly affect BT's pricing in wholesale call origination, reducing our market power to such an extent that BT would no longer have SMP.

Question 6.3: Do you agree with Ofcom's assessment that KCOM has SMP in wholesale call origination on fixed narrowband networks in the Hull Area? If not, please explain why.

BT has no comments in response to this question.

Question 6.4: Do you agree with Ofcom's analysis of future developments that may affect these assessments? If not, please explain why.

As well as the potential changes in market dynamics brought about by mobile growth, there are significant uncertainties about the implications of new technology. A major change is the anticipated future growth in IP-based voice services which Ofcom has not considered.

Ofcom has offered very limited analysis to underpin the proposed introduction of distinct definitions for VoIP and managed VoB services. We are confused about Ofcom's rationale as the definitions seem to be based on broad statements of relatively subjective product quality and service characteristics which have been used to determine that VoIP calls are outside of the calls market definition and that managed VoB services are included in the definition. We believe that this argument is weak as many VoIP and VoB products offer similar services, have low volume of usage and are considered to be emerging technology.

Although the extent to which these services will act as a constraint on the fixed calls market is not entirely clear yet, BT believes that both VoIP and VoB clearly have the potential to disrupt the market and their impact should be kept under review.

Question 7.1: Do you agree with Ofcom's assessment that there is a separate market for wholesale fixed geographic call termination for each provider of fixed geographic call termination? If not, please explain why.

BT agrees with Ofcom's assessment that there are separate markets for wholesale fixed geographic call termination for each provider of such services. Please see our response to question 6.1 regarding the definition of call termination.

Question 7.2: Do you agree with Ofcom's assessment that each provider of wholesale fixed geographic call termination has SMP? If not, please explain why.

BT agrees with Ofcom's assessment that each provider of wholesale fixed geographic call termination has SMP in their respective market.

Question 7.3: Do you agree with Ofcom's analysis of future developments that may affect these assessments? If not, please explain why.

BT agrees with Ofcom's analysis of future market developments and in particular, agrees with the point which Ofcom alludes to that significant changes in the market may well occur within the proposed four-year review period, which may necessitate an interim review (refer Ofcom Consultation, paragraph 7.38).

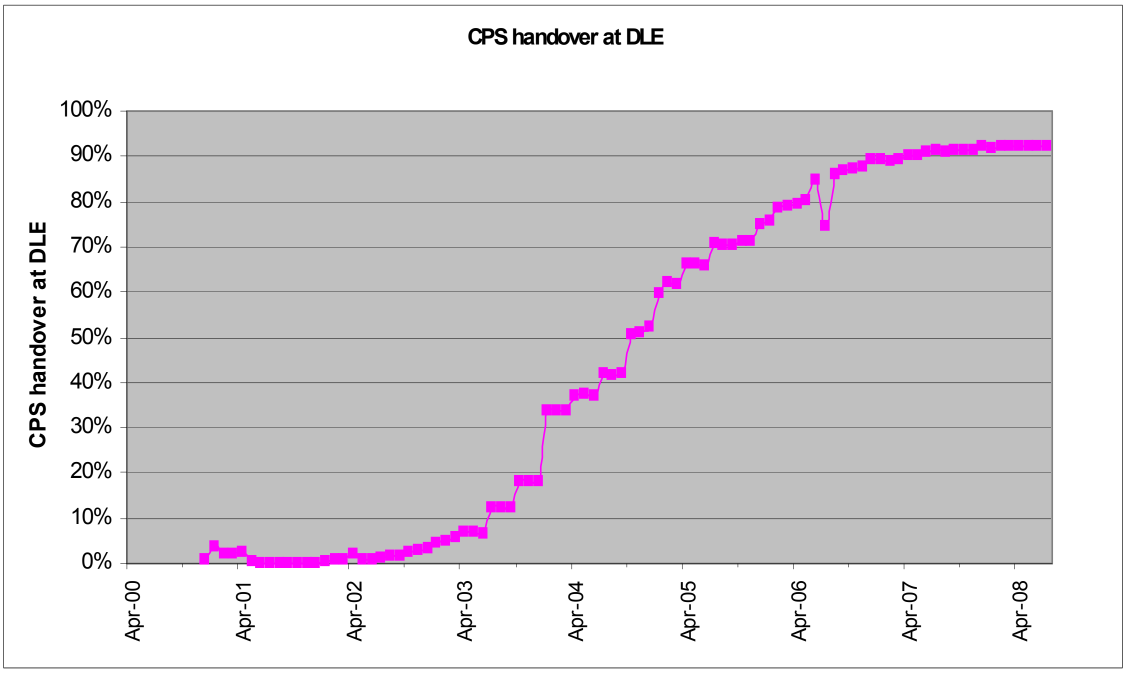
Question 8.1: Do you agree with Ofcom's assessment that there is a single LTC/LTT market in the UK excluding the Hull Area? If not, please explain why.

BT agrees with Ofcom's assessment that there is a single LTC/LTT market. This reflects the reality of CP purchasing decisions and, on a forward-looking basis, is consistent with the consolidation of network elements that is likely to arise.

Question 8.2: Do you agree with Ofcom's assessment that BT does not have SMP in the LTC/LTT market? If not, please explain why.

BT agrees with Ofcom's assessment that BT does not have SMP in the LTC/LTT market. Figure 8.4 of the Ofcom Consultation shows that the proportion of LTC in BT's traffic carried for other CPs has fallen dramatically since the 2003 review. For call origination, the ratio has declined from more than 90% prior to August 2003 to less than 10%. For call origination plus call termination, the ratio has also fallen substantially from nearly 80% in 2003 to less than 30% in 2008 and continues to fall. There is a similarly significant increase in CPS handover at Digital Local Exchanges (DLEs), as shown in the figure below.

Figure 2 CPS handover at the DLE



Source: BT

DLE handover is enabled by the interconnect footprint established by CPs. Three or more CPs interconnect at all but one DLE. Clearly a fully competitive market has developed for LTC which has been sustained through all of the consolidation that has taken place within the industry and the emergence of new players such as Carphone Warehouse.

CPs have built their networks out to 75% of DLEs. Even if the move to NGNs reduces the incentives for further build, this footprint is highly unlikely to shrink. Having made the investment in infrastructure, it is a sunk cost for CPs, on which they will want to maximise revenue. The marginal cost of continuing to use the capacity is likely to be low. This will act as a significant constraint on BT's ability to win back market share in the LTC market.

Question 9.1: Do you agree with Ofcom's assessment that there is a single market for conveyance and transit services at the tandem layer in the UK excluding the Hull Area? If not, please explain why.

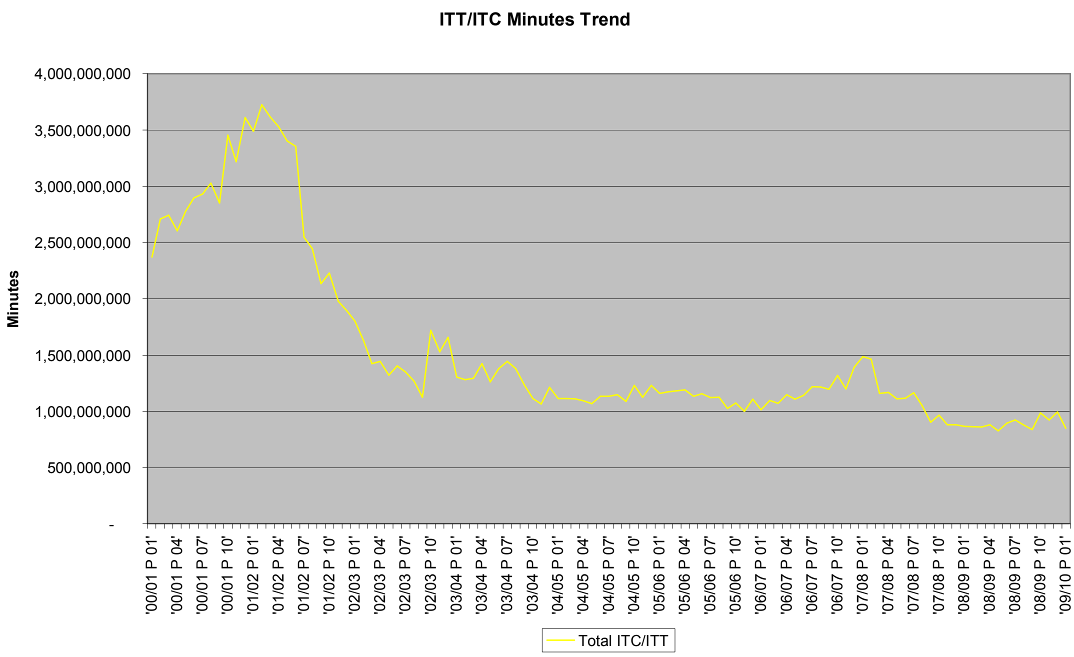
BT agrees there is a single market as this reflects the buying behaviour of wholesale customers. BT's experience is that many CPs simply want their calls delivered and don't wish to purchase fragmented components. Indeed, a number of CPs define 'transit calls' as calls which leave their network regardless of whether they are destined for BT or another third party CP and these originators are often seeking deals for all that traffic at a single rate.

Question 9.2: Do you agree with Ofcom's assessment that BT does not have SMP in the market for conveyance and transit services at the tandem layer? If not, please explain why.

BT agrees with Ofcom's assessment that BT does not have SMP in the market for conveyance and transit services at the tandem layer.

When Ofcom last reviewed the inter-tandem market, it was clear from the dramatic fall in BT volumes that BT no longer had SMP. It can be seen from the attached chart that overall BT volumes have not grown since then, with a slight continuation of the downward trend.

Figure 3 BT Total ITT/ITC Minutes



It is apparent from the traffic volumes we receive and the interconnect footprints of our customers that many of them split their traffic between BT and other alternatives for both Inter Tandem and Single Tandem Transit. Indeed, there are over 50 CPs that have number ranges allocated to them, and which we know to be actively sending and receiving calls over their own networks, yet do not have any interconnect with BT at all.

Also, in addition to the major players who offer third party facilities, there are a number of smaller companies such as Magrathea, Telephony Services Ltd and Switch Services with significant volumes of traffic who appear to offer transit and conveyance services. With the proliferation of direct interconnect between CPs, it is clear that CPs have choices about how they interconnect with BT and each other and that they exercise them. This is clear evidence of the development of competition in the market.

Question 10.1: Do you agree with Ofcom's assessment that BT and KCOM should be required to provide interconnection circuits? If not, please explain why.

It is reasonable that BT be required to provide Interconnect Circuits, but the situation is not so clear cut for Interconnect Extension Circuits (IEC) which extend connectivity from interconnect at a specific location.

The BT view is that IECs are only required to buildings where there is insufficient infrastructure competition. We propose this should be buildings where fewer than three independent CPs have In Span Interconnect (ISI). At the present time this would mean that the supply of IECs to 66 buildings would no longer attract regulation.

