Competition Act 1998

BT 0845 & 0870 retail price change-
Suspected Internet Service Provider (ISP)
margin squeeze

Decision of the Office of Communications

This is the non-confidential version of the decision. Confidential information and data have been redacted. Redactions are indicated by “[X]”.

19 August 2004
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Summary

S.1 The Office of Communications (Ofcom) has concluded that BT Group plc (BT) has not infringed Section 18 (the Chapter II prohibition) of the Competition Act 1998 (the Act) or Article 82 of the EC Treaty (Article 82) in relation to price changes for 0845 and 0870 services introduced on 1 June 2003 and 18 July 2003. On the information in Ofcom's possession, Ofcom has concluded that BT's conduct is not caught by the Chapter II prohibition or the prohibition in Article 82 and, therefore, there are no grounds for action.

S.2 Ofcom's decision follows an own-initiative investigation, which was opened in response to representations from a number of competing Internet Service Providers (ISPs) that BT's 1 June 2003 retail price changes for 0845 and 0870, which included a reduction in price of evening calls to 0845 number ranges and weekend calls to 0870 number ranges, was likely to result in the exclusion of competitors from relevant markets in the provision of narrowband metered internet access.

S.3 The Office of Telecommunications (Oftel) opened its own-initiative investigation on 18 July 2003 and investigated whether the impact of the 1 June 2003 price changes and subsequent action on 18 July 2003 via BT's downstream termination business, namely passing on the effects of these retail price changes in the out-payments it makes to ISP customers purchasing internet termination services from BT, had the effect of imposing a margin squeeze on its competitors in downstream markets. Oftel ceased to exist as of 29 December 2003 and its powers under the Act have now been assumed by Ofcom.

S.4 Following its investigation, Ofcom has considered the available evidence and concluded that BT’s conduct is not caught by the Chapter II prohibition or the prohibition in Article 82 and, therefore, there are no grounds for action.
Background

1.1 On 3 April 2003, BT announced changes to retail prices for geographic calls. These changes included a reduction of the local evening rate from 1.49p to 1.00p per minute and a reduction in the national weekend rate from 2.00p to 1.50p per minute. Since BT links its standard (i.e. pre-discount) prices for local rate calls to 0845 calls and for national rate calls to 0870 calls, these changes were also made to the retail prices for 0845 and 0870 calls. These retail price changes were implemented on 1 June 2003 (the June 2003 price changes).

1.2 A number of Internet Service Providers (ISPs) provide narrowband metered dial-up internet services to consumers using 0845 numbers and, to a lesser extent, 0870 numbers. Calls made to 0845 and 0870 numbers form part of the Number Translation Services (NTS) regime (explained in further detail in paragraph 2.8 below) and, consequently, BT passes on payments to its own internet termination business or to other providers of internet termination when passing 0845 and 0870 originated NTS traffic for termination (NTS outpayments). BT’s retail price reductions for 0845 and 0870 consequently had the impact of reducing those NTS outpayments BT makes to itself and other providers for terminating 0845 and 0870 traffic.

1.3 The purchase of internet termination by ISPs includes a revenue sharing arrangement with the provider of internet termination for a proportion of the NTS outpayment (ISP revenue shares). The effect of the NTS outpayment reduction following the June 2003 price change, therefore, resulted in a reduction to the revenue received by ISPs. The reduction in ISP revenue share for BT’s ISPs customers was made with effect from 18 July 2003 (the July 2003 price changes).

1.3 Following the announcement and price changes, various ISPs made representations to the Director General of Telecommunications (the Director) that there was insufficient margin after the price change available to them to provide profitable narrowband metered internet services, alleging that BT was abusing a dominant position in the market for call origination with the intention of excluding others from the downstream market of narrowband metered internet access.

1.4 Under section 25 of the Competition Act 1998 (the Act), the Director could conduct an investigation if there were reasonable grounds for suspecting that section 18 of the Act (the Chapter II prohibition) has been infringed. Given BT’s likely dominance in the relevant upstream markets, the significant reductions made in out-payments to ISPs and representations made by industry parties in response to BT’s price changes, the Director had a reasonable suspicion that BT’s actions in reducing out-payments to ISPs had the effect of imposing a margin squeeze on its competitors in downstream markets.

1 See paragraph 2.8
1.5 The Director decided on 18 July 2003 to open an own initiative investigation into whether BT’s conduct in reducing revenue shares to ISPs was contrary to the Chapter II prohibition.

1.6 Oftel ceased to exist as of 29 December 2003 and its powers under the Act have been assumed by Ofcom. Ofcom has concurrent powers under the Act in relation to activities connected with communications matters pursuant to section 371 of the Communications Act 2003.

1.7 The Act has been amended as of 1 May 2004 in order to implement EC Regulation 1/2003\(^2\) into UK law. Ofcom now has the power under the Act to apply Article 82 of the EC Treaty (Article 82), in addition to the Chapter II prohibition.

1.8 The Chapter II prohibition only applies if the conduct of the dominant undertaking is capable of having an effect on trade within the UK. Article 82 only applies if the conduct of the dominant undertaking is capable of having an effect on trade between Member States.

1.9 The European Commission has published guidelines on what is meant by an effect on trade under Articles 81 and 82 of the EC Treaty\(^3\). At paragraph 93 of these guidelines, the European Commission states that where an undertaking, which holds a dominant position covering the whole of a Member State, engages in exclusionary abuses, trade between Member States is normally capable of being affected.

1.10 This investigation concerns an allegation that BT is applying retail prices likely to result in the exclusion of competitors in relevant markets. Ofcom considers that the alleged anti-competitive conduct in this case was, by its nature, capable of having an effect on trade between Member States. BT’s conduct was clearly also capable of having a potential effect on trade within the UK.

1.11 As of 1 May 2004, this investigation has been carried out under both the Chapter II prohibition of the Act and the prohibition in Article 82\(^4\).

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\(^2\) OJ [2003] L1/1.

\(^3\) OJ [2004] C101/81.

\(^4\) The parties were informed of this fact by letter dated 4 May 2004.
The Facts

The Undertakings

2.1 BT Group plc (BT), whose registered office is at 81 Newgate Street, London EC1A 7AJ, is the listed holding company for an integrated telecommunications group that provides voice and data services in the UK and elsewhere. Its principal activities include local, national and international telecommunications services, broadband and internet products and services, and IT solutions. BT serves approximately 21 million UK residential and business customers. In the financial year to March 2004, BT had a UK turnover (from continuing activities) of £18.5 billion. BT is an undertaking for the purposes of the Chapter II prohibition and Article 82.

2.2 Within BT, the BT Retail line of business is responsible for the provision of exchange lines to BT’s UK residential and business customers, the leasing of private circuits and other private services, and the sale and rental of customer premises equipment. The BT Wholesale business provides network services to communication providers, including to other BT businesses - BT Retail, BT Global Services and BT Openworld. BT Openworld, part of the BT Retail line of business, is responsible amongst other things for the provision of narrowband metered internet access to end users.

2.3 Although an own-initiative investigation, this investigation was opened in response to representations made by Brightview Group Limited, Wanadoo UK plc (formerly Freeserve.com plc), Tiscali UK Ltd and Virgin.net (the ISPs).

The Investigation

The products under investigation

2.4 BT supplies a range of internet access services to end users including broadband, narrowband metered (i.e. subscription) and narrowband metered (i.e. ‘pay-as-you-go’) internet access services. The narrowband metered internet access product is generally provided to end users on the basis that the only charge to the end user is the charge for the phone call billed by their call provider.

2.5 This investigation concerns BT’s supply of narrowband metered internet access products to end users using 0845 and 0870 number ranges. BT offers a range of narrowband metered products through its BT Openworld unit. Services targeted at businesses are labelled ‘BT Connect’ with a range of options and add-ons such as ISDN access, e-mail addresses and webspace. There are two products targeted at consumers – BT Openworld PAYG, a basic metered product with an e-mail address and webspace, and BT Click, which provides metered access only and is also sold via third party businesses as an own branded service.

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2.6 In order to provide narrowband metered internet access services to end users, both BT Openworld and other ISPs must ensure that end users can access the ISP’s services via their originating call provider. In order to access the greatest number of potential end users, ISPs need to ensure that they can offer their services to BT retail customers and so must purchase NTS call origination services from BT.

2.7 In practice, ISPs often purchase narrowband metered internet termination services from BT (in the form of Surfport or Webport) or from another provider. The internet termination provider, in turn, purchases NTS call origination in order to service the termination products and, ultimately, allow access to end users. The termination products provide IP network access and authentication, together with IP connectivity to the ISP’s network.

