

TELEWEST RESPONSE TO OFCOM CONSULTATION: VALUING BT'S COPPER ACCESS NETWORK

14th FEBRUARY

Executive Summary

1. We support the Ofcom rationale for consulting on the value of the BT access network. It is appropriate that Ofcom assesses whether the cost accounting methodology relevant to BT's copper assets continues to be appropriate.
2. Alongside our support, we also believe that Ofcom needs to strike a careful and delicate balance in its valuation of the BT copper loop. We note, in particular, Ofcom's belief that UK consumers are best served through retail competition on the BT network given the lack of market entry at the access network level. As a major operator and owner of access network, serving both residential and business services, we would emphasise that Ofcom should not focus on retail competition via the BT network to the exclusion of current and new alternative network access investment. We believe that such alternative access network is central to the ability to offer UK consumers real choice in communications services as well as a key driver on BT to continually invest and innovate in new products and services.
3. We believe that Ofcom should be careful in the using the term "valuation" when relating to the BT copper network, when, in fact, the Ofcom emphasis is on changing the potential regulatory cost accounting methods applicable to BT e.g. a change in regulatory accounting methodology may not necessarily be the same as a change to the underlying value of BT network e.g. wholesale prices based on the former may not be representative of the latter.

Regulatory Policies and Objectives

Consistent with the above, we believe that Ofcom must attempt to provide incentives for efficient investment in access infrastructure as well as protect consumers from excessive pricing, when considering which route to follow in valuing BT copper network

Valuation Methods and Costing Issues

We firmly believe that the basis of valuation for BT access network should reflect the reality and risk of investment in the same. In this context, we believe that the basis for valuation is most likely to be the annualised current cost of assets used in the network provision of a particular set of services. Furthermore, we propose that the only credible valuation of the BT access network is as a business e.g. there should be full reflection of enterprise value, with proper recognition of future

cash flows, which, in turn, reflect not only the current costs of the asset base but also future capital investments.

Observations on Ofcom Options

In this paper we provide provisional views on Ofcom's proposals for the three main valuation scenarios:

- Retaining existing valuation methodology: We recognise Ofcom's need to assess whether the existing valuation delivers both sustainable investment in BT access network as well as competition via re-sale of the same.

- An optimised deployment of BT's existing technology, as reflected in any new valuation model, needs to be carefully defined. For example, there are major costs in trenches and ducts and an optimised deployment of the same should, in reality, differ little from the current valuation.

- - An optimised deployment of new technology – We believe that this is the most useful method for assessing market opportunities and medium term business decisions. Therefore, it also represents the approach that best encourages further investment in the infrastructure. However, there are major issues concerning the technologies to be selected as references. Arguably, UK cable

company's networks are the only proven alternative access technology on a wide scale and should be the basis for developing the BT valuation model using current prices.

We believe (3) above is part of an essential dialogue that Telewest and Ofcom must pursue if the re-valuation of BT copper loop is to be a credible and sustainable exercise.

RESPONSE TO SPECIFIC CONSULTATION QUESTIONS

Question 1: Should this consultation be extended to cover the copper access network operated in the Hull area by Kingston Communication? If you think it should then please explain why.

Not applicable.

Question 2: What is your opinion of a return to HCA?

HCA is the accounting policy of BT (and is the normal accounting convention). We accept that HCA is not likely to be appropriate for commercial pricing decisions which need to reflect market conditions and be cost oriented. The costs are therefore more likely to best reflected by using today's or current costs (CCA).

Question 3: Do you believe that the overall regulatory approach described in this section is complete and appropriate? If not then please explain how the proposed approach should be changed.

We generally accept the rationale for Ofcom's proposed approach. However, we are concerned that Ofcom's approach appears to be in isolation from the Long Run Average Incremental Cost methodology that has been used to derive BT interconnect charges. There is a possibility of some inconsistency.

Question 4: What do you believe the useful economic life, i.e. book life, and the service life, i.e. actual usable life before replacement is required, of copper access cable should be?