The continued availability of IECs to other locations will have the effect of ensuring that the LTC market remains fully competitive.

Question 10.2: Do you agree with Ofcom's assessment that BT's product management, policy and planning (PPP) charge incurred in markets where it has SMP and in the provision of interconnection circuits should be regulated? If not, please explain why.

BT agrees that where PPP is being recovered from SMP markets, PPP should also be regulated. PPP is the only element of call charges that is not a network cost, as it represents the sales, and general and administration costs of providing NCC services. These costs include product management, finance costs such as billing and account management.

It is appropriate that the NCC services should recover a share of these costs based on an allocation to all services. Where BT has SMP, it is appropriate that all elements that contribute to the cost of the service should experience the same regulatory framework. Therefore, where PPP is being recovered from SMP markets, PPP should also be regulated.

Question 11.1: Do you agree that Ofcom should impose a requirement to provide network access on reasonable request on BT and KCOM in the markets and technical area discussed? If not, please explain why.

BT accepts the imposition of the requirement to provide network access on reasonable request in respect of each of the markets and technical area where it has SMP.

The form of network access may differ depending on developments in BT's core network topology and the roll out of fibre instructure, and that the network access should not be expected to be exactly replicable or in the same locations as has historically been the case.

Question 11.2: Do you agree that Ofcom should impose a requirement not to unduly discriminate on BT and KCOM in the markets and technical area discussed? If not, please explain why.

BT accepts the imposition of the requirement not to unduly discriminate in relation to the provision of network access for all markets and technical area where it has SMP except for interconnect circuits. Our arguments against regulation on interconnection circuits have been articulated above in questions 10.1 of this Response.

We notethat the division of BT that provides wholesale exchange line services (Openreach) is already providing its wholesale exchange line products on an EOI basis under the Undertakings in the form of WLR3.

Question 11.3: Do you agree that Ofcom should impose a requirement that BT's charges and KCOM's charges should be subject to a cost orientation obligation in the markets and technical area discussed? If not, please explain why.

BT strongly disagrees with the introduction of a new cost orientation obligation on ISDN30 as an unnecessary and disproportionate remedy. This matter is addressed in response to question 17.2 of this Consultation.

Aside from ISDN30, BT accepts the imposition of a cost orientation obligation in the markets and technical area where it has SMP so long as SMP continues to apply in the relevant markets. Ofcom will need to keep this under review in light of the rapidly changing market dynamics.

Question 11.4: Do you agree with our approach on cost orientation? If not, please explain why, indicating in particular the mechanism you consider to be appropriate.

Ofcom states "Ofcom needs to take a consistent approach to assessing cost orientation …Our view with regard to cost orientation with respect to wholesale fixed narrowband markets will be informed by the responses to the LLCC [Leased Line Charge Control] consultation and decisions taken in that area. We will provide further clarity in our final statement, including any guidance on our approach to enforcement where appropriate" (Ofcom Consultation, paragraph 11.34).

At the time of submitting this Response, the LLCC Statement has not been published. However Ofcom has now published its draft determination to resolve a dispute about PPC charges not being cost oriented, which raises a number of points in relation to the way in which Ofcom would interpret the proposed SMP obligations on wholesale narrowband services. Without clear additional guidance from Ofcom on how cost orientation would apply in practice to wholesale narrowband services, it is difficult for BT to comment meaningfully on Ofcom's proposed approach. When Ofcom does publish clear guidance, BT would expect to have the opportunity at that time to comment on how Ofcom's proposed approach to cost-orientation relates to the wholesale fixed narrowband markets.

Question 11.5: Do you agree that Ofcom should impose a requirement to publish a reference offer on BT and KCOM in the markets and technical area discussed? If not, please explain why.

BT accepts the imposition of the requirement to publish a reference offer in respect of each of the markets and technical area where it has SMP.

BT proposes an improvement to the requirement proposed in Condition AA5.5(b) with regard to the obligation to send a separate copy of the reference offer to Ofcom. All of this information is routinely published on Openreach and BT Wholesale's websites and as such is available to Ofcom. BT proposes that the obligation to notify Ofcom separately with these details is relaxed thereby saving BT and Ofcom an administrative burden.

Question 11.6: Do you agree that Ofcom should impose a requirement to notify charges, terms and conditions on BT and KCOM in the markets and technical area discussed? If not, please explain why.

BT accepts the imposition of a requirement to notify charges, terms and conditions to provide transparency to the market in the markets and technical areas where it has SMP.

Question 11.7: Do you agree that BT and KCOM should provide 28 days notice of price changes following a six month transition period? If not, please explain why.

BT agrees that the notification period should be reduced to 28 days to ensure BT can respond to customer demands in a reasonable period, given that the current 90 day requirement is overly long.

BT disagrees that a six month transition period is warranted.

The existing requirement to notify changes to, prices 90 days in advance of becoming effective is too long and undermines BT's ability to respond promptly to customers' requirements, ultimately to the detriment of end users.

Any proposed price changes requested from our customers, or identified separately to address their needs, require detailed internal assessment to gauge their commercial viability. This assessment, along with other internal governance processes, takes time. When combined with the existing 90 day notification period, this means that any new pricing proposal can typically take 4-5 months from conception to implementation, and potentially longer if systems development is needed . We note that Ofcom was recently supportive of an Openreach request for a notification waiver in respect of WLR Basic connection charges precisely on the grounds that it was good for CPs and consumers and was available to all[12].

The customer need for responsiveness is a given, and has been brought into particular focus in the current economic climate, where it is important for BT and its customers to be able to respond quickly – including through commercial innovation – to the competitive and economic environment.

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[12] http://www.ofcom.org.uk/consult/condocs/waiver_bt/statement/

Customers expect BT to react to their feedback. For example, with a 90 day notification period if BT had introduced a 3 month pricing special offer and then wished to extend that offer, notification of the extension would be required on the first day of the offer period – in other words in advance of any relevant data as to the offer performance, customer feedback and other crucial information – being collected. A reduced notification would alleviate this difficulty.

Many other services have 28 day notification periods. For example, prices for various conveyance and transit services are currently subject to 28 days notice. Also, prices for new Network Access for services regulated under the Wholesale Local Access and Business Connectivity market reviews are subject to 28 day notification periods. On this basis, BT considers arguments that the billing systems or commercial arrangements of other CPs cannot cope with notification periods shorter than 90 days to be unfounded.

Going forward, an even shorter notification period for all changes to charges and terms and conditions may be appropriate. BT understands that CPs have the ability to quickly amend prices in their contracts with their customers, particularly for price decreases, and therefore the need for a 28 day notification period is not apparent.

BT does not support the 6 month transition period for the introduction of the change to this SMP condition. A reduction to the notification period is warranted and would benefit the market straight away, so any delay to implementation is difficult to justify. The publication of the Ofcom Consultation means that CPs will be aware already that there is a potential for a change to the required pricing notification period. Furthermore, as noted above, CPs are able to amend their terms and conditions with their customers with a much shorter notice period than 6 months. Consequently, the proposed change should take effect from the date of the final statement.

Question 11.8: Do you agree that Ofcom should impose a requirement to notify technical information on BT and KCOM in the markets and technical area discussed? If not, please explain why.

BT proposes an improvement to the requirement proposed in Condition AA6.(b).4 with regard to the obligation to send a copy of the notification to Ofcom. All of this information is routinely published on Openreach and BT Wholesale's websites and as such is available to Ofcom. BT proposes that the obligation to notify Ofcom separately with these details is relaxed thereby saving BT and Ofcom an administrative burden.

BT accepts the imposition of the requirement to notify technical information a minimum of 90 days in advance of providing new wholesale services or amending existing technical terms and conditions in respect of each of the markets and technical area where it has SMP.

The proposed Condition AA6(b).1 states that "this obligation for prior notification shall not apply where new or amended charges or terms and conditions are directed or determined by the Office of Communications…". As this Condition relates to technical information, the reference to charges should be removed.

Question 11.9: Do you agree that Ofcom should impose a requirement to provide transparency as to quality of service on BT in the markets and technical area discussed? If not, please explain why.

BT accepts the imposition of the requirement to provide transparency as to the quality of service of BT in the markets and technical areas where BT has SMP, except those relevant to Interconnect Circuits.

BT acts in an appropriate manner and treats all CPs fairly who purchase regulated products, regardless of whether those CPs are downstream BT businesses or not. BT has not favoured its downstream businesses, and the KPIs provided to Ofcom to date bear witness to this view.

Question 11.10: Do you agree with Ofcom that service provision and fault repair remain critical areas for this remedy to monitor?

BT agrees that service provision and fault repair remain critical areas for this remedy to monitor, as they are the most susceptible to undue discrimination between BT's downstream businesses and its external customers. However, any KPIs should not be overly burdensome to BT, as no discrimination has been identified.

Question 11.11: Are the KPIs proposed above sufficient to provide industry with the necessary level of transparency? If not, what additional KPIs should be included?

BT does not agree that Ofcom should mandate KPIs. Rather, the KPIs going forward should be agreed with industry to ensure that they are fit-for-purpose and able to be amended to reflect changing market conditions. For example, measures such as "best in class" or "3 month rolling averages" are unlikely to be appropriate, and an industry agreed approach would enable more meaningful statistics to be developed.

BT already provides a great number of measures to industry and regulators to provide transparency in relation to BT's services. The focus should be on streamlining what already exists rather than presuming that imposing more regulation is appropriate. The question posed is unhelpful in this respect.

Question 11.12: Is the reporting provided by the Openreach online KPI tool sufficient to provide the relevant KPI data?

It is better for KPIs to be agreed and developed between BT and its customers rather than mandated by Ofcom. This approach allows BT to be more responsive to changing customer needs and avoids costs being incurred reporting on items that may lose relevance to customers over time. BT disagrees with the proposed increase in regulation which mandating the KPI Online tool appears to represent, particularly as the developments to that tool would necessitate the reallocation of budget over other prioritised developments such as the product roadmaps which have been agreed with our customers. BT has demonstrated a clear commitment to meeting its customers' KPI and reporting needs, the development of the KPI reporting tool being an example of this, and development to meet those needs will be better facilitated through a more “light touch” regulatory approach.

KPIs provide a transparent demonstration to our customers that an operator is not discriminating between its own operations and that of other CPs in the supply of a service. Under the Undertakings, BT offers WLR services on an EOI basis, through the product known as WLR3. The EOI requirement means that BT will provide WLR3 services to itself and other CPs on the same price, terms and conditions. It also means that services are provided on the same timescales, service levels and by means of the same systems and processes. On this basis, BT would expect that the level of KPIs required for WLR will reduce over the near term.