2.8 BT was designated as holding Significant Market Power (SMP) in the market for Fixed narrowband call origination in the UK excluding Hull, as set out in ‘Review of the fixed narrowband wholesale exchange line, call origination, conveyance and transit markets’ published 28 November 2003.\(^6\) NTS call origination is a service provided by BT whereby BT retails calls on behalf of the terminating provider, retaining the regulated price of call origination and passing the residual revenue through to the terminating provider (NTS outpayments). This service is regulated by BT’s SMP Condition AA11 ‘Requirement to provide NTS Call Origination,’\(^7\)


\(^7\) As set out in ‘Review of the fixed narrowband wholesale exchange line, call origination, conveyance and transit markets’ published 28 November 2003.
2.9 The precise boundary for provision of different elements of the end to end service varies on a case by case basis - elements such as Network Access Servers, authentication, internet access, e-mail, hosting and domain name system (DNS) services may be provided by either party.

2.10 As mentioned in paragraph 2.8 above, providers of internet call termination receive the residual revenue from the retail price of a call to NTS services (including 0845 and 0870) after the regulated prices for call origination and (where appropriate) conveyance have been deducted. This residual revenue is the NTS outpayment. Terminating providers then typically offer revenue share arrangements with ISP customers so that a proportion of the NTS outpayment is paid through to the ISP (ISP revenue share).

2.11 In the case of BT’s ISP, BT Openworld’s management accounts include charges in respect of narrowband metered internet termination services from BT Wholesale in the form of Surfport and Webport products for the provision of its narrowband metered internet access products described at paragraph 2.5 above. These charges for narrowband metered internet termination include the effect of the wholesale input price charged for call origination which the provider of internet termination must purchase in order to supply termination services. The BT Openworld management accounts also include revenues received from BT Wholesale due to ISP revenue share arrangements.

The alleged anti-competitive activity under investigation

2.12 The investigation has considered whether BT’s conduct in making the 18 July 2003 price changes (i.e. the reduction in the revenue shares to ISPs) constitutes a breach of the Chapter II Prohibition and the prohibition in Article 82. In particular Ofcom has considered whether BT’s conduct amounts to a margin squeeze on retail ISPs as a result of changes in revenue shares to BT’s ISP customers that purchase narrowband metered internet termination from BT, as set out in Oftel’s Competition Bulletin and confirmed by letter to the ISPs on 6 October 2003.

Evidence gathered during the investigation

2.13 Following the opening of the investigation on 18 July 2003, Ofcom sought relevant evidence and information from a number of parties including BT and the ISPs that made initial representations to Oftel. Specifically, Ofcom required the provision of relevant documents and information using powers under section 26 of the Act:

i) On 15 August 2003 for BT to provide details of retail and wholesale narrowband metered internet access products on 0845 and 0870 number ranges including product description, customer numbers, cost information and business plans. BT was also required to provide all documentation that included consideration of the potential effects of BT’s retail price changes of 1 June 2003 and any information regarding the migration of customers between numbers for dial-up access;

8 http://www.ofcom.org.uk/bulletins/comp_bull_index/comp_bull_ocases/open_all/cwq_647/
ii) On 18 August 2003 for the ISPs to provide details of retail and wholesale narrowband metered internet access products on 0845 and 0870 number ranges including product description, customer numbers, cost information and business plans. The ISPs were also required to provide any information regarding the migration of customers between numbers for dial-up access;

iii) On 8 October 2003 for BT to provide further financial information including forecasts for the financial year 2003/4 incorporating the impact of the July 2003 price changes, details of all wholesale inputs used and NTS outpayments received; and

iv) On 15 January 2004 for BT to provide budgets for the narrowband metered business (or the smallest reporting unit(s) that included that product) for the financial years ending 31 March 2002, 2003 and 2004, together with corresponding business plans, management accounts and detailed analysis of revenues and transfer charging as reflected within the relevant regulatory product group financial statements. In addition BT was required to provide customer numbers and traffic volumes for narrowband metered internet access services.

2.14 In addition and in reaching its decision, Ofcom has used additional information supplied voluntarily by BT and the ISPs that made the initial representations (some of which clarified responses to the section 26 request listed above), data in the public domain and research and analysis undertaken internally by Ofcom.

2.15 On 4 May 2004, the parties were advised that information that had been requested under section 26 of the Act would also be relied upon in the context of an investigation under Article 82 of the EC Treaty.
Legal and Economic Assessment

Introduction

3.1 The Chapter II prohibition prohibits conduct by one or more undertakings which amounts to the abuse of a dominant position in a market where this may affect trade within the United Kingdom or part of it\(^9\).

3.2 This investigation concerned whether BT has infringed the Chapter II prohibition by engaging in anti-competitive conduct (by way of a margin squeeze) in relation to the introduction of revised prices for 0845 evening calls and 0870 weekend calls and the consequent impact, through reductions in ISP revenue shares, on the market for narrowband metered internet access.

3.3 During the course of the investigation, Ofcom acquired the power under the Act to apply Article 82 in addition to the Chapter II prohibition. As noted at paragraph 1.10 above, Ofcom considers this case is capable of having an effect on trade between Member States. Accordingly, as of 1 May 2004 the investigation was conducted under both the Chapter II prohibition and the prohibition in Article 82.

3.4 In order to assess whether BT has infringed the Chapter II prohibition and/or Article 82 in this case, Ofcom has considered the following:

i) The relevant markets and whether BT holds a dominant position in a relevant market; and

ii) Whether BT’s conduct amounts to an abuse.

3.5 In this chapter we set out Ofcom’s reasoning on the relevant markets and dominance, and then set out the detail of Ofcom’s margin squeeze assessment in this investigation, that is, whether BT’s conduct amounts to an abuse.

Market definition and dominance

3.6 In its decision in Freeserve v Director General of Telecommunications\(^10\), the Competition Appeal Tribunal (CAT) stated that:

"conduct capable of constituting an “abuse” is not unlawful under the 1998 Act unless it is carried out by a dominant undertaking. In those circumstances it seems to us that, for clarity of analysis, it will often be appropriate for the Director, in rejecting a complaint on the grounds that there is no abuse, to indicate, at least briefly, which market or markets appear to him, at first sight, to be potentially relevant to his investigation, and whether or not he has made any assumption on the issue of dominance in those markets. [...] We emphasise,

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\(^9\) Competition Act 1998 s.18

\(^10\) Case No 1007/2/3/02: Freeserve.com plc v Director General of Telecommunications [2003] CAT 5
however, that the Director is not required to decide issues which it is unnecessary for him to decide in order to reach a concluded view on a complaint”¹¹.

3.7 The European Court of Justice has defined a dominant position as:

"a position of economic strength enjoyed by an undertaking which enables it to prevent effective competition being maintained on the relevant market by giving it the power to behave to an appreciable extent independently of its competitors, customers and ultimately of consumers”¹².

3.8 For the purposes of the Chapter II prohibition and Article 82, dominance is assessed within a relevant market.¹³ The relevant market has two dimensions: the relevant goods or services (the product market) and the geographic extent of the market (the geographic market)¹⁴.

3.9 A relevant product market comprises all those products and/or services which are regarded as interchangeable by any reason of the products’ characteristics, prices and intended use¹⁵. A relevant geographic market comprises the area in which the undertakings concerned are involved in the supply and demand of products or services in which the conditions of competition are sufficiently homogeneous and which can be distinguished from the neighbouring areas because the conditions of competition are appreciably different in those areas.

3.10 Following Ofcom’s investigation and the conclusions at paragraph 3.99 below that BT’s conduct in respect of the July 2003 price changes and their impact on the narrowband metered internet access market does not amount to an abuse, it is not necessary to conclude on the markets and whether BT may be dominant within them. However, Ofcom’s investigation included consideration of likely upstream and downstream market definitions as part of the investigation of BT’s conduct and the following forms its preliminary assessment of the relevant markets.

3.11 For the purposes of the current investigation, there are two markets of relevance to the alleged breach of the Chapter II prohibition and the prohibition in Article 82, namely:

i) the upstream market(s) in which BT may hold a dominant position; and

ii) the downstream market(s) in which any abuse carried on by BT is likely to occur.

¹¹ Ibid, paragraph 131.


¹³ See OFT Guideline 403, Market Definition.

¹⁴ See OFT Guideline 403 Market Definition, paragraph 2.10.

Accordingly Ofcom's investigation has considered relevant markets at both levels of the supply chain.

**The upstream market(s) in which BT may hold a dominant position**

3.12 As noted in paragraph 3.6 above, it is not necessary for Ofcom to decide on issues which it is unnecessary to do so in order to reach a concluded view on a complaint. However, Ofcom has pursued its analysis in this case on the basis that there is likely to be relevant market in the supply of call origination on fixed public narrowband networks in the UK excluding the Hull area.