- The useful economic life of a tangible fixed asset and its residual value is, at best, an estimate and should, we believe, be reviewed each period in accordance with accounting standards. Accounting policies information published by BT in its annual report indicates that cables are depreciated over periods of between 3 – 25 years. With such a wide range it is difficult to comment on exactly what lives are used for particular BT access assets.
- The Ofcom document states that copper is “assumed” to have a service life of 15 years. This life period is also used for the economic life but it is not entirely clear as to whether this is what BT actually uses. Looking at the BT annual report of 1991 (for example), this quotes cable's estimated useful life as 4 -25 years, so it would appear BT has seen no reason to change book life for cable.
- We believe that 15 years does not seem unreasonable for copper cable, although, in practice, the actual operational life of many cables is probably

much longer. We also believe that BT statistics of past trends of numbers installed, replacements and cessations are needed to make a more informed view.

- The attribution/allocation of the depreciation charge against a particular product needs to be considered. It is presumably the case that the copper pairs “service life” in question is attributed to the residential and business exchange (narrowband) retail service.

Question 5: Do you believe that a rolling treatment of the economic life for duct is appropriate? If not, how do you believe duct should be treated?

We do not believe that the rolling basis of treatment is adequately explained in the Ofcom document. The BT annual report for 2004 states that the life for duct is 25 years. Conversely, the BT 1991 annual report, for example, gives an asset life range of 45 to 60 years. The implication is that BT possibly now believes the duct will not last as long. Typically the original cost of duct assets should be written off over the estimated useful economic lives by equal instalments.

Question 6: What level of spare capacity do you believe is appropriate for a copper access network?

- We would ask Ofcom to clarify how broadband services, and the extent to which capacity usage may transfer from the switched network to broadband system, will be taken account in the examination of capacity. We assume that there will be a need for some cost allocation method to be adopted.
- Spare capacity is normally an economic compromise between a long design period between plant increments with a high[ish] burden of spare plant, against short design periods with higher costs of smaller more frequent plant increments. Clearly the growth rate and forecast accuracy also has a major impact. We note that BT may be facing a decrease in the volume of switched traffic.
- For the BT copper loop, historically the difficulty of forecasting down to DP level has been difficult and with the previous high growth rate had resulted in a high spare plant margin e.g. 20 – 30%. We believe that the use of DPs and PCPs was to give flexibility to overcome forecast inaccuracies. However, with today’s high penetration, pair growth is largely for second lines and maintenance replacements so we would expect the spare plant to be fairly low, perhaps 10% or less.

Question 7: What is your opinion on the option of keeping the current methodology and then moving to a valuation based on PIPeR when it becomes possible (expected in 2006/7)?

Ofcom clearly has concerns about the current statistical basis for the LLCS. The computerisation of access network records will be a major lengthy task. It may well be that such types of projects may slip from the expected date of 2006/7. There seems to be no real alternative to retaining the present methodology prior to the introduction of the PIPeR.

Question 8: What is your opinion of using an optimised approach to estimate the value of BT's copper access network?

The concept of an optimised deployment of the same technology as used in BT's network raises a number of issues. In essence, we have a concern as to whether it makes sense for any new entrant to try to adopt the current same BT network design throughout the whole of the UK. In a number of respects this seems a highly theoretical approach which will not be a credible method for re-valuation. Consequently, we believe that any pursuit of an optimised network model must take full account of cable network values and design.

We believe that it could be argued that the modern proven alternative technology is largely that used by the cable companies. In practice, the major cost is for trenches and duct. The investment over the past few years by cable companies will largely reflect optimised topology and reasonably current costs.

A further issue, which we believe relevant, is the fact that any review is not just an engineering exercise. The purpose of any access network is to provide multiple services to the market. While the traditional telephone business is static new broadband services are developing.

Question 9: Do you believe it would be possible to discount the new technology solution for additional functionality and, if so, how?