BT interprets paragraph 6 of the WLR KPIs Annex (which states that “the Dominant Provider shall provide to each third party on a confidential basis via a link on any relevant website operated or controlled by the Dominant Provider, the information required in [relation to the KPIs] for that third party”) as mandating the provision of the KPI Online tool. If this interpretation is correct, BT is strongly opposed to any proposal to increase the regulatory burden associated with KPIs. Openreach launched the tool in December 2008 for the purposes of providing greater information to CPs. This was a voluntary initiative which was positively received by customers and would not benefit from intervention by Ofcom.

BT also notes the following:

- Ofcom has not indicated that the set of Non-Discrimination KPIs which BT currently produces for WLR under Ofcom’s 2004 Direction, and which Ofcom essentially proposes to continue to require, is no longer sufficient, and Ofcom has further not justified why, if these KPIs were no longer sufficient, additional regulation would now be required.[13]

- By the end of the review period, all CPs will obtain WLR3 on an EOI basis and sthe need for KPIs will reduce. o

- Ofcom has not articulated the consumer welfare benefits which will be derived from the proposed increase in regulation.

In light of the above, BT considers that the proposed remedy to mandate KPI Online is not proportionate, nor is it likely to lead to the development of the strongest and most relevant set of KPIs over time. If BT has misinterpreted the paragraph, and the intention is not to mandate the KPI Online tool, BT suggests that the paragraph be reworded, to allow BT to provide the required information by any reasonable method. This would give BT sufficient flexibility to continue to provide the information by appropriate alternative means (including, for example, if KPI Online was temporarily offline for whatever reason).

Question 11.13: Do you agree that Ofcom should impose an obligation on BT to follow a statement of requirements process to handle new requests for network access in the markets and technical area discussed? If not, please explain why.
Question 11.14: Do you agree that the condition should allow changes to be made to the current SOR process if agreed by BT with industry? If not, please explain why.

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[13] Ofcom, Requirement on BT to publish Key Performance Indicators, September 2004.

BT is supportive of the movement away from an Ofcom mandated process towards an industry agreed process, including the ability to make any changes to the process as agreed with industry. In addition, the process must reflect the developments and roadmaps already agreed through industry consultation with customers.

BT also notes that the existing regulatory requirements for the regulated SOR process will continue to apply to services regulated under the Business Connectivity and Wholesale Local Access market reviews. BT encourages Ofcom to align the SMP condition across each of these market reviews to ensure a consistent approach to addressing SORs.

BT accepts the imposition of the requirement relating to a Statement of Requirements (SOR) process to handle new requests for network access in respect of each of the markets and technical area where it has SMP.

BT proposes an improvement to the requirement proposed in Condition AA1.(b).5 with regard to the obligation to send a copy of the notification to Ofcom. All of this information is routinely published on Openreach and BT Wholesale's websites and as such is available to Ofcom. BT proposes that the obligation to notify Ofcom separately with these details is relaxed thereby saving BT and Ofcom an administrative burden.

Question 11.15: Do you agree that Ofcom should impose an obligation on BT and KCOM to comply with obligations governing cost accounting systems and processes as set out by Ofcom in the markets and technical area discussed? If not, please explain why.

BT accepts the imposition of a requirement to comply with the cost accounting systems and processes obligations in respect of each of the markets and technical area where it has SMP, excluding the market for wholesale ISDN30 exchange lines where BT does not consider it proportionate or appropriate that a new cost-orientation obligation should be introduced. The cost accounting obligation for wholesale ISDN30 lines is unnecessary without a cost orientation obligation. Please see the response to questions 17.1 and 17.2 for further detail on this.

Question 11.16: Do you agree that Ofcom should impose an obligation on BT and KCOM to comply with obligations governing accounting separation as set out by Ofcom in the markets and technical area discussed? If not, please explain why.

BT accepts the imposition of a requirement to comply with the obligations governing accounting separation in respect of each of the markets and technical areas where it has SMP.

Question 12.1: Do you agree with the obligations Ofcom proposes to impose on BT in the wholesale fixed geographic call termination markets? If not, please explain why.

BT accepts the imposition of the obligations which Ofcom proposes to impose upon BT in the wholesale fixed geographic call termination markets.

Question 12.2: Do you agree with the obligations Ofcom proposes to impose on KCOM in the wholesale fixed geographic call termination markets? If not, please explain why.

BT has no comments in response to this question.

Question 12.3: Do you agree that BT and KCOM should provide 28 days notice of price changes following a six month transition period? If not, please explain why.

For the reasons outlined in answer to question 11.7 above, BT agrees that notice periods should be reduced. However, a six month transition period is unnecessary and inappropriate.

Question 12.4: Do you agree that all other providers of fixed geographic call termination should be required to provide this on fair and reasonable terms? If not, please explain why.

BT supports the view that all other providers of fixed geographic call termination should be required to provide this on fair and reasonable terms. BT believes that these terms are unlikely to be fair and reasonable unless they are based on BT's Network Costs because they are a reasonable proxy for those of an efficient network. This approach is reflected in Ofcom's proposed technology neutral approach to the Network Charge Control. If BT were required to pay more for call termination on another communication provider's network than it received from that provider for call termination on its own network, it would not be competitively neutral. Regarding NGN charging, BT will make proposals for the incorporation of such charges into any Reciprocity Agreements once the launch date and pricing for NGN CC have been announced. It would be counterproductive to anticipate this at a time when BT is still considering a wide range of options for NGN rollout.

BT hosted an Industry Forum on CP Geographic Call Termination Charges on 2 June 2009. The BT view is that we should continue with a formulaic approach and that where there is no charge determined under the Network Charge Control, as Ofcom has proposed will be the case for Double Tandem and Single Tandem, the rates used for calculating both Rate 'A' and Rate 'B' will reflect the Double Tandem Short and Single Tandem rates CPs pay. The symmetry of this proposal means that if BT increases ST and DT rates, the rates BT pay to CPs go up, and correspondingly if we reduce the rates, the rates BT pay go down. Alternative views were expressed by some CPs and further industry meetings and bilateral discussions will be held to agree a way forward.

Question 12.5: Do you agree that it would be disproportionate to require all other providers of fixed geographic call termination to notify charges? If not, please explain why.

The requirement to notify is not, in itself, onerous. There is a significant burden for BT in having to publish in advance, but a simple requirement to publish prices, for example on a website, would aid transparency without imposing any significant burden. We therefore consider that some requirement on other providers of fixed geographic call termination to notify charges would be appropriate and would not be disproportionate.

Question 13.1: Do you agree that Ofcom should impose an obligation on BT to provide WLR products in the wholesale analogue, ISDN2 and ISDN30 exchange lines markets? If not, please explain why.

Generally, BT accepts the imposition of an obligation to supply WLR products in the wholesale analogue, ISDN2 and ISDN30 exchanges lines markets. However, for the reasons outlined below, BT requires two fundamental changes to this obligation:

- it must be explicitly dis-applied from areas where NGA exists; and
- it must be amended to include the words "*Except in so far as Ofcom may otherwise consent in writing*".

Firstly, Ofcom has already accepted that it may be impractical or unnecessary to replicate existing regulation in the NGA environment — any blanket application of WLR regulation would appear inconsistent with Ofcom's own previous statements on this issue. In its "Next Generation New Build: Delivering Super-fast Broadband in New Build Housing Developments" statement (23 September 2008), Ofcom stated that in relation to WLR, existing regulatory obligations will continue to apply *if relevant* to NGA products until the new wholesale narrowband market review is completed. Ofcom also noted in its statement "Delivering Super-fast Broadband in the UK" (March 2009), that "we should not seek simply to roll-over existing regulation to new situations such as super-fast broadband investment. We must apply regulation in ways that are relevant and proportionate to the prevailing and future circumstances that we face".[14]

An absolute obligation on BT to supply these products is not flexible enough to take account of new developments, such as NGA. Applying existing regulation to NGA may stymie investment and innovation. On this basis, BT seeks absolute clarity from Ofcom that the remedies proposed in the Ofcom Consultation are not intended to be applied in an NGA environment.

Secondly, although BT has SMP in these markets, it should still be able to operate as a commercial entity. For example, ISDN30 is a mature product with a limited lifespan, and the economic conditions in the market may lead towards replacement or withdrawal. Once it reaches the end of its lifespan (for example because other solutions have proved to be equally acceptable to CPs), BT should have the freedom to withdraw the product, as any other commercial entity would, rather than being

[14] Ofcom, Delivering Super-fast Broadband in the UK, 3 March 2009, paragraph 1.10.

required to continue to provide an obsolete product that is no longer consumed to any material extent by CPs.

In light of the above, BT requires that:

- at a minimum, this condition must be explicitly dis-applied from areas where NGA exists; and
- The condition should be amended to include the words "*Except in so far as Ofcom may otherwise consent in writing*". This will give BT more flexibility to withdraw a product with Ofcom's consent or to provide a replacement product that allows CPs to compete with BT's downstream businesses on an equivalent basis.

BT notes that condition AA10.2 appears superfluous, given the existence of AA3 which already places a cost-orientation obligation on WLR services (without prejudice to our comments on the application of that remedy to ISDN30).

Question 13.2: Do you agree that the maturity of the WLR products plus BT's obligations under its Undertakings means that Ofcom does not need to impose an obligation on BT to comply with a functional specification for ISDN2 and ISDN30 WLR products? If not, please explain why.

BT agrees that the maturity of the WLR products, in particular the ISDN2 and ISDN30 products, means that Ofcom does not need to impose a requirement to comply with a functional specification.

The current ISDN2 and ISDN30 products on WLR2 comply with existing functional specifications, while Ofcom agreed in its statement dated 15 December 2005 that the analogue product is fit-for-purpose. BT has agreed with industry a list of requirements for future developments of the product, in particular for WLR3, along with a methodology for any further product developments required in future, and as such an Ofcom specified list is no longer required. The industry agreed features are sufficient to ensure consistency and quality of the supplied products. Given the advanced state of maturity for the analogue and ISDN products, the existing delivery specification can be reasonably expected to endure as fit for purpose for the lifetime of the products.

Question 13.3: Is it appropriate for the pricing of value-added features to be subject to a basis of charges obligation? Do you think Openreach would have the correct incentives to develop new features in a regime where these may become subject to basis of charges obligations?

BT strongly agrees with the approach suggested by Ofcom in paragraph 13.23 of the Consultation, namely that cost-orientation should only apply to "all the elements required to provide the basic level of service required by consumers", i.e. rental charges; connection, rearrangement and termination charges; and network features that comprise the basic service, as CPs have no choice but to purchase these elements. This should be formally stated in the cost-orientation obligation, together with a clear statement of exactly what network features and service levels comprise the basic service and that anything outside this feature set is not subject to the cost-orientation obligation. This would provide BT with the clarity and certainty it needs to ensure it can continue to invest and develop the WLR product, to the benefit of CPs, end-users and competition in the downstream retail markets. BT looks forward to receiving this clarity in the final statement.

BT considers that it would not be appropriate for any basis of charges obligation, including cost-orientation, to be extended to include value-added features and services (i.e. those features and services not required to provide the basic WLR service).