3.13 Ofcom has recently examined this upstream market in its market review ‘Review of the fixed narrowband wholesale exchange line, call origination, conveyance and transit markets’, published on 28 November 2003.

3.14 In that review, Ofcom concluded that BT has SMP in call origination on fixed public narrowband networks in the UK excluding the Hull area. SMP is a designation similar to the concept of dominance in competition law. While therefore not concluding on dominance for the purpose of its decision in this case, Ofcom has undertaken this investigation on the basis that BT is likely to hold a dominant position in the market for call origination on fixed public narrowband networks in the UK excluding the Hull area.

**The downstream market(s) in which the effect of any conduct carried on by BT is likely to occur**

3.15 One of the impacts of the June 2003 price changes was to reduce NTS Outpayments to providers of metered internet termination services. The July 2003 price changes then reduced revenue shares to ISP customers that purchase metered internet termination services from BT. As noted in paragraph 3.6 above, it is not necessary for Ofcom to decide on issues which it is unnecessary to do so in order to reach a concluded view on a complaint. However, Ofcom has pursued its analysis in this case on the basis that there are likely to be two relevant downstream markets, wholesale narrowband metered internet termination and narrowband metered internet access.

3.16 As referred to in paragraph 2.12, Ofcom’s investigation has focussed on whether BT’s conduct in making the July 2003 price changes (i.e. the change in revenue shares to ISPs) constitutes an anti-competitive margin squeeze. In particular, Ofcom has considered whether BT’s conduct amounts to a margin squeeze on retail ISPs as a result of changes in revenue shares to BT’s ISP customers that purchase narrowband metered internet termination from BT. The investigation has therefore proceeded to consider the effect on competition within the market for narrowband metered internet access. Assessment of the market for wholesale narrowband metered internet termination is included in this decision for the purpose of clarifying the supply chain involved in the provision of narrowband metered internet access itself.

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Wholesale narrowband metered internet termination

3.17 In the recent market review ‘Wholesale narrowband metered Internet termination services – UK excluding Hull area’ published on 28 November 2003\textsuperscript{17}, a distinction was made between markets for retail metered and retail unmetered internet access services. No further distinction was made between business or residential services, nor was any distinction made by product or time of day.

3.18 Consequently, whilst not concluding on the market definition, Ofcom has proceeded with the investigation on the basis that there is a market for wholesale narrowband metered internet termination in the UK excluding the Hull area.

3.19 BT has no existing SMP designation in this market. Since there is no need to establish dominance in the downstream markets\textsuperscript{18} in this case, Ofcom has not reached a conclusion on whether BT is dominant in this market.

Narrowband metered internet access

3.20 In relation to the downstream retail market (the market in which Ofcom was concerned to assess the potential for anti-competitive margin squeeze), Ofcom was inclined to consider the effect of any margin squeeze on the basis of a relatively narrow market definition. This was on the basis that, given the concern relating to potential margin squeeze in this case related to a specific price change affecting a narrow set of services, if no effect could be shown in a narrow market definition relating to those services, then it was unlikely any effect relating to that price change could be shown in a broader market where those services made up only part of any commercial offering.

3.21 The majority of ISPs which provide narrowband metered internet access offer these services across the entire UK, independently of the originating network. Consequently, the relevant geographic market is likely to cover the whole of the United Kingdom.

3.22 While not concluding on the market definition, Ofcom has undertaken this investigation on the basis that the relevant downstream retail market was that for narrowband metered internet access services in the UK.

3.23 BT has no existing SMP designation in this market. Since there is no need to establish dominance in the downstream markets in this case, Ofcom has not reached a conclusion on whether BT is dominant in this market.

\textsuperscript{17} http://www.ofcom.org.uk/legacy_regulators/oftel/narrowband_mkt_rvw/internet_term_uk_ex_hull.pdf

\textsuperscript{18} It was recognised by the Director General of Fair Trading in the Genzyme case that, for the purposes of the Chapter II prohibition, in a margin squeeze case, it is necessary to establish dominance in the relevant upstream market. It is not necessary to establish dominance in the downstream market. Decision No. CA98/3/03 of 27 March 2003, at paragraph 369.
Margin squeeze assessment

Introduction

3.24 In making the July 2003 price change it was alleged that BT was imposing a margin squeeze such that downstream ISPs could not compete with BT’s ISP services. Where a vertically integrated undertaking has a dominant position in an upstream market and supplies an input to undertakings that compete with it in a downstream market, there may be scope for it to abuse its dominance in the upstream wholesale market by adversely affecting competition in the downstream retail market. The vertically integrated undertaking may impose a ‘margin squeeze’ by raising the cost of the upstream input (i.e. the wholesale price it charges its downstream competitors) and/or lowering the prices it charges in the downstream market (i.e. the retail prices it charges final customers).

3.25 In considering whether BT’s conduct amounts to a margin squeeze, Ofcom has analysed whether on the basis of BT’s own retail costs, BT is profitable in the downstream market if it incurred the same upstream input prices as it charges to its competitors. This analysis is also referred to as the ‘equally efficient operator’ test.

3.26 This approach is based on the test set out at paragraph 7.26 of the OFT’s Guidelines on the application of the Act in the telecommunications sector:

“….In considering whether an undertaking is engaging in price squeezing in breach of the Competition Act, the Director General will consider whether the dominant undertaking would be profitable in the relevant downstream market if it had to pay the same input prices as its competitors.”

This test is also set out in the European Commission’s Telecommunications Access Notice and has been applied by the European Commission, the OFT and Oftel in previous cases involving margin squeeze.

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20 OFT 417.


3.27 That is, in the context of this investigation, Ofcom will consider whether BT’s own ISP operation would be able to profitably provide the service if it had to pay the same input prices as BT charges to its competitors.

3.28 The margin squeeze test is constructed using three main elements:

(i) The wholesale upstream input prices BT charges to its competitors for narrowband metered internet termination (which itself includes the wholesale input price charged by BT for call origination on fixed public narrowband networks);

(ii) The revenues BT receives for the supply of narrowband metered internet access; and

(iii) BT’s downstream costs of supplying narrowband metered internet access.

3.29 In relation to the first of these elements, the wholesale input prices for narrowband metered internet termination, it is relevant to note that BT Openworld’s management accounts and regulatory product group financial statements include charges in respect of narrowband metered internet termination services provided by BT Wholesale in the form of Surfport and Webport products. Ofcom’s analysis was therefore able to identify the relevant upstream input charges, based on BT’s published tariffs, that an equally efficient competitor to BT Openworld would be required to pay to BT.

3.30 Given the inclusion of the wholesale input charges in the data analysed by Ofcom in investigating the potential for margin squeeze to occur, the relevant analysis focussed on the profitability of the BT Openworld narrowband metered internet access business in the downstream market. That is, Ofcom analysed whether the revenues generated by the BT Openworld narrowband metered internet access business were sufficient to recover both the cost of necessary wholesale input charges, plus additional BT Openworld downstream costs.

3.31 In this next section we set out the detail of how Ofcom approached the margin squeeze assessment in this investigation. Firstly we set out the reasoning for the scope of the margin squeeze test in relation to the scope of the relevant market, i.e. across which products and time of day/week the margin squeeze test is most relevant. Secondly we discuss the type of margin squeeze test to be applied, in terms of the measure of profitability and source data Ofcom has used in order to assess profitability in this case. Finally we go on and set out the detail of how that test was applied in this instance.

**Scope of margin squeeze test**

3.32 The June 2003 retail price changes applied to all services which were provided behind 0845 and 0870 numbers, but only for calls at particular times of the day or week (i.e. evening 0845 calls and weekend 0870 calls). This raises the question as to how to assess the alleged margin squeeze. That is, should the profitability of services be considered just at the particular time of day to which the price reduction applied, or would it be more appropriate to assess the profitability of the service (or services) across all times of day?

3.33 Investigations into alleged anti-competitive conduct are considered within the context of a relevant market, or, where leveraging behaviour is involved, in the context of two or more relevant markets. The relevant downstream market (into
which dominance is being leveraged) has been assumed to be that for narrowband metered internet access services. The scope of the services within this downstream market is therefore one of the relevant factors to the identification of any anti-competitive effect of the alleged behaviour.

3.34 Given that the effect of the margin squeeze is assessed within the relevant downstream market, as a starting point for any analysis it may be relevant to include all services supplied by BT in the retail narrowband internet access market in the margin squeeze test. This said, it is arguable that the test should consider costs and revenues across a narrower or broader range of services rather than just the scope of the relevant downstream market. For example, where the revenues from the service in question constitute a large proportion of the total revenues in the relevant downstream market, it may be sufficient to assess just the profitability of that service. Where revenues are derived from multiple sources (e.g. subscription charges and advertising), it may be appropriate to consider costs and revenues across a wider range of relevant products and/ or markets.