The cost of providing a new technology solution for restricted functionality, for example an APON or other optical fibre access system for telephony only, will be almost the same as providing it for higher functionality. Thus, no discount seems reasonable.

Question 10: What alternative architectures to the active PCP architecture studied by Ofcom do you believe would be viable options for a modern equivalent asset to BT's copper access network?

Active PCPs are unlikely to be cost effective as ADSL, together with cable, can at present provide for the bulk of the broadband/telephony customer requirement. As such, it would make sense to retain the copper network as it is, augmented by ADSL for broadband requirement excluding entertainment video, until such time as it is economic to replace the entire network with Fibre to the Home (FTTH). FTTH will be able to cover with a single system the delivery of telephony,

broadband for internet access including teleworking, and also to provide entertainment services.

Alternative architectures based entirely on copper access technologies with or without active PCP's would represent a potentially precarious investment until and unless the market demand has stabilised.

Question 11: What is your opinion of using an optimised approach which takes advantage of modern technology to estimate the value of BT's copper access network?

- We believe that the only credible way of estimating the value of BT's copper network is to recognise that the same network will be a staging post, and, ultimately, key element of the evolution of the BT access network. E.g. it will be part of a hybrid copper/fibre network that is increasingly for broadband service provision.
- If new technologies e.g. fibre, are deployed in a comparable network then it is critical that the full civil engineering costs of installing fibre and active electronics outside the exchange are included, in accord with the arguments in Q8/9 above. Previous studies of large scale fibre deployment in the access network have indicated demonstrated that the inclusion of civil works costs made the investment not viable.

Question 12: How do you believe the labour rate should be set?

The BT Annual Report shows a large amount of labour capitalised. Presumably some of this cost relates to access. It is not clear from the Ofcom document whether such labour costs are applied to assets at the current rates in any particular financial year or whether the index forward method is applied.

The use of an index might be appropriate but, as far as we are aware, there is no information provided as to what has happened on contracts since the 1994/5 period. It may be that an index more closely related to civil works would be appropriate rather than average earnings.

Question 13: How do you believe the issue of unavailability of asset types used in the network should be accounted for in the valuation?

We agree that some abatement to cover asset unavailability. Clearly there is an intrinsic business value in the infrastructure which provides access to residential and business customers in the UK and this is not directly dependent on availability or individual asset category usage.

Question 14: What is your opinion of using cross-sectional area to attribute the cost of shared duct?

- The incremental cost of providing additional bores when a duct route is constructed is probably small. However, it is important to emphasise that this increase in capacity must be added at the time of initial construction. The cost of adding a single additional duct bore to an existing duct route is extremely high, usually approximately the cost of the entire original installation. In many cases existing BT duct routes do not have existing spare bores. Furthermore, there may be cases in the access network where the duct bore has collapsed onto the cables. These cables will often continue working indefinitely, but obviously no new cables can be installed in any unused bores on the route.
- Cross sectional area is clearly a simple basis for duct space charging. However, we believe that it might militate against the continuing use of copper, as optical fibre (access or core) will put a very much greater bandwidth into any given cross section.

Question 15: What is your opinion of using bandwidth to attribute the cost of shared duct?

We do not believe bandwidth is appropriate to attribute the cost of shared duct. With the use of techniques such as WDM and passive optical networks, the bandwidth of individual fibre pairs can be extremely high so if operators share a duct by laying their own cables then, given that the size of individual fibre cables is not too different [compared to copper] with the number of fibres they contain, then cables would be a better basis for apportioning costs. The use of micro duct containing blown fibre pairs complicates the issue, but a micro duct might be equivalent to a fibre cable. Where ducts also contain copper cables, a factor in cable size e.g, say that a 100 pair copper cable is roughly the same size as a fibre cable and 300 pairs equates to two fibre cables, etc.

The idea of using bandwidth and then arguing what to do about an increasing number of copper access cables carrying ADS is problematic. The market will determine how many cables need to be up-rated and hence the mix in any duct at any one time. Although the bandwidth carried by Core network cables will just scale (on average) with the increasing bandwidth of up-rated cables, again the relative cost would depend on the cable mix in a particular duct at any one time.