- There is no obvious basis for proposing the imposition of a charge obligation.
- It is disproportionate.
- It may have the consequences of reduced efficiency, reduced competition in the downstream market, reduced end-user choice and reduced incentives for Openreach to innovate and develop new services and features in response to customer demand.
- The Undertakings (section 5.11) specifically reference the treatment of unregulated services provided by Openreach.
- It is inconsistent with Ofcom's position in relation to the development of new NGA products.

The general principles underpinning the EU regulatory framework, through the Framework and Access Directives, are that national regulatory authorities should regulate upstream and regulate only when strictly necessary. Any remedy imposed as a consequence of a finding of SMP in a defined market must be related to the problem identified and be proportionate. At a high level, the application of cost-orientation to value-added services and features would not fit with this general approach as it is neither related to any identified problem nor appropriate (as will be explained more fully below).

BT also does not agree that the imposition of a cost-orientation requirement on value-added services meets the conditions necessary for the application of an SMP condition under the Communications Act. In particular, an SMP condition requiring cost-orientation cannot be imposed except where it appears to Ofcom that there is a relevant risk of adverse effects arising from price distortion[15] and the condition is appropriate for the purposes of promoting efficiency, promoting sustainable competition and conferring the greatest possible benefits on end-users. These requirements are not met for the following reasons:

- There is not a risk of adverse effects arising from excessive pricing (which cost-orientation aims to prevent) as BT is not "able to set prices freely" for any value-added features and services, as suggested in paragraph 13.25 of the Ofcom Consultation. Not only is BT is mindful of the constraints of general competition law, but our customers would stop purchasing these value-added services if they considered that the price did not reflect appropriate commercial value for them.

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[15] Defined in section 88(3) of the Communications Act as excessively high prices or the imposition of a price squeeze.

- It does not promote efficiency as it does not provide Openreach with any incentive to improve its efficiency, if all of its products and services are subject to cost-orientation. In some cases, it could even lead to increased inefficiency. For example, if Openreach considered launching a 5-hour repair product, it would wish to price this product on a commercial basis (i.e. with a higher return than a cost-orientated price). This is not to make a high return but for reasons of practicality; if the service were priced at a strictly cost-orientated (i.e. lower) price, it would be more attractive to CPs, leading to a significantly increased uptake for this service. Openreach would then require a much larger engineering force to deal with the increased demand for this product, leading in turn to much higher and possibly inefficiently-incurred costs. In reality, Openreach would not launch such a product if it were required to be cost-orientated.

- It does not promote sustainable competition as the practical consequence of requiring value-added services and features to be cost-orientated is that it may stifle Openreach's incentives to innovate and invest in new additional services and features on top of the regulated product, even where there is a clear demand for such non-regulated services. This is particularly important in today's economic climate, with the declining take-up of wholesale analogue exchange lines, where BT needs to innovate to stimulate demand.

- It does not confer the greatest possible benefits on the end-users of public electronic communications services. In fact, it would be likely to lead to a detriment to end-users through reduced differentiation in terms of services available, as there would be less choice of value-added services and features.

For the reasons set out above, BT does not consider it appropriate that these value-added products fall within the regulated market, and so be subject to cost-orientation. Even if these value-add products were to be considered to be within the regulated market, it is not necessary for them to be subject to any cost-orientation obligation as the application *ex post* of competition law is sufficient to address pricing issues.

In providing value-added services, Openreach is often responding to customer demand for features over and above the basic WLR product. Charges for these services are commercially set between Openreach and CPs, balancing the customer's willingness to pay – and therefore their view of the economic value of the service – with Openreach's incentives to supply at different price points. There is no market failure which requires Ofcom to intervene in this process.

The provision of non-regulated value-added services is consistent with the terms of the Undertakings agreed between BT and Ofcom. The Undertakings stipulate that Openreach can supply non-regulated products, and that when it receives a request from a CP for such a product, Openreach is "free to treat those requests as would any other commercial organisation and to accept or reject them on the basis of, among other things: (a) fit with the assets, skills and resources and terms of reference of Openreach; (b) **commercial attractiveness to Openreach**; and (c) opportunity cost to Openreach" (section 5.11, emphasis added).

Furthermore, Ofcom's recent announcements in relation to NGA appear to encourage pricing freedom to provide the incentives to develop new products. The extension of regulation to all WLR features would be considered contrary to that intention.

Question 14.1: Do you agree that Ofcom should impose an obligation on BT and KCOM to provide CPS? If not, please explain why.

The Carrier Pre Select (CPS) obligation is a wholesale fixed narrowband remedy that applies only to BT at the retail level. We believe that it is no longer appropriate to have any downstream regulation that only applies to BT as it has a disproportionate impact on ability to compete on a level playing field. Any such regulation, especially in the context of the Ofcom position in the retail market review, should be taken in the light of the highly competitive nature of these markets.

Ofcom's analysis of the retail level calls and lines markets shows that the market is competitive and it is our assertion that these retail markets could still be competitive if the CPS remedy was removed.

The multiple layers of competition, from major brands, through WLR, LLU and cable, combined with the ubiquity of mobile telephony, indicates that the retail markets are very competitive indeed. CPS services are just another calls product, often combined with WLR, and should be available on commercial terms rather than mandated by regulation. It is inappropriate in a competitive market to have regulation that applies to only one competitor.

If, however, Ofcom considers that the CPS obligation should continue to apply, BT believes that this condition should be kept under review given its relevance as networks evolve. For example, the demand profile for CPS on BT's 21CN network is uncertain.

Furthermore BT does not believe that the CPS obligation should be replicated in NGA or in new build areas as this would be a disproportionate and backward-looking regulatory response. The Voice Enabled Port on the GEA product - a type of Active Line Access (ALA) product - that Openreach is already deploying meets the underlying objectives of carrier pre-selection as has been discussed with Ofcom to date. It also offers significant additional advantages. Also, market drivers indicate that CPS may be overtaken by other developments. In its Statement on NGA new build Ofcom offered support for this view, stating "We would not expect wholesale or retail services and products existing over copper to be replicated as a matter of course, as it may be uneconomic to replicate certain services or products**…..**We believe that both ALA-based products and duct access may be used to provide functionality to fulfil any relevant existing regulatory obligations. How exactly this will be done in practice is up to the individual operator [16].

Again, if Ofcom decide to maintain the CPS obligation, BT would request that it should no longer be required to provide new supply of the FeatureNet variant of Centrex installations.

Since 26 November 2001, BT has been obliged to provide CPS functionality on Centrex installations . This includes FeatureLine (including FeatureLine Compact), Embark and FeatureNet 500. Following requests from a small number of customers, the implementation of this functionality on FeatureNet 500 was completed on 5 September 2005. There were three triallists for the service.

16 Ofcom, " Next Generation New Build: Delivering super-fast broadband in new build housing developments" 23 September 2008.

The volume of orders placed has been very low. Between September 2005 and September 2007 just 262 orders were placed of which only 13 were activated, the remainder being timed out or rejected. Since September 2007 those CPSOs that did undertake Service Preparation for FeatureNet have subsequently requested BT to switch the capability off for new orders. In fact all CPSOs have asked for FeatureNet orders to be rejected automatically by the CPS gateway. This prevents them being processed if they are placed in error.

Given the above, we believe that there is no longer demand for this product, and the obligation on BT to provide new supply should be revoked. BT is currently incurring significant development costs as a result of Undertakings requirements for system separation, and the need for a separate FeatureNet CPS variant is an additional burden that is not justified by customer demand. The previous orders for FeatureNet were placed using systems that, due to system separation obligations, can no longer be accessed by the CPS order team.

Question 14.2: Do you agree that Ofcom does not need to impose an obligation on BT and KCOM to comply with a functional specification for CPS? If not, please explain why.

BT supports Ofcom's proposal to remove the obligation for it to comply with a functional specification. However, there would need to be an alternative in the form of a product design/description document. BT can produce this, but any changes would still need to be agreed at industry level. Any CPs looking to BT to "enhance" the current product set would need to submit a Statement of Requirements into BT Wholesale. This may be an issue where a CP wants BT to develop something that does not fit in with other CPS CPs' ideas. However, we expect that this could probably be resolved at an industry level at the CPS Commercial meetings.

Question 14.3: Do you agree that Ofcom should impose an obligation on BT and KCOM to provide carrier selection (Indirect Access)? If not, please explain why.

BT accepts the imposition of a requirement to provide carrier selection (Indirect Access). Indirect Access is recognised as a "niche" product giving the end user the option of remaining with BT but applying the Indirect Access code on a call by call basis to route calls via other CPs.

Question 15.1: Do you agree that Ofcom should impose an obligation on BT in relation to NTS call origination? If not, please explain why.

Ofcom has proposed that the market for fixed narrowband retail call services is effectively contestable and therefore it is unclear why a wholesale remedy should apply to a subset of this calls market, i.e. NTS calls. This brings into question the appropriateness of the NTS obligation and we ask Ofcom to reconsider its decision to impose this wholesale remedy on BT.

NTS is essentially a platform (that may span one or several CPs' networks) the purpose of which is to enable callers of NTS numbers to obtain services from those organisations which have been assigned the use of an NTS number (the service provider).

Ofcom through the NTS call origination condition has imposed on BT alone an obligation to 'retail' calls on behalf of the service provider. The effect of the NTS call origination condition is to restrict the amount that BT may retain from its retail charge to only (a) a charge for the Call Origination Service used to originate the NTS Call; (b) a charge for the NTS Retail Uplift; and (c) a charge for bad debt relating to the retailing by the BT of Premium Rate Services calls.

As Ofcom proposes that no CP has SMP in the retail market for fixed line calls, the NTS call origination condition is inappropriate. It places BT at a material and unjustified disadvantage to its competitors in the retail market for fixed line calls, a market which Ofcom, at least in the Consultation, considers effectively contestable, but where BT alone is not free to set its retail charges and retain the revenue from NTS calls after payment of an appropriate termination charge.

In addition, the National Telephone Numbering Plan (the NTNP) restricts BT alone in its ability to set the retail charge for some NTS calls. For example, BT is allowed to charge only 5p per minute or per call for a 0844 call but other retailers are allowed to charge higher prices, and invariably do, some significantly more. This again places BT at a material and unjustified disadvantage to its competitors on the fixed line calls market.

It is not objectively justifiable, and is discriminatory and disproportionate, to restrict BT's ability to compete effectively on a market which is effectively contestable and for these reasons Ofcom's proposal to continue the NTS call origination condition, in its current form, is misconceived. BT would urge Ofcom to remove the NTS call origination condition in its entirety and (to the extent that it is necessary) simply extend the end-to-end connectivity obligation to cover all wholesale narrowband call termination services.

Question 16.1: Do you agree that Ofcom should impose charge controls on BT in wholesale analogue exchange lines, wholesale call origination, wholesale fixed geographic call termination, interconnection circuits, PPP and the NTS retail uplift charge? If not, please explain why.