3.35 In Ofcom’s view, therefore, the scope of the services in the relevant downstream market is not conclusive on the scope of the relevant margin squeeze test. However, it does provide; (a) a starting point for the consideration of which services should be included; and (b), guidance as to the possible effect of any alleged margin squeeze.

3.36 The following diagram illustrates the range of services both within the relevant market and certain other services which are related to those supplied in this market (e.g. narrowband unmetered internet access services) which could potentially be relevant for the margin squeeze analysis.

Figure 2 – Potential market segments within the retail internet access markets for scope of margin squeeze test

Note – ‘other metered’ includes 0870
3.37 Figure 2 demonstrates that the test could be undertaken across a number of different segmentations of the market, for example:

i) broadly (e.g. across all narrowband internet access services including unmetered and part-metered);

ii) narrowly (e.g. across a specific time of day for a specific product);

iii) broadly by service but narrowly by time of day (e.g. all metered services at a specific time of day); and

iv) narrowly by service but broadly by time of day (e.g. 0845 metered products only across all times of day/week).

3.38 In considering the relevant services across which to undertake the margin squeeze test, Ofcom has taken into account the following factors:

i) the scope of the relevant market;

ii) the ability of an equally efficient competitor to match the specific pricing proposal;

iii) The level of granularity of company reporting;

iv) the impact of non-0845 products; and

v) whether there are differences in usage profiles between different retail services and customer groups.

3.39 Ofcom’s conclusion is that the relevant scope of the margin squeeze test in this case should be across all narrowband metered internet access products (excluding part-metered products) at all times of day. Ofcom’s reasoning behind this conclusion, taking into consideration each of the factors above, is discussed in sections 3.40 to 3.50 below.

The scope of the relevant market

3.40 The relevant market was discussed in sections 3.20 to 3.23 above and, for the purposes of this investigation, the downstream market was assumed to be narrowband metered internet access services. As a starting point for analysis, therefore, all services supplied within this market should be considered in the scope of the margin squeeze test.

The ability of an equally efficient competitor to match the specific pricing proposal

3.41 In considering the relevant scope of any margin squeeze test, it is important to consider the ability of competitors to match the vertically integrated undertaking’s pricing structure. That is, if there are constraints to equally efficient ISPs pricing and recovering cost in the same manner as BT’s ISP, there may be reason to consider a narrower test for any margin squeeze. For example, if an ISP operated a viable business model supplying 0845 evening calls only, there may be reason, given BT’s change to revenue share arrangements for 0845 evening calls following the July 2003 price change, to consider the potential for margin squeeze to occur on 0845 evening calls alone. It may also be necessary to consider whether any ongoing margin squeeze
may, in fact, already prevent competitors from offering such alternative business models in the first instance.

3.42 However, in this case it is clear that both BT and its competitors supplying narrowband metered internet access services, do so across 0845 and 0870 number ranges and at all times of the day and week. This is due to the substantial economies of scope in supplying services at all times. While the exact relationships between costs and cost drivers is not always clear, most of the large cost items are either common across times of day (e.g. marketing) or relate to peak usage (e.g. infrastructure costs) such that once capacity is installed it is available for use at all times.

3.43 Therefore, in principle, and absent any existing margin squeeze, there do not appear to be reasons why competitors could not match BT’s proposal in lowering retail prices for the services identified at particular times of day. Furthermore, there is no reason why any competitor would seek to supply services at only specific times of day given the commonality of costs involved.

3.44 In addition, the common costs involved in supplying different services or supplying services at different times of day may well render the question of the appropriate scope largely meaningless. This can be shown by considering the difference between long-run incremental costs (LRIC) for individual services at different times of day, and the LRIC for the service across all times of day.

3.45 Taking the case of LRIC for different times of day, the individual LRICs of different time periods may well be quite low, and not that different from period to period, because of the large proportion of costs shared between them. For example, a specific marketing campaign for the metered service will almost certainly be shared and thus form no part of LRIC for the service at a particular time of day. However, these costs will be common to the service at all times of day, and thus a ‘combinatorial’ LRIC test for the service at all times of day would include these costs. A similar argument may well apply for particular services in comparison to a broader grouping of services (e.g. consumer or business).

3.46 Given the above, Ofcom considers that the ability of competitors to match BT’s pricing proposal in terms of the range of services offered supports an argument that any margin squeeze test should not be restricted to specific time of day or week.

The level of granularity of company reporting

3.47 BT appears to manage its narrowband metered internet access services at far less granular level than “by service, by time of day”. In particular, cost information appears to be first aggregated and managed at the level of business or residential narrowband services. Therefore, profitability is not reported by time of day (because costs are not incurred or recorded by time of day) or by particular service (i.e. with no split between metered and unmetered). This is consistent with practices at competitor companies. One competitor has provided information indicating that it manages its business (and reports an EBITDA\(^2\) profit measure) as an ‘0845’ business – across

\(^2\) Earnings before interest, tax, depreciation and amortisation.
residential and business users and at all times of the day / week, whilst other competitors do not separately report metered and unmetered products. Given that the evidence demonstrates that ISPs themselves do not prepare internal financial management information split by time of day and week, Ofcom considers that this further supports the argument for not restricting any margin squeeze test to particular times of day.

The impact of non-0845 products

3.48 Ofcom is aware that whilst this investigation specifically concerns the impact of retail price changes in 0845 and 0870 number ranges, the narrowband metered internet access market defined above includes traffic to other number ranges, most notably 0844 and 0871. Information from the accounting information supplied by BT and its competitors, however, demonstrates that within the narrowband metered internet revenue stream, less than 0.5%24 of revenue relates to non-0845 number ranges. This suggests that a margin squeeze test across specific products split by number range would not be relevant, given the overwhelming significance of 0845, and supports a conclusion that the relevant scope is across all narrowband metered internet access products.

Differences in usage profiles

3.49 Differences in end user usage profiles might be relevant if BT’s profile showed a much higher share of its traffic supplied to either business or residential users, or at particular times of day, such that it might be considered to be behaving strategically in lowering evening or weekend prices to the detriment of its competitors with alternative usage profiles. For example, if BT’s ISP had relatively lower volumes of users for 0845 evening calls than its competitors, then the effect of a reduction in 0845 evening ISP revenue shares would be disproportionately greater on those competitors. An argument could be made that a narrow test was appropriate if it was clear that BT was using its stronger position in one segment of the market (e.g. 0845 daytime users) to remove competitors in another segment (e.g. 0845 evening users).

3.50 If BT’s narrowband metered internet access ISP services were skewed towards serving business customers rather than residential, then it might be the case that BT concentrated on daytime rather than evening and weekend users. Accordingly, there might then be a concern that BT had sought to reduce evening and weekend revenue shares. From the data Ofcom has assessed in reaching its conclusions in this case, however, BT’s narrowband metered internet access business products would appear to be of only modest significance, at around [X]% of narrowband metered revenues in total [X]%25. There is also no reason to suspect that BT has any advantage in attracting residential customers predominantly using daytime service as opposed to evening or weekend services. This is supported by evidence in figure 3 below that demonstrates the usage profiles of BT and its competitors on the 0845 number ranges are very similar. One ISP has a skew towards daytime calls but, in any case, this business model would give that competitor a stronger

24 Responses to notices under section 26 of the Act

25 Data supplied in BT response to notice under section 26 of the Act
position in daytime calls and so the reduction in revenue for evening and/or weekend calls is proportionately less significant to it.

**Figure 3 ISP traffic time of day comparison (0845)**

![Figure 3 ISP traffic time of day comparison](image_url)

*Source: BT and ISP responses to notices under s26 of the Act*

3.51 Having considered the above, Ofcom considers that the scope of the margin squeeze test should be the same as the relevant market, i.e. across narrowband metered internet access.

**Type of margin squeeze test**

3.52 While this is an own-initiative investigation opened by OfTEL and taken forward by Ofcom, it is pertinent that the June and July 2003 price cuts were the catalyst for the industry disquiet and representations to OfTEL which led to the opening of the investigation. In other words, prior to the June and July 2003 price cuts, there were no allegations of a margin squeeze being levied at BT. This suggests that what is required is an examination of the impact on the margin (between wholesale input charges and retail prices) resulting from the price cut, and whether this was sufficient post the price cut to result in BT’s downstream internet access service failing to recover sufficient margin (however assessed) to recover its relevant costs.