A partial use of bandwidth to calculate duct charging may make sense, but care needs to be taken. As noted a copper pair may well only be carrying 64 Kbit/ sec (4 MHz) telephony. Alternatively, it might be carrying ADSL at between 0.5 Mbit/s and 8 Mbit/s (although the latter is only practical over very short distances). ADSL is asymmetric in bit rate, with a higher bit rate being available in the upstream direction (from customer to exchange). There are also symmetric systems for business users (HDSL and SDSL).

An access optical fibre is at present almost certain to be connected to a business customer, and to be carrying a 4 x 2 Mbit/s system (total 8 Mbit/s), with some 16 x 2 Mbit/s systems (total 32 Mbit/s) also being deployed. An APON to the present FSAN specification would carry 622 Mbit/s, with higher rates available in the future. A core fibre could carry several Gbit/s.

It would seem sensible to consider any approach generally in categories which might be:

1. An access copper pair carrying only telephony (analogue or ISDN-2).
2. An access copper pair carrying ADSL, HDSL or SDSL.
3. An access fibre carrying a 4 x 2 Mbit or 16 x 2 Mbit/s system.
4. An access fibre carrying an advanced optical system (622 Mbit/s FSAN APON or beyond).
5. A core fibre.

Question 16: What is your opinion of using incremental cost as the basis to attribute the cost of shared duct?

The meaning of incremental cost is not entirely clear and would need to be defined carefully.

Question 17: What other methods of attribution for the cost of shared duct might be appropriate?

The use of EPMU would probably have a similar effect to the use of charging based on usage types, as suggested under Question 15 above.

Question 18: Over what timeframe do you think it is appropriate to recognise the impact of any change in valuation of the copper access network in relation to setting prices?

- The Ofcom consultation document assumes, in several places, that the revaluation will be downwards but there appears to be no data to support this. Given that civil works costs including duct are a significant element in capital then related depreciation costs could rise. Further, much of the BT network is overhead distribution which is cheaper and it is not clear whether this method is to be continued in the valuation, for example cable and more recent BT distribution is more costly underground distribution.
- CCA accounting methods are complex and will take time to implement changes, as Ofcom point out. It is difficult to comment as no details are

available of the BT treatment of supplementary depreciation, holding gains or losses or backlog depreciation and the effects of a revaluation.

- There is no reference to the LRAIC methodology currently in use for wholesale products but presumably any question of these prices would need to establish how the impact of any change would apply – within the LRAIC floor and ceiling range.
- At this stage, without data, our preliminary opinion is that the loss or gain should probably be spread over the remaining life of the particular asset. It would seem that any revaluation surplus or deficit arising on the restatement of the cumulative amounts brought forward should be offset against unrealised reserves in the same way as backlog depreciation is charged to current cost reserves as it does not represent the current cost of utilising the asset. Rather, it represents the effect of the consumption on price changes.

Question 19: Over what range of products and services do you believe it would be appropriate to recover any potential holding loss?

It is assumed by Ofcom that it would be a loss. We await Ofcom's detailed explanation of why such a loss may be automatic. Any such loss would need to be spread over products and services which use the specific assets. This applies to wholesale and retail products as well e.g. line rental. This raises the question of retail line rental rebalancing, where very substantial losses have been incurred for many years by BT and there appears to be a residual need for BT to rebalance its tariffs.

Question 20: What do you believe would be the most appropriate way to implement changes relating to pricing of specific products? What timeframe do you believe would be appropriate for such implementation?

We believe that BT should be free to set wholesale/interconnect charges subject to a Competition Act context e.g. for so long as these charges are not in contravention of UK competition law then there should be no Ofcom intervention. We do not believe that it is sustainable for Ofcom to determine the full portfolio of interconnect charges, as believe that this may be inconsistent with charges that would be set in compliance with competition law.