This question is redundant given the intention of Ofcom to impose charges controls through the Network Charge Control Consultation and the upcoming WLR Charge Control Consultation. BT will comment on the appropriateness of the proposed charge controls in response to the relevant consultations.

Question 16.2: Do you agree that it would be disproportionate to impose charge controls on KCOM? If not, please explain why.

BT has no comments in response to this question.

Question 17.1: Do you agree that, based on BT's reported returns, Ofcom should impose additional obligations on BT in relation to wholesale ISDN30 exchange lines? If not, please explain why.

BT does not agree that Ofcom should impose additional obligations on BT in relation to wholesale ISDN30 exchange line services. Ofcom has failed to sufficiently demonstrate that additional obligations are necessary, appropriate and proportionate.

Existing SMP regulations were set as part of Oftel's previous market review in 2003. Oftel found ISDN30 was subject to strong supply side competition from Ethernet services and especially 2mbit circuits. It also noted potential substitution with ISDN2 and in particular the possibility that multiple ISDN2 lines could substitute for a low utilisation ISDN30. These factors continue to exist and therefore there is no reason to change the regulatory treatment of this product.

Additional obligations for ISDN30 are not warranted; the imposition of such would create unhelpful shocks into the market. Ofcom's basic premise for this section appears to be that there is something inherently wrong with the levels of Return on Capital Employed (ROCE) associated with ISDN30. BT disagrees; ISDN30 is a mature product entering the end stages of its lifecycle, and as such ROCE has been rising as the capital associated with the product has declined.

Introduction of further obligations could artificially extend the lifecycle for ISDN30, thereby undermining alternative technologies that are competing with it, along with requiring BT to incur additional cost in meeting unanticipated demand over an extended period.

ISDN30 volumes are now falling and, should prices remain constant, are expected to continue to fall at an increasing rate over the period of the market review. Fundamentally the decline in channels is driven by the current availability of alternative technologies such as IP based competition, and this competition is set to significantly increase over the period of the review. This decline in volumes is also further accelerated by the prevailing economic conditions (i.e. business failure and cost rationalisation).

A number of large vendors and CPs are already active in this market[17] offering IP PABX, SIP trunking, along with an increasing range of access technologies to compete directly with ISDN30. Although the competitive position is typically around price, QOS for many of the alternatives (a major consideration in end user buying criteria) is also at high levels and getting stronger, while an increasing number of CPs and end users are coming to see IP based solutions as economic and functional alternatives to ISDN30. The presence and likely impact of this competition does not appear to have been recognised in Ofcom's assessment of the market definition and market power and should be taken into account. BT's current demand forecasts for wholesale ISDN30 are displayed in Figure 4 below and has been informed by feedback from its CP customers.

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17 For example, Cisco, Cable & Wireless, Global Crossing and Verizon Business.

Figure 4 BT's forecasts of demand for Wholesale ISDN30 services

[CONFIDENTIAL]

Openreach believes that the decline in ISDN30 will be faster than anticipated and that its forecasts are conservative.

Consistent with the product moving to the end stage of its lifecycle, BT has slowed its investment in the product as reflected in the declining Mean Capital Employed. In addition, the underlying assets have been depreciated.

The principle that ROCE is not the appropriate basis for deepening regulation is further supported in that:

1. For Historic Cost Accounting, it is a recognised principle that if a network is neither growing nor declining, and the owner continues to replace the capital (such that capital expenditure equals depreciation and there is no new growth capital spending), then it would be expected, on average, that the assets are halfway through their lifecycle. That is, the Net Book Value to Gross Book Value ratio would be approximately 50:50.

2. This principle can be read across to Current Cost Accounting. If we assume that there is no change in the price of an asset such that year-on-year the value of the asset is not changing (only the asset lives move) then Net Replacement Cost (NRC) to Gross Replacement Cost (GRC) ratio would also be approximately 50:50.

3. For ISDN30, the BT Regulatory Accounts in 2004/05 included a NRC/GRC ratio of 40%. Since then, however, the ratio has been in steady decline and by 2007/08 ratio was 32%.

4. This decline is consistent with BT slowing its capital investment in a product which it anticipates will eventually be withdrawn. This effect is one of the major reasons behind the £180m decline in capital employed for the product since 2004/05, which represents a 40% overall decrease in capital employed.

5. BT does not wish to invest capital in an ageing product with a limited lifespan, as this could be regarded as inefficient investment. The imposition of deeper regulation would introduce significant change into the market, which would artificially stimulated higher ISDN30 demand over a longer period. To fulfil a skewed demand profile would require further unplanned and significant capital investment in, for example, line cards for ISDN30 which are already in short and decreasing supply from a decreasing number of vendors.

BT considers that an appropriate approach is to reinstate capital employed, similar to the approach adopted by Ofcom in the Network Charge Control Consultation as the 'hypothetical ongoing network' (which involves deletion of 21CN costs, but resetting the costs of the continuing technology to reflect a sustainable economic level). We understand that Ofcom has adopted similar approaches elsewhere.

Question 17.2: Would a cost orientation obligation be sufficient to address the concerns raised by Ofcom in relation to BT's returns?

As set out in question 17.1 of this Response, BT disagrees that additional obligations are warranted.

In proposing additional regulation, Ofcom indicates that that its has based its decision on an analysis of market share, BT's wholesale returns and the weak constraint provided by alternative supply options. Ofcom also notes that without the additional regulation, BT has set prices above those it would expect in a competitive market, and these costs are likely to have been passed on to retail consumers (Ofcom Consultation, paragraph A5.24). BT does not accept this conclusion and believes Ofcom has failed to substantiate its assertions.

Firstly, as outlined in question 5.2 of this Response, Ofcom overstates BT's market share in the relevant wholesale ISDN30 market.

Secondly, as outlined above in question 17.1, BT believes that capital-related returns are not the appropriate measure which Ofcom should be considering given the stage at which ISDN30 is in its product lifecycle. A cost orientation obligation would be an inappropriate and disproportionate measure to meet the concerns raised by Ofcom in relation to BT's returns for ISDN30.

Finally, Ofcom has not recognised the ability of existing and growing competitive alternatives to ISDN30 to provide effective and appropriate constraints over the period under consideration. End user consumers of ISDN30 already benefit from investment and innovation in alternative technologies, and importantly from the choices this gives them. IP-based alternatives continue to gain traction in the market, and the take-up is expected to increase significantly over the near future. Analysts generally agree that the market for SIP Trunking, for example, will grow rapidly over the next 3 years, with Illume Consulting estimating that there will be over 570,000 channels by Q4 2011[18], and IDC forecasting an even greater figure of over 760,000 channels (shown in question 5.1). These forecasts could prove conservative with an increasing number of equipment vendors and communication providers developing their capabilities to address this market area.

Ofcom has released guidelines entitled "Better Policy Making: Ofcom's approach to Impact Assessment (July 2005)". The Impact Assessment must consider different options for regulation, including alternatives to formal regulation, and then using objective criteria select the best option. It notes that Ofcom will be guided by the principle of proportionality in carrying out an Impact Assessment and that it will select the option most closely aligned with its duties.

Ofcom estimates the impact of a cost orientation obligation to be £80m a year on BT. BT considers that Ofcom needs to correctly evaluate the likely benefits and detriments arising from the implementation of this obligation, via an appropriate impact assessment in accordance with Section 7 of the Communications Act 2003.

BT acknowledges that it has not changed its nominal price for ISDN30 rentals since 2003. However customers have received price decreases in real terms since that time, which are likely to have been passed on to retail consumers. It is also relevant to consider the perceived value that end users of fixed line services believe that they receive. Ofcom's survey of large business customers in October 2006 showed dissatisfaction with value for money for fixed line services at only 12% (lower than the

[18] Illume Consulting, "UK SIP Trunking Report 2009".

corresponding responses for mobile and advanced data services), with 34% of respondents also indicating that choice of fixed line supplier had improved (set against 11% who believed the opposite). In the same report large business also indicated the increasing importance, and use of IP / VOIP.[19]

Should BT be required to significantly lower the price of ISDN30, as suggested by Ofcom's £80m revenue reduction, then the level of investment and innovation in alternative technologies, such as IP-based solutions, is likely to be significantly impacted, along with the competitive prospects of existing suppliers and prospective new entrants into the market. As such, the emergence of alternative technologies and technological advancement will be hampered and further investment may be stopped. BT does not consider this to be the best outcome for consumers and does not believe that this is the consistent with the objectives of Ofcom, and again would suggest that Ofcom allow the developing competitive landscape to mature (without undue regulatory intervention) as the best means to address the concerns raised.

Question 17.3: Would a charge control be a proportionate response to the concerns raised by Ofcom in relation to BT's returns?

As per answers to questions 17.1 and 17.2, BT does not believe that any additional pricing regulation should be applied to ISDN30.

A charge control is typically a more restrictive regulatory remedy than cost orientation, and on that basis, if Ofcom was still minded to impose a remedy, cost orientation would normally be a preferable and more proportionate remedy to a charge control. However, in the absence of clear guidance from Ofcom as to what cost orientation would mean, it is difficult for BT to meaningfully comment, other than to reiterate that we do not believe it is appropriate, proportionate or necessary to impose a pricing remedy on wholesale ISDN30 exchange lines, nor do we believe that Ofcom has justified why such a remedy would be appropriate, proportionate and necessary.

Question 18.1: Do you agree that Ofcom should revoke the obligation on BT to provide FRIACO? If not, please explain why.

BT strongly agrees that Ofcom should revoke this obligation. BT is concerned that the obligation has remained in place long after the need for it has disappeared. In fact BT does not have any external FRIACO circuits left. The continued regulation of this product well beyond the point that was justified by market need is an example of the dangers of maintaining regulation on a precautionary basis rather than taking a forward-looking view.

Question 18.2: Do you agree that Ofcom should revoke the direction requiring BT to provide local-tandem transit and inter-tandem transit for Indirect Access traffic? If not, please explain why.

[19] http://www.ofcom.org.uk/reserach/telecoms/reports/lbpanel/

BT agrees that Ofcom should revoke the direction requiring BT to provide local-tandem transit and inter-tandem transit for Indirect Access traffic.

Question 18.3: Do you agree that Ofcom should revoke the direction relating to BT's credit vetting supplemental agreement? If not, please explain

BT supports Ofcom's proposal to revoke the direction relating to BT's credit vetting supplemental agreement.