3.53 The Analytical Framework Paper developed during OfTEL’s investigation into the pricing of retail consumer broadband concluded on 20 November 200326 (the Analytical Framework Paper), identified two methods available to assess profitability in the context of a predatory pricing or margin squeeze investigation:

i) a forward-looking analysis, which would typically be conducted on a discounted cash flow (DCF) basis over a number of years, such as commonly used in business plans (and which might also include historical costs and revenues in recent periods); and

ii) an assessment of historical financial accounting data, which may cover single or multiple periods and may include adjustments so that the accounting data provides a reasonable measure of economic costs.

3.54 The relevance of these approaches largely depends on the circumstances at hand. The question that Ofcom has addressed in this investigation relates to whether BT’s narrowband metered internet access service would be profitable, given the price reductions in June 2003.

3.55 The historical accounting approach appears better-suited to answering the relevant question in this investigation. The reasons why a historical accounting approach might be preferred in these circumstances include:

i) The business is relatively mature and, indeed, the market for narrowband metered internet services may even be in a declining phase. In an immature business where subscriber numbers and unit costs are changing rapidly questions of start-up losses, data volatility and limited data availability tend to support the use of a DCF approach. In this case, however, losses at this mature stage of the product life would not be consistent with normal competitive behaviour. Also, accounting data is available for a number of years making this approach viable for this investigation; and

ii) Adjustments can be made for the most significant accounting distortions by considering questions of economic cost paths over time\(^{27}\).

3.56 These reasons are recognised in the Analytical Framework Paper:

Paragraph 85 - “Another approach would be to analyse the historical financial accounting data and apply adjustments to seek to remove the accounting distortions. For example, certain costs might be capitalised so that their recovery is allowed for over a period of time, not just in the period in which they are incurred. In other words, the adjustment would alter the path of cost recovery that is (implicitly) specified in the accounting data (even if only a single period’s cost is assessed). The underpinning rationale for the adjustments is that it is reasonable or appropriate for the cost path to be altered in this way.”

Paragraph 127 – “In many circumstances either no adjustments would be needed or the required adjustments would be relatively straightforward. For example, it is often the case that for mature services there are not significant accounting distortions in which case it would be appropriate to conduct a price-cost test in a single year, by comparing the price with the average accounting cost in the current year.”

3.57 One suitable method by which to analyse profitability of a specific time period such as before and after the 18 July 2003 price changes would be to assess

\(^{27}\) Economic cost paths are discussed further in Annex A paragraphs A.25 to A.29.
BT’s margin at 17 July 2003 as a starting point. This margin could then be flexed post 18 July 2003 by tracing through the effect of the retail price fall in the revenue shares ascribed to ISPs post 18 July 2003 and any other relevant changes in the costs and revenues for that period. This approach would be an example of the historical accounting approach to the assessment of margin squeeze.

3.58 Based on the above, Ofcom concluded that the most appropriate approach in this case was to test the EBIT\textsuperscript{28} profit margin from BT’s narrowband metered internet access products extracted from historical accounting information and with appropriate adjustments. The adjustments are discussed further in paragraph 3.72 below.

3.59 It was also necessary to consider the relevant cost standard for use in the historical accounting approach. That is, profitability must be assessed relative to a particular cost benchmark or ‘cost floor’. In the Analytical Framework Paper\textsuperscript{29}, it was suggested that there were two relevant cost floors – average variable cost (AVC) and long-run average incremental cost (LRIC). However, in practice, the practical difference between the two was likely to be minimal when viewed over a similar time horizon (that is, all costs become variable in the long run).

3.60 In this case, Ofcom considers that LRIC is the relevant cost standard because the relevant question is whether BT Openworld’s price could be matched on a sustainable basis by an equally or more efficient retail competitor. There is no suggestion that BT’s price change is a special offer or otherwise limited in duration. For a price to be sustainable, it would need to be sufficiently high for the firm to recover all of its costs (including capital costs) over the long run. This makes LRIC a particularly appropriate measure.

3.61 Ofcom also notes that the use of long run costs is consistent with the European Court of Justice decisions in Napier Brown – British Sugar\textsuperscript{30} and National Carbonizing Company\textsuperscript{31} which considered the ability of competitors to survive in the long-term.

**Source Data**

3.62 Ofcom had access to a variety of evidence obtained during this investigation using powers under section 26 of the Act. Core to the assessment of margin squeeze was BT’s accounting information which was obtained for the financial years ending on each of 31 March 2002, 31 March 2003 and 31 March 2004 (FY02, FY03 and FY04 respectively). Much of the analysis took place in FY04 and where necessary data for FY04 was prepared based on actuals to December 2003 and forecasts for the remainder of the year. In its investigation Ofcom utilised two different sets of accounting information, BT’s regulatory

\textsuperscript{28} Earnings before interest and tax

\textsuperscript{29} http://www.ofcom.org.uk/static/archive/oftel/publications/comp_bull/cases/cw_613a.pdf

\textsuperscript{30} Paragraphs 65 to 66 of Napier Brown – British Sugar (see footnote 18)

\textsuperscript{31} Paragraph 7 of National Carbonizing Company, Commission Decision 76/185 OJ [1976] L35/6
financial information (regulatory financial statements) and management accounting information (management accounts).

3.63 The regulatory product group financial statements that were utilised were for regulatory product groups P357 (Openworld Narrowband) and P344 (Virtual Internet Service Providers), with data provided for FY02 and FY03. BT amalgamated regulatory product group P344 into product group P357 for reporting purposes in FY03. The regulatory financial statements for these product groups include the revenues, costs assets and liabilities for all of BT’s narrowband internet access products, both metered and unmetered. The regulatory financial statements were prepared on a fully attributed cost basis as set out in BT’s detailed attribution methods, and were audited to a ‘properly prepared in accordance with BT’s Accounting Documents’ standard. Audited results for FY04 have not yet been published by BT.

3.64 Management accounting information was also available for BT Openworld’s narrowband ISP business for FY02, FY03 and, at the time of analysing the data, part of FY04. This information is prepared on a slightly more disaggregated basis, splitting the narrowband business between consumer and business products on a month by month basis. The management accounts do not distinguish between metered and unmetered product groups. The management accounts tend to focus on costs falling within the scope of authority of the management of that particular business division or department (i.e. they are ‘controllable’ by the actions of a specific set of managers) and are unaudited.

3.65 Ofcom considered each of the data sources and decided to base its investigation on the management accounting data, supported by information from the regulatory accounts.

3.66 This was primarily due to the ability of the management accounts to explain movements between years in the individual cost items (the cost stack), as during the investigation it became a significant issue for Ofcom to properly understand the cost trends and any one-off accounting effects apparent in the data. The accounts data showed an improvement in the profitability in the consumer narrowband management accounts EBIT from a loss of £[>X] million for FY02 to a profit of £[<X] million for FY03 and, in the relevant regulatory financial statement product group, EBIT, from a loss of £[>X] million for FY02 to a loss of £[<X] million for FY03.

3.67 The availability of monthly information and variance reports between budget and actual figures for the management accounts provided documentary evidence for expected and unexpected changes in the cost trends of the business over time. Such evidence was not available from the regulatory accounts. The results of this analysis is set out in Annex A paragraphs A.20 to A.22.


33 This comprises regulatory product groups P357 and P344 in FY02 and P357 in FY03.

34 Stated after charging all attributed common costs for metered and unmetered services.
A high level reconciliation was performed between management and regulatory accounts in order to obtain comfort that the two data sources were not inconsistent. The management and regulatory accounts are prepared for different purposes. The purpose of the regulatory accounts is to inform whether BT is compliant with its regulatory obligations, as a result of which the regulatory accounts produced by BT take account of all costs of a product, both direct and indirect. The management accounts focus on controllable costs. By comparing the management accounts to the regulatory accounts, Ofcom sought to ensure that all relevant costs were being included in the management accounts, and that at the gross profit level, the management accounts revenues and costs reflected the retail price and "transfer charges" for network infrastructure at BT’s published tariffs. Any material differences arising from the reconciliation were incorporated into the margin squeeze assessment as set out in Annex A paragraphs A.7 to A.9.

In the analysis below the starting point chosen is the FY03 accounts. The use of FY03 management accounts allowed for comparison with the audited FY03 product group financial statements, as the audited FY04 product group financial statements are not yet available. In addition, the FY03 cost base (adjusted as set out below) appeared better suited to assessment of the margin in May and June 2003 than either monthly management accounts (which may contain cost timing problems) or full year estimates based on forecasts for the remaining months of FY04. The results for BT’s narrowband metered internet access business as extracted from the management accounts for FY03 were turnover of £[>£]m and EBIT of £[>£]m, a net margin of [>£]%.

Analytical Strategy

Initial indications from BT based on the management accounts for FY03 and FY04 were that margins were strongly positive for the narrowband internet access businesses and that detailed accounting data at a level sufficiently granular to assess the specific market identified above was not normally reported, in either the management accounts or regulatory product group financial statements.

Given the suggestion of strong positive margins mentioned above, Ofcom adopted a proportionate but robust analytical strategy involving two elements. Firstly, Ofcom required BT to produce accounts for the narrowband metered internet access services and to justify only the assumptions material to the analysis (such as source data and allocation methodologies). Secondly Ofcom adopted assumptions or interpretations of other data (where necessary) under a ‘bias to reduce margin.’ This means that where an issue was open to interpretation or an assumption had to be made, an assumption with a bias to reduce the margin (i.e. to reduce revenue (or increase costs) and, hence profitability), was made in Ofcom’s analysis.

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35 The starting point for the analysis, i.e. before the July 2003 price change - see paragraph 3.57

36 Cost timing problems could include seasonality in costs, or misallocation of costs between periods.
Analytical Framework

3.72 Based on the above, the analysis focused on a detailed review of the management accounting information, including understanding of the BT Openworld narrowband business gained from the budget information referred to in paragraphs 3.62 to 3.69 above. Within this, the FY03 management accounts were taken as the base year (as set out in Table A1 in Annex A). A series of adjustments were made to bring the data into line with the revenue and cost base likely to be experienced prior to the July 2003 price changes on an economic basis, so as to estimate the FY04 results on an economic basis as if the July 2003 price change had applied from 1 April 2003. These adjustments are listed below:

i) Correction of errors;

ii) Adjustment to reconcile with regulatory accounts;

iii) Impact of July 2003 price changes;

iv) Adjustment to base case to achieve recurring cost base;

v) Roll forward of cost trends;

vi) Adjustment to economic cost path; and

vii) Adjustment to LRIC.

The effect of each of these on the profitability of the business is set out briefly below, with the detailed explanations of each step taken in Ofcom’s analysis set out in Annex A.

3.73 The summary impact on profitability of BT’s provision of narrowband metered internet access after each adjustment is shown in Figure 4 below. This chart shows profitability of £[>]<m for the financial year FY03 derived from the management accounts (the base case), together with each of the adjustments listed above to arrive at the profitability figure after adjustments. It is this post adjustments profit that we are assessing in the margin squeeze test. The chart shows that the combined impact of positive changes to profit from correction of errors, the impact of cost trends and LRIC adjustments and negative changes to profit from the other adjustments, is an increase in profit from £[>]<m to £[>]<m.
Return on turnover assessment

3.74 The summary impact on profitability of BT’s provision of narrowband metered internet access after each adjustment is made and taking into account the impact of the July 2003 price change is profitability of £[<]m, from a base case of financial year FY03. It is this post adjustments profitability figure that we are assessing in the margin squeeze test.

3.75 Ofcom’s analysis, as set out in detail in Table A1 in Annex A, shows that BT’s return on turnover (on the basis of profitability of £[<]M), before LRIC adjustments but after the impact of the July 2003 price changes has been taken into account, is [<]%. With adjustment to a LRIC cost standard increasing this margin by between [<]% and [<]%, this suggests a return on turnover in the range of [<]% to [<]%. Paragraphs 3.76 to 3.80 below discuss why return on turnover may be an appropriate proxy for measuring profitability in this case.

Accounting profit measure

3.76 The measure of profit or loss in a DCF analysis is clear – it is the net present value. However, when considering historical approaches, the relevant measure is less clear. One commonly used measure is return on capital employed, which is interpreted to indicate a loss if it is below the risk-adjusted cost of capital.

3.77 BT Openworld’s narrowband metered business primarily buys in most of the services that it offers, including call origination and metered internet termination. Bought-in services account for more than [<]% of total narrowband metered costs based on BT’s FY03 management accounts.
3.78 Reflecting this, the capital employed would be expected to be small or negative relative to turnover, and much of the capital employed to be represented by working capital. Working capital can be highly variable.

3.79 In this case, no balance sheet information was available for the metered business alone, however information was available from the regulatory product group financial statements that included the retail metered internet access activities. The information for product group P357 (Openworld Narrowband) for FY03 showed mean capital employed of less than £[\times] million on turnover of £[\times] million, or [\times\%] of turnover. This mean capital employed figure was made up of a positive contribution of £[\times] million for the net replacement cost of fixed assets and a negative £[\times] million contribution for working capital and provisions for liabilities and charges. Ofcom considers that the mean capital employed for the metered business is likely to be a similar or lower percentage of turnover as the narrowband business as a whole due to the substantial similarities between the business models and practices and given that much of the fixed capital in the regulatory accounts is likely to be an allocation of common assets.

3.80 For these reasons, Ofcom considers that a measure based on capital employed would be inconclusive in this case (given that fixed capital is low and working capital is negative). Ofcom believes, however, that return on turnover may be a reasonable proxy in this case as a measure of return in the context of the investigation.

3.81 The use of return on turnover as a proxy for a reasonable rate of return is consistent with discussion set out in paragraphs 1.24 to 1.27 of the OFT economic discussion paper ‘Assessing profitability in competition policy analysis’ July 2003.  

3.82 A similar view on profitability measures was taken by the Monopolies and Mergers Commission (MMC) in its report on BT, where instead of using return on capital employed, the MMC calculated return on turnover for BT’s call business. The MMC considered that the reason this approach could be applied to BT’s call business was the ‘very high proportion of turnover accounted for by bought-in services’.

3.83 Ofcom has considered the capital employed information available from the regulatory financial statements including the unpublished regulatory product group financial statements, and derived some equivalent return on turnover thresholds.

\[http://www.oft.gov.uk/nr/rndonlyres/c410132c-f322-47cd-8afa-38b13247a0ae/0/oft657.pdf\]

\[British Telecommunications Plc: A report on a reference under section 13 of the Telecommunications Act 1984 on the charges made by British Telecommunications Plc for calls from its subscribers to phones connected to the networks Cellnet and Vodafone. MMC, 21 January 1999. The MMC concluded (paragraph 2.113) that calculating a return on net assets employed was an unreliable basis for setting a reasonable return as the mean net assets employed in call activities are not only relatively small but they consisted for the most part of working capital items which could fluctuate considerably from year to year.\]

\[Paragraph 2.116. In the case of BT, ‘over 80% of the retail price to consumers represents the cost of bought in services’ (Paragraph 2.112).\]
The regulatory product group financial statements for BT’s narrowband internet access business show a mean capital employed that is \( [\times \%] \) of turnover. Taking a Weighted Average Cost of Capital (WACC) (or required return on capital) of 13.5\%, this would be equivalent to a threshold of \( [\times \%] \) for a rate of return on turnover. Ofcom has also considered a sensitivity to this calculation, considering the impact of a higher capital employed number. In this sensitivity test, all of the net replacement cost of fixed assets for the narrowband business is allocated to metered, and the working capital is set to zero instead of being negative. This gives a mean capital employed that is \( [\times \%] \) of metered revenue, which (applying a WACC of 13.5\%) would be equivalent to a return on turnover threshold of \( [\times \%] \).

The MMC concluded that a return on turnover of 1.5\% would be appropriate for BT’s calls-to-mobiles activity (see footnote 38). In contrast, in its report on Scottish Hydro-Electric plc a return of 0.5\% was adopted.\(^{40}\) The MMC considered that ‘the potential for competition from new operators and the speed with which it could impact on BT are factors which we believe differentiate BT’s calls to mobile activity from the circumstances of Scottish Hydro-Electric’.\(^{41}\)

In assessing an appropriate return on turnover threshold in the context of this investigation, Ofcom has also considered a variety of comparator companies that might be expected to provide a reasonable proxy for the normal profit that BT’s narrowband metered internet access business may be expected to earn. Criteria identified by Ofcom included having a similar function, proportion of bought-in services, capital structure and barriers to entry as BT’s narrowband metered business. A summary of Ofcom’s comparator companies is detailed in Annex B.

Ofcom considered other ISPs. Given the complaints regarding margin squeeze and the different scales of operation, rival ISPs could not be considered to be good proxies. Other companies in the telecoms sector were then considered, but the majority of these have a much higher fixed asset base (relying on their own infrastructure) or barriers to entry (lead times to build network or availability of authorisations/ licenses.) However, Ofcom did identify two UK communications providers with high proportions of resale activity, BT Retail and Virgin Mobile, with EBIT margins of 10.6\% and 14.6\% respectively for the most recent financial year.

Ofcom has also considered other areas of economic activity that involve retail services, including major high street retailers and supermarkets. Ofcom considered such companies within the FTSE-100 and within the 100 largest private companies in the UK. Retailers and supermarkets have very different capital structures to narrowband metered internet access, but their return on turnover ranged from 1.5\% to 16.8\% with an average of 6.1\% (weighted by turnover) or 7.0\% (unweighted).