Annex A

Fixed-Mobile Substitution: BT's View

Introduction

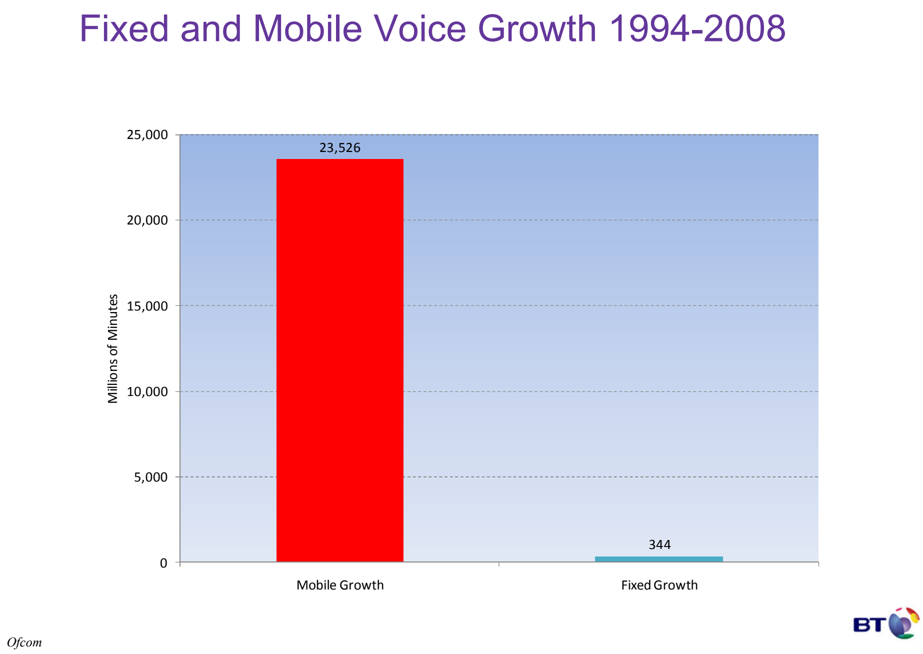
1. There are many issues that make isolating fixed-mobile substitution (FMS) difficult. These include that the economic (SSNIP) test is valid only if prices are at their competitive levels – which, because of large differences in termination rates, has historically not been the case. Complementarities in fixed access, with fixed lines increasingly being used for DSL broadband access as well as for basic voice access, mean call volume responses to price changes may be muted. Bundling of access and calls, of inclusive minutes, and of broadband with other services makes it increasingly difficult to identify the relevant price for analysis. There is growing 'leakage' of voice calls to other platforms, such as e-mail, SMS, social networking sites, instant messaging, and VoIP. And there is a high degree of market segmentation in mobile, which means general analysis is increasingly less likely to be relevant.
2. Within this context, Ofcom's view – based, among other things, on a single mobile price (Figure 4.7, Retail Market Review) - is that substitution between fixed calls and access and mobile calls and access is not yet sufficient for there to be a single voice calls market and a single voice access market. If retail markets are deregulated, the implications of this conclusion will be felt mainly at the wholesale level, for call origination, where BT continues to be heavily regulated, with obligations like price publication, no undue discrimination, and mandated access. With a single voice market, BT would be a minority player, without SMP, so these obligations would disappear.
3. BT believes Ofcom's view of separate fixed and mobile voice markets is open to question, principally because it is based on an analysis of mobile calls and access at too aggregative a level, and it ignores a range of other compelling evidence. In practice, there is clear market segmentation in mobile use, with contract and pre-pay customers, business and residential customers, different contract price points, different inclusive call allowances, and different actual ppm mobile contract rates varying subject to use made of inclusive minutes.
4. We believe that, particularly for calls, there is already sufficient evidence of significant substitution to show a trend towards a single voice calls market. Further, it is arguable that in the next few years, mobile broadband will increasingly replace DSL broadband and potentially lead to a single voice access market.
5. This paper sets out the evidence supporting our view, key to which is the disappearance of some 15bn fixed voice minutes per quarter, the related decline of geographic calls as the principal call type, the increasing preference for using mobiles, and the disappearance of the mobile price premium for contract users.

Evidence of Fixed-Mobile Substitution in Calls

6. In paragraph 4.66 of the retail market review, Ofcom states that "Mobile call minutes increased by 47 billion minutes between 2002 and 2007, while fixed volumes declined by only 17 billion minutes. This suggests that while there is likely to be have been some substitution from fixed to mobile calls, most of the growth in mobile call volumes has been new calls."

7. Chart A1 shows that fixed minutes account for less than 1% of the growth in voice minutes since 1994. This is despite the UK economy growing by almost 50% (in nominal terms) over the same period. It is difficult to believe that fixed call volume growth has *not* been held back over this period by substitution to mobiles.

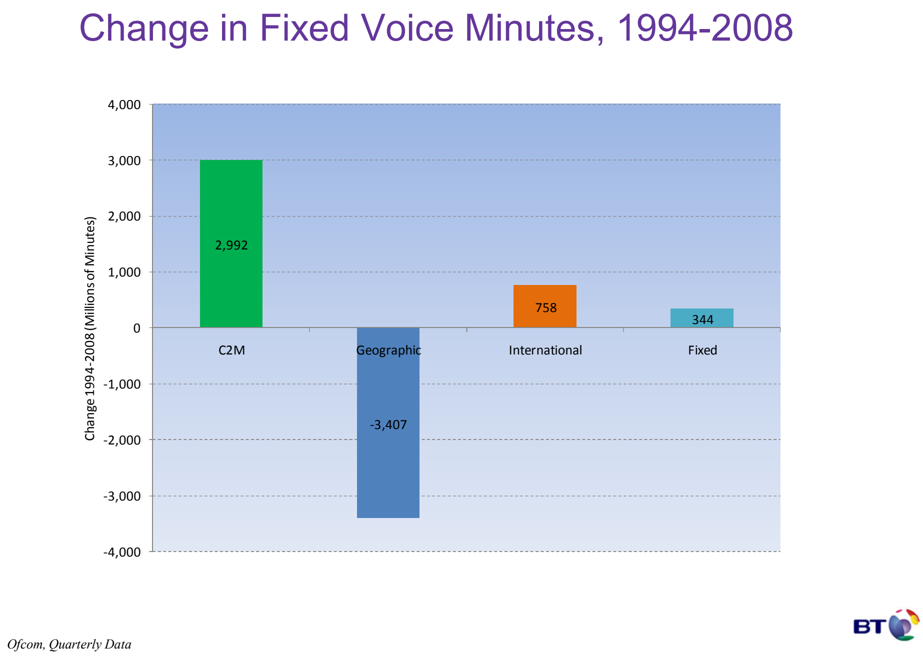
Chart A1



Loss of Geographic Minutes

8. Chart A2 provides strong evidence that fixed calls have been displaced to mobiles. Whilst overall fixed voice call volumes increased by 344m minutes per quarter over the 14 year period 1994-2008, geographic call minutes fell by 3.4bn minutes per quarter, or 13%. These lost minutes – the key fixed minutes in FMS - demand an explanation that Ofcom's analysis fails to offer.

   Chart A2



Peak-to-Trough Analysis

9. The position is even more stark and clear if we consider the decline of fixed call minutes from their peak values. This is set out in Table A1 below. Geographic call minutes peaked 11 years ago in 1998, and have declined by circa 1/3rd since then to 22.6bn minutes per quarter in 2008. This is over half the 23.5bn gain in mobile minutes per quarter. Despite this, Ofcom claims most mobile minutes are new minutes.

Table A1

Fixed minutes have been in decline for at least 10 years…with 12.6bn geographic minutes lost per quarter

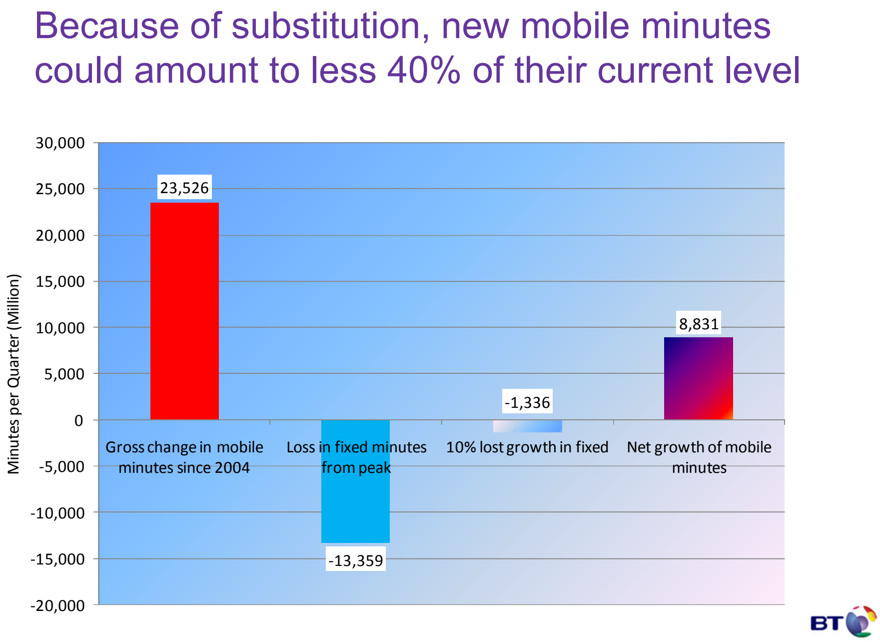
	Date of Peak	Peak Value	Date of Trough	Trough Value	Change	Peak to 2008 Q3
Geographic	1998 Q4	35,198	2008 Q3	22,621	-12,576	-12,576
International	2001 Q1	1,783	1994 Q2	854	+929	-170
Calls to mobiles	2005 Q2	3,957	1994 Q2	353	+3,604	-611
Fixed minutes	2001 Q1	38,932	1994 Q2	27,236	-11,696	-13,358
Mobile minutes	2008 Q2	24,215	1994 Q2	678	+23,537	

Ofcom, Quarterly Data

BT

10. Combining the peak to trough loss in geographic minutes with the loss of Calls To Mobile (C2M) and international minutes from peak to 2008 gives a loss of 13.36bn fixed minutes per quarter. Without mobile, fixed minutes would have grown. Applying a conservative 10% growth figure (the economy grew by 50% over 1994-2008) to lost fixed minutes results in the total loss in fixed minutes rising to just under 15bn per quarter and the change in mobile minutes netting off at under 9bn per quarter (Chart A3). A loss of 15bn minutes per quarter from fixed networks – circa 40% of the peak volume in 2001 – appears to us sufficient to constrain any hypothetical monopolist.

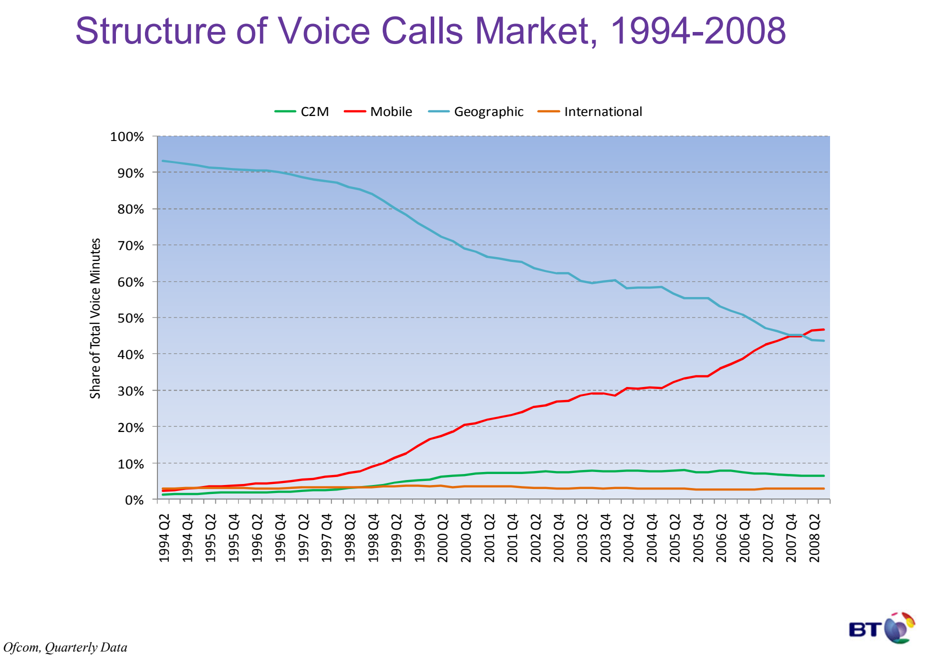
Chart A3



Crossover Analysis

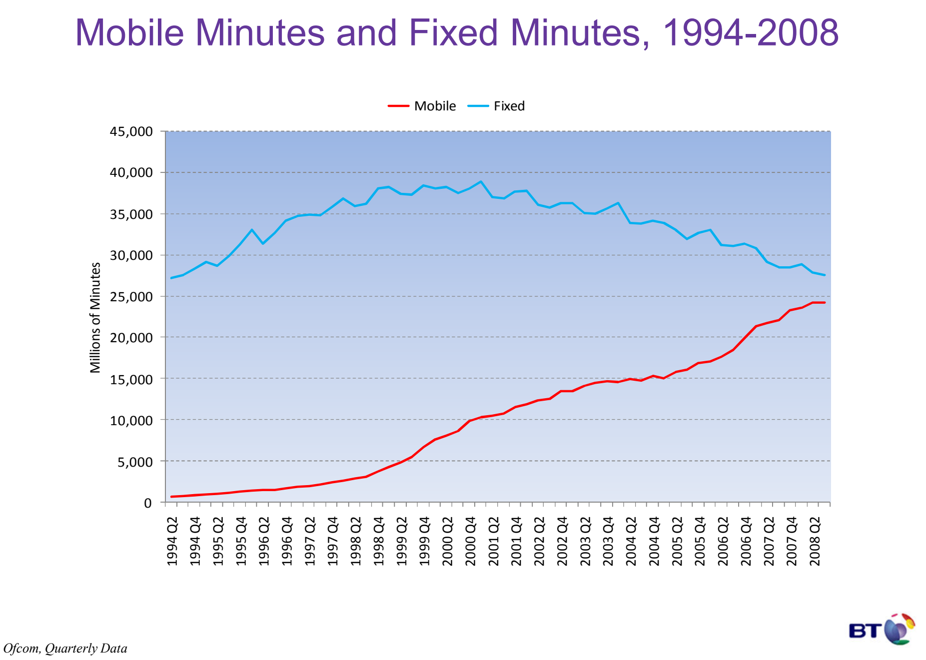
11. A third way of considering FMS is crossover analysis – that is, the extent to which in an absolute or relative sense, mobile calls have overtaken fixed calls. Chart A4 shows that mobile calls have now overtaken fixed geographic calls to become the most important call type, with 47% of voice minutes. Ofcom's analysis does not even attempt to explain the decline in the share of geographic minutes.

Chart A4



12. In absolute terms, there are now just 3.4bn fewer mobile minutes per quarter than fixed voice minutes per quarter (Chart A5). With fixed minutes having been in decline since 2001Q1, this gap is likely to disappear over the next few years.

Chart A5

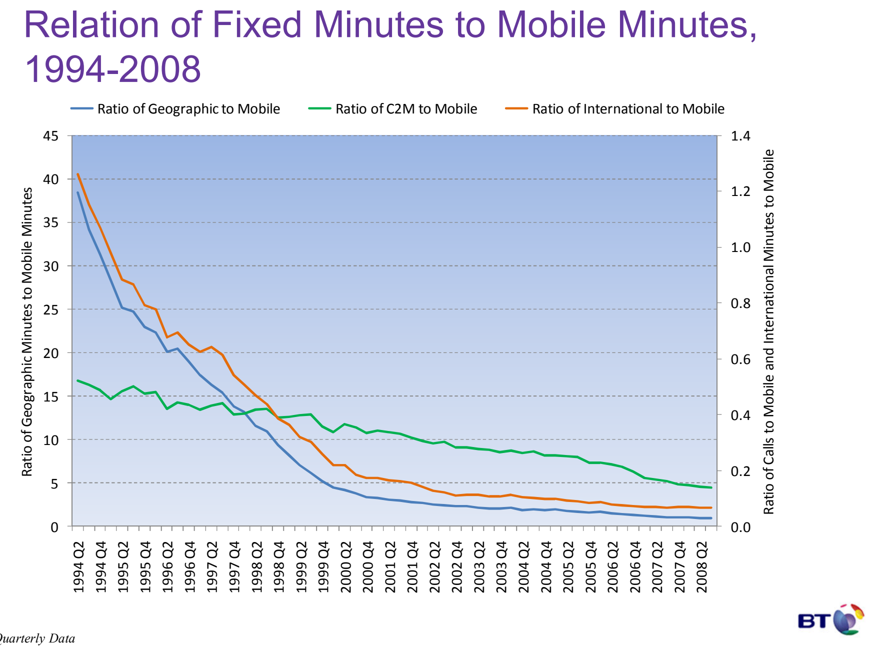


Increasing Preference for Using Mobiles

13. The increasing importance of mobiles in the voice market is reflected in the changes in fixed call volumes relative to mobile call volumes. Chart A6 shows how, of fixed call types, C2M volumes have held up best in relation to growing

mobile volumes. However, the increasing preference for using mobiles to originate calls means that all three types of fixed call have declined in relative terms.

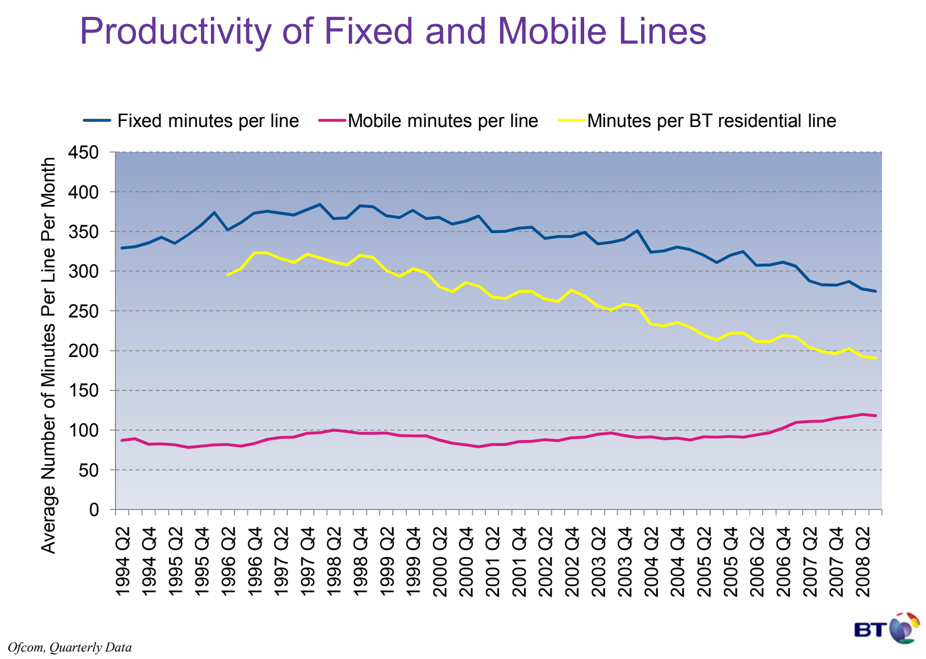
Chart A6



Ofcom, Quarterly Data

14. Chart A7 shows another way of considering phone preferences - combining minutes with lines to show the productivity per line. It reveals a clear and substantial decline in the average number of voice minutes per month generated by fixed lines in general, but BT residential lines in particular – down by over 130 minutes from their peak. In contrast, the average number of mobile minutes has grown to circa 120 minutes per month, despite a large increase in line numbers from 2.6m in 1994 to over 68m in 2008.

Chart A7



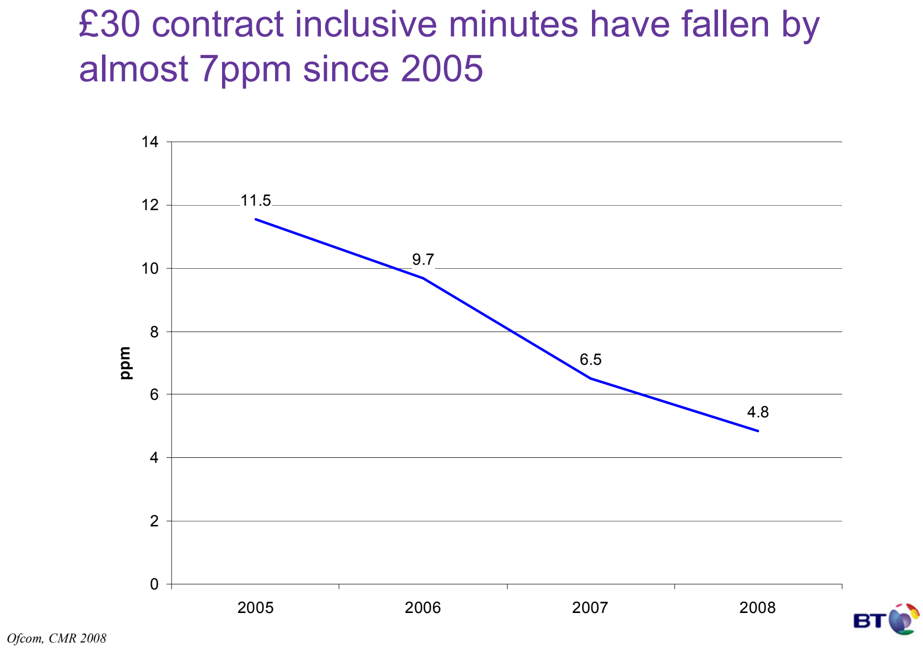
Disappearance of the Mobile Price Premium

15. Ofcom maintains (paragraph 4.68) that "the price of a fixed call has remained relatively constant between 2002 and 2007 at between 6.5 and 7.1 pence per minute. However, during the same period, the price of an average mobile minute fell sharply from 14.6 to 11.5 pence per minute. While the gap between fixed and mobile prices has narrowed significantly, the average revenue per minute of a mobile call is still 62% higher than the cost of a fixed call."