Ofcom notes that the results of the margin squeeze analysis set out at paragraph 3.75 above shows a return on turnover for BT’s narrowband


\(^{41}\) Paragraph 2.117
metered internet access services of $>\%$\textsuperscript{42}. These results demonstrate a return on turnover significantly in excess of the range of comparative threshold indicators discussed in paragraphs 3.84 to 3.88 above. Consequently, Ofcom has not found it necessary to conclude definitively on an appropriate return on turnover threshold. Given the margin by which BT’s narrowband metered internet access services exceeds the range of comparator thresholds, however, Ofcom has confidence in using return on turnover as a reasonable proxy on which to base its conclusions on profitability and, therefore, any allegation of anti-competitive margin squeeze.

Recovery of Common Costs

3.90 As noted at paragraph 3.61, the relevant cost standard applied in assessing the existence of a margin squeeze in this case is LRIC. This excludes certain costs which are common across a number of products and businesses and which arise due to the existence of certain economies of scope within BT.

3.91 In order to be profitable as a whole, these common costs must be recovered by the various businesses and services that share them. However, this investigation concerns the pricing (and related costs) of a single product only and the impact of specific price changes on the profitability of that product. Hence, the issue of recovery of common costs is not of concern to Ofcom’s assessment in this investigation, given that the issue is one of potential margin squeeze in narrowband metered internet access alone, following the June and July 2003 price changes.

3.92 In any case, Ofcom notes that in the analysis above, BT’s narrowband metered products are profitable before the LRIC adjustments are taken into account with a margin of $>\%$, significantly above the range of comparative threshold indicators.

3.93 In addition, Ofcom considered those costs with components arising from services shared with other parts of the BT Group. Whilst not concluding on the sufficiency of these margins to recover appropriate common costs, Ofcom notes from its analysis of the cost stack that the level of shared costs is relatively small in most cases and also notes that BT Openworld narrowband metered represents only a small part of the BT group. Ofcom notes that BT Group plc made an EBIT from continuing activities of £2,861\textsuperscript{43} million and BT Retail an EBITDA from continuing activities of £1,433 million in the year to 31 March 2004. Ofcom considers that this provides evidence that there is considerable scope for recovering common costs across the wider products and business of the BT group.

Assessment of data from other ISPs

3.94 As part of Ofcom’s investigation, Profit and Loss data was also requested for the narrowband metered internet access businesses of four other communications providers, namely Brightview Group Limited, Wanadoo UK plc

\textsuperscript{42} Results after adjusting for correction of errors, reconciliation with regulatory accounts, cost trends and adjustment to economic cost paths, but before adjusting for LRIC.

\textsuperscript{43} See BT Group plc Annual Report and Form 20-F 2004
(formerly Freeserve.com plc), Tiscali UK Ltd and Virgin.net. The primary reason for requesting this data was to assist in assessing the completeness of the cost stack that BT provided.

3.95 Whilst the data submitted was not as detailed as that provided by BT, and was in general not in a consistent format or to a consistent scope between the parties, it was possible to draw some high level conclusions on the cost stack, unit costs and margins from the data provided.

3.96 Ofcom compared these ISPs’ costs with those of BT in order to identify any areas of substantial difference. As the ISPs have different numbers of customers to BT, costs were compared on a per minute rather than absolute basis. Ofcom found that although the unit costs were not identical, at a high level there was nothing to suggest that these other ISPs’ costs were inconsistent with BT’s costs or, alternatively, that BT may have understated its costs.

3.97 At the gross margin level, all ISPs providing data showed margins in line with BT’s, showing no margin squeeze at that level. The data also showed some net margins that were lower than BT’s, but that were all positive prior to the 1 June 2003 price changes. Taking into account the impact of the price changes, one ISP would report a small negative net margin whilst another was not immediately impacted by the price changes [►].

3.98 Ofcom considers that this data is consistent with a finding of profitability based on BT’s own data for two main reasons. Firstly, these margins are before any adjustments of the sort discussed with respect to BT’s data above. For example, the consideration of LRIC adjustments acts to increase margins by between [►] and [►] percentage points, enough to bring all the ISP’s net margins positive. Secondly, it is to be expected that economies of scale and scope would lead to BT experiencing relatively lower overheads.

Conclusion

3.99 Following the analysis set out above, Ofcom notes that on the basis of return on turnover, which Ofcom considers to be a reasonable proxy for the profitability of the business in this case, after the 18 July 2003 price reduction BT’s narrowband metered ISP business remains well above the range of identified comparator thresholds, at which point Ofcom may begin to have concerns over the ongoing profitability of the business. Given that on Ofcom’s LRIC adjusted calculation BT’s return on turnover is estimated somewhere between [►] and [►], Ofcom concludes that the effect of the 18 July 2003 price change does not represent an anti-competitive margin squeeze between the wholesale input price ISPs are required to pay to BT Wholesale and the retail prices charged in the downstream narrowband metered internet access market.

3.100 Accordingly Ofcom has concluded that BT’s conduct is not caught by the Chapter II prohibition or the prohibition in Article 82 and, therefore, Ofcom has no grounds for action.
A.1 In Ofcom’s analysis of the management accounting information a review of data was undertaken, including understanding of the business gained from budget information. Within this, the FY03 management accounts were taken as the base year, and a series of adjustments were made to bring the data into line with the revenue and cost base expected immediately following the price change, on an economic basis. These adjustments are listed below:

i) Correction of errors;

ii) Adjustment to reconcile with regulatory accounts;

iii) Adjustment to base case to achieve recurring cost base;

iv) Impact of cost trends;

v) Adjustment to economic cost path; and

vi) Adjustment to LRIC.

A.2 This Annex sets out Ofcom’s approach and the specific detail of each adjustment made. Adjustments of a magnitude of less than £100,000 are not discussed as they are not material to the analysis, although a small number were made. All adjustments are summarised in Table A.1 below.
Table A.1 – Adjustments to management accounts base case for margin squeeze analysis (£ 000s)

[...]

32
Correction of errors

A.3 Ofcom has conducted a review of all the data provided by BT, including cross referencing alternative data sources, such as the regulatory accounts, and an assessment of the appropriateness of attribution methodologies used by BT to allocate a proportion of costs common to a number of services to the service in question - narrowband metered internet access. Where Ofcom had concerns, these were followed up with BT and either clarified or an adjustment made. As a result, there are two adjustments that Ofcom views as errors in the management accounts (the base data) supplied, and Ofcom has (following further discussion with BT) adjusted the base data to take account of them.

A.4 The first impacts the cost line ‘Other’ directly, where Ofcom now uses a higher allocation percentage compared to that suggested by BT for allocating Other costs to narrowband metered internet access. The higher allocation is based on the number of active customers.

A.5 The second correction impacts costs by eliminating costs of a service that was not a pure metered internet access service and for which the revenue had not been included by BT. This ensures a consistent treatment of costs and revenue in Ofcom’s analysis. These adjustments in aggregate account for a £\[\]m reduction in cost base from the base case.

A.6 During this investigation, Ofcom highlighted a potential error contained in the management accounts for FY03, acting to reduce the margin in the calculation of port costs. BT subsequently considered that a different and more detailed allocation methodology which would result in lower port costs was more appropriate. Consistent with the analytical strategy, Ofcom has chosen to use the higher figure, but notes that using BT’s alternative would reduce base case costs by £\[\] million, or \[\] percentage points of final return on turnover.

Adjustment to reconcile with regulatory accounts

A.7 A high level reconciliation was performed between management accounts and regulatory accounts in order to obtain comfort that the two data sources were not inconsistent and that all relevant direct costs were included. FY03 costs for the Narrowband business were £\[\] million per the management accounts compared to £\[\] million per the regulatory accounts, resulting in a difference to be explained of £\[\] million. BT identified 9 specific items that make up nearly 95% of this difference (£\[\] million). The remaining unidentified difference of just over 5% (£\[\] million) is not considered material to the results of Ofcom’s analysis.

A.8 In summary, of the £\[\] million, Ofcom concluded:

i) £\[\] million (including the unidentified £\[\] million) was not adjusted for as the cost items were not considered relevant for various reasons, including that the cost related to products that were not metered internet access products. This is consistent with the treatment of the related revenue;

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44 Includes legal costs and third-line support
ii) £[\times] million was not adjusted for, as the cost items were considered to contain minimal incremental costs or, on the other hand, substantially represent common costs which would be fully removed in the LRIC adjustments. Examples of this are BT Group overheads and a share of BT’s (then) license fee; and

iii) £[\times] million was adjusted by allocating a relevant proportion to the metered business. The allocation basis used varied by item depending on the nature of the cost. This resulted in a total adjustment (increase) to metered costs of £[\times] million before LRIC adjustments.