16. However, the mobile price in question does not relate to contract customers, where Ofcom expects to see the highest FMS – "contract customers are more likely to consider a mobile call as an effective substitute for a landline call than pay as you go customers" (4.6). According to Ofcom's *Mobile Sector Assessment* (2008), despite the fact that contract customers account for only 36% of mobile subscribers, contract minutes account for almost ¾ of all mobile minutes. So, the key mobile volumes in FMS are those relating to mobile customers. Yet, Ofcom's analysis is silent on relating these volumes to changes in contract prices and to the fall in geographic volumes.

17. BT has conducted an analysis of the £30 per month mobile contract price point, using data in Ofcom's *Communications Market Report* (2008). In terms of supply alone, the increased number of inclusive bundled minutes since 2005 – from 260 per month to 620 per month – implies a price reduction of almost 7ppm, to under 5ppm (Chart A8).

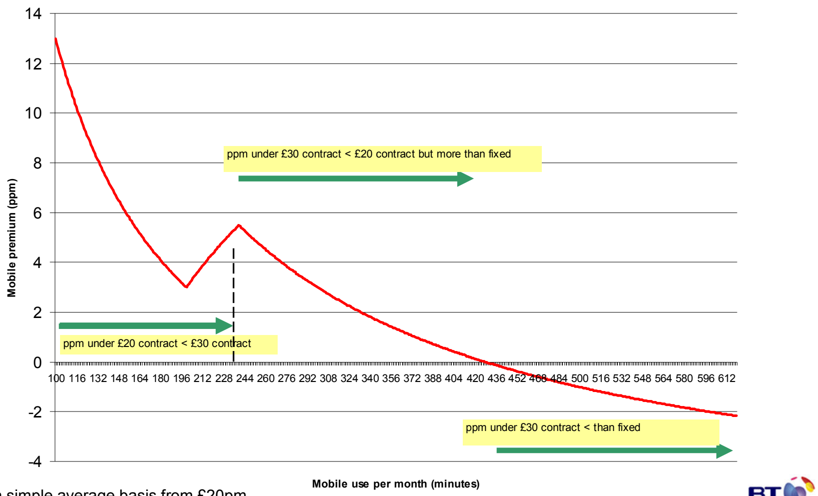
Chart A8



18. With the average BT price including line rental across all customers and including all discounts amounting to 7.1ppm, full usage of mobile minutes at this £30 per month contract price point means mobile calls are cheaper than fixed calls. This remains true for usage of more than 430 minutes per month (Chart A9).

Chart A9

The mobile premium* in 2007

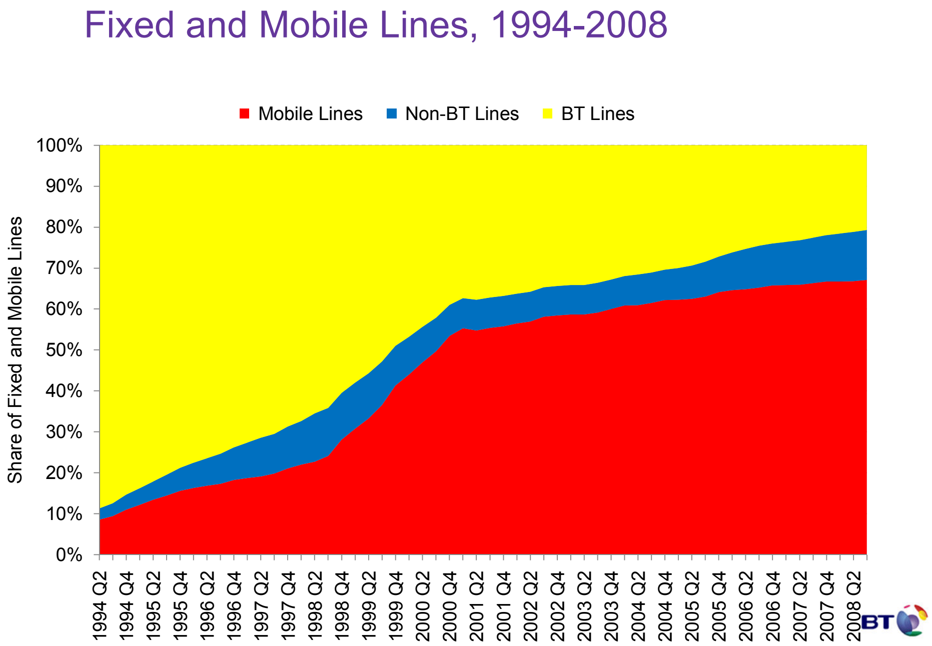


*Calculated on simple average basis from £20pm & £30pm contracts & assuming 25ppm metered charges, & BT net price of 7.01ppm.

Evidence of Fixed-Mobile Substitution in Access

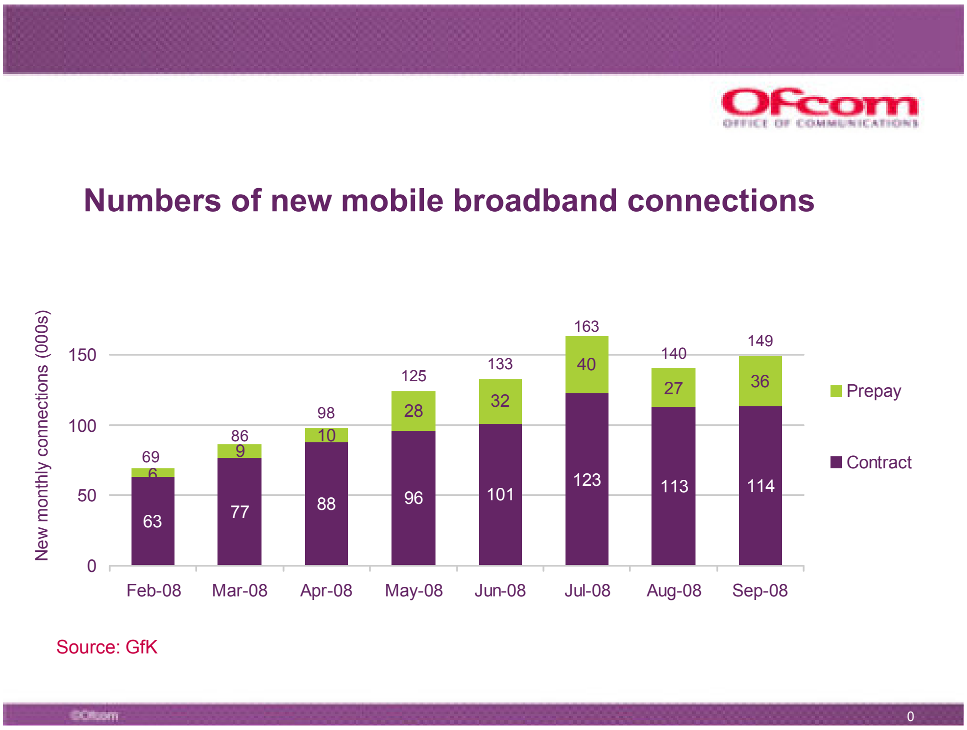
19. Chart A10 shows that mobiles account for circa 2/3rd of all lines, compared to less than 10% in 1994. Today, as a result of this shift, circa 80% of people have both fixed and mobile lines, and 13% are mobile-only.

Chart A10



20. With increasing adoption of mobile broadband – Chart A11 shows almost 1m new connections in just eight months in 2008 – it may be that numbers of fixed lines, and the voice minutes associated with them, will decline in future. Factors affecting this will include mobile broadband speeds, connectivity, download allowances, and prices. Interestingly, fixed line penetration is, at just over 85%, almost ten percentage points down from its earlier peaks.

Chart A11

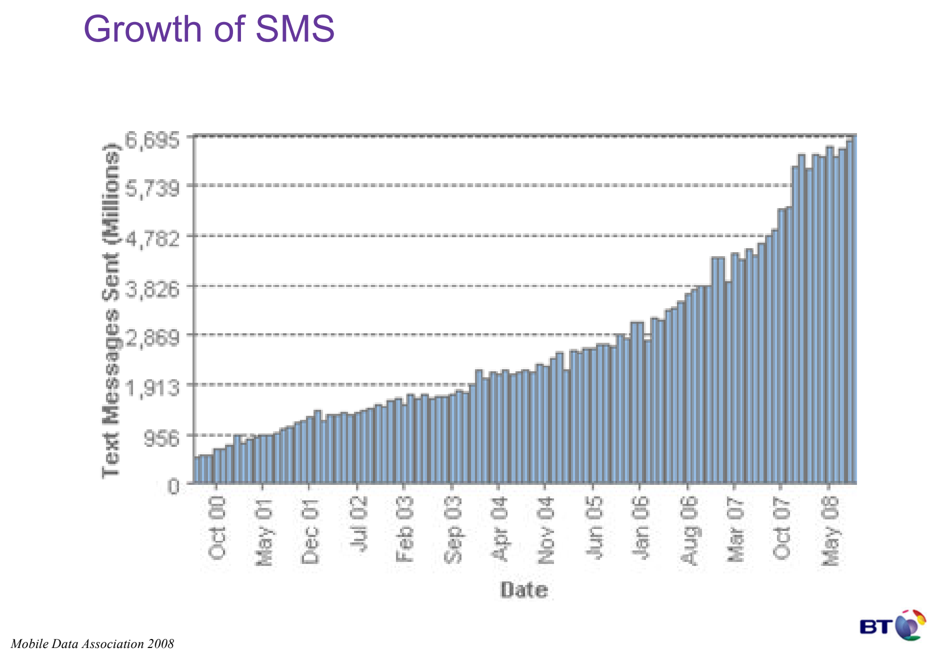


Conclusions

21. Ofcom's analysis of FMS is open to question: it is too general and leaves unexplained too many key changes in fixed and mobile markets.

22. We have shown that, since 1994, 15bn or more fixed voice minutes have been lost per quarter, with the majority of these being geographic minutes. Our view is that, since circa 80% of people have both fixed and mobile phones and 13% are now mobile-only, most of these geographic and other fixed call minutes have been substituted by mobile. This suggests to us that new mobile minutes are closer to 9bn per quarter, compared to their gross increase of almost 24bn minutes per quarter. Some fixed voice minutes are also likely to have been substituted by some of the over 6bn mobile texts per month (Chart 12). As a result of these changes, fixed call minutes now account for circa 53% of voice minutes, compared to nearer 100% in 1994.

Chart A12



23. The mobile premium has arguably also disappeared for contract mobile users.

24. In our view, taken together, this evidence is sufficient for Ofcom to find that, on a forward-looking basis, there is already a trend towards a single voice calls market.

25. However, should Ofcom still be minded to maintain the divisions between fixed and mobile, BT would like it to adopt a crossover trigger for next reviewing whether single markets exist. We suggest the trigger could be 60% mobile to 40% fixed of the total minutes (see Chart A5).