Table A.2 Summary of adjustments to reconcile with regulatory accounts (£000)

<table>
<thead>
<tr>
<th>BT cost categories</th>
<th>Adjustment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other</td>
<td>[\times]</td>
</tr>
<tr>
<td>Marketing</td>
<td>[\times]</td>
</tr>
<tr>
<td>Team costs</td>
<td>[\times]</td>
</tr>
<tr>
<td>Depreciation</td>
<td>[\times]</td>
</tr>
<tr>
<td><strong>Total reduction in profit</strong></td>
<td>[\times]</td>
</tr>
</tbody>
</table>

A.9 No adjustments were considered material in respect of differences in wholesale costs charged in the regulatory and management accounts.

Impact of July 2003 price changes

A.10 Given the overwhelming majority of narrowband metered internet access services and their revenues operate behind 0845, Ofcom considered the inclusion (or otherwise) of revenues for non-0845 services (including 0844, 0870 and 0871) would not be material to the outcome of any margin squeeze test. Accordingly, Ofcom proceeded with its analysis of profitability of BT’s ISP based on the impact of the 0845 price change alone. That is, in considering the effect of the July 2003 price changes and their impact on ISP revenue shares and, ultimately, profitability, Ofcom has directly assessed the impact (reduction) on revenues received for 0845 services, but has not included similar reduction for alternative services on 0844, 0870 and 0871. Given that non-0845 traffic represents less than 0.5% of revenue in total for narrowband metered internet access services, Ofcom considered that the impact of a lower revenue share on 0844, 0870 and 0871 would not be material to Ofcom’s conclusions.

A.11 Adjustment to the source data involves calculation of the effect of the reduction in ISP revenue share payments received by BT Openworld as a result of BT’s 18 July 2003 price changes. Ofcom calculates a [\times]% reduction in revenue share for FY04 as set out below. The net effect of this reduction would be to reduce profit in FY04 by £[\times].

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45 See paragraph 3.48.
Table A.3 Change in revenue share

<table>
<thead>
<tr>
<th>Port</th>
<th>Band</th>
<th>Payback rate (pence per minute)</th>
<th>% Change</th>
<th>Port weighting</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>FY03</td>
<td>Post</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>18/07/03</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surfport</td>
<td>Large</td>
<td>[××]</td>
<td>[××]</td>
<td>[××]</td>
<td>[××]</td>
</tr>
<tr>
<td>Webport Elite</td>
<td>Average of large and very large</td>
<td>[××]</td>
<td>[××]</td>
<td>[××]</td>
<td>[××]</td>
</tr>
<tr>
<td>Weighted average</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>[××]</td>
</tr>
</tbody>
</table>

A.12 This is a comparison of the weighted average revenue share in FY03 compared with the post-18 July 2003 reduction in revenue share. It is a roll-forward of the FY03 revenue figure rather than a calculation of the fall in revenue share that occurred on 18 July 2003. This latter fall is approximately 10.4% for Surfport and 10.2% for Webport Elite, compared to an NTS outpayment reduction of 11.4%. The difference between the [××]% reduction in weighted average revenue share calculated by Ofcom and the reduction in revenue share of approximately 10% on 18 July 2003 is due to a revenue share increase that took place during FY03.

Adjustment to base case to achieve recurring cost base

A.13 During Ofcom’s review of the data provided, Ofcom has considered whether there are any one-off or otherwise abnormal costs or revenues in the base case data being used for the analysis. Inclusion of such abnormalities in the final profitability would give a result that did not accurately reflect profitability based on BT’s recurring cost base for FY04. Special attention was paid to explanations of why, in some cases, costs fell between FY02 and FY03. Examples of such falls include the impact of reversals of prior year accruals, one off contract costs or discounts that would not be expected to recur, or the impact of specific provisions, for example, a one-off large bad debt. Ofcom has reviewed each line-item and made adjustments for one-off items in Revenue, Helpdesk, Other, Sales Commission and Depreciation. The purpose of this is to ensure that the base case data represents as closely as possible BT’s recurring cost base.

A.14 The Narrowband business has three main revenue streams: metered, unmetered and other. As the costs relating to ‘other’ revenues are part of the cost pool of the Narrowband business, some of these will implicitly have been allocated to the metered business as part of the allocation process. In order not to understatement narrowband metered margin, it is appropriate that either ‘other’ revenue is also allocated to the metered business or that the relevant costs are eliminated from the analysis. In discussions with BT it became apparent that any attempt to remove costs would be the basis of many subjective assumptions, and so an approach that made a corresponding adjustment to revenue was used.

A.15 In FY03, other revenue which was not explicitly metered or unmetered was £[××] million. This revenue was allocated to metered on the basis that the related costs had been allocated, as described in paragraph A.14. The result is an allocation to metered of £[××], which has been incorporated as an
adjustment. Ofcom notes that this is a relatively modest revenue increase, and even if no revenue was allocated to metered through this process (leaving the corresponding costs unadjusted) it would not affect the overall conclusion.

A.16 [...]. In order to arrive at a recurring helpdesk cost for FY03, Ofcom proposes to adjust costs upwards to take account of this, applying the allocation percentage for narrowband metered of [\(\times\%\)] to helpdesk costs to arrive at an upward cost adjustment of £[\(\times\)].

A.17 In the Other cost line, there is a one-off release of an accrual relating to [\(\times\)]. This accounts for an adjustment of £[\(\times\)] million.

A.18 Sales Commissions are a direct, product-specific cost, representing revenue share for the ‘Powered’ sector of BT’s narrowband business for the Consumer element, and an amount per product per new install charges for the Business element. The management accounts showed a fall in sales commission between FY02 and FY03 which reflects both an actual reduction in the overall cost and the reversal of a prior year provision for £[\(\times\)]m relating to [\(\times\)] and [\(\times\)] in the Powered business. As Powered is a metered product, Ofcom has adjusted for the whole of this amount, thus increasing metered sales commissions for FY03 by £[\(\times\)]m to £[\(\times\)] million.

A.19 In FY03 a platform relating to BT’s metered [\(\times\)] was written down fully as volumes were not as high as expected. Ofcom considers that the appropriate economic treatment for the write-down of [\(\times\)] would be to remove all costs of it, as it does not form an ongoing cost to be taken forward to FY04. This results in a £[\(\times\)]m reduction in depreciation to achieve the recurring cost base.

Table A.4 Summary of adjustments to base case to achieve recurring cost base

<table>
<thead>
<tr>
<th>BT cost categories</th>
<th>Adjustment</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue</td>
<td>[(\times)]</td>
<td>Revenue adjustment to match with the treatment of costs that do not relate directly to metered or unmetered revenue</td>
</tr>
<tr>
<td>Helpdesk</td>
<td>[(\times)]</td>
<td>[(\times)]</td>
</tr>
<tr>
<td>Other</td>
<td>[(\times)]</td>
<td>Principally the [(\times)] provision reversal</td>
</tr>
<tr>
<td>Sales Commission</td>
<td>[(\times)]</td>
<td>[(\times)] provision reversal</td>
</tr>
<tr>
<td>Depreciation</td>
<td>[(\times)]</td>
<td>Reversal of provision for [(\times)]</td>
</tr>
<tr>
<td><strong>Total reduction in profit</strong></td>
<td>[(\times)]</td>
<td></td>
</tr>
</tbody>
</table>

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46 [\(\times\)]% is the proportion of costs allocated to the narrowband metered business derived from the weighted average of the proportion of costs allocated to consumer narrowband and business narrowband.

47 A segment of BT’s consumer narrowband metered internet access business
Roll forward of cost trends

A.20 In line with Ofcom’s analytical framework of using the FY03 management accounts as a baseline for considering the margins (and hence profitability) available to the narrowband metered internet access business following the 18 July 2003 price changes, Ofcom considers it reasonable to take account of any material cost trends that were likely to change the cost base between FY03 and the period of analysis, i.e. post 18 July 2003. This is so that the cost base used in the analysis reflects properly the cost base experienced by BT following the 18 July 2003 price changes.

A.21 Having reviewed the information provided by BT, in particular the 2003/4 budget and BT’s responses as to actual cost savings achieved in 2003/4, Ofcom has identified two key areas in which changes to business practice have led to changes in profitability. These are:

i) changes to port costs through retail price changes and planned contention ratio adjustments (which adjust the number of ports provided per customer); and

ii) the full impact of revised Helpdesk costs.

Changes to port costs

A.22 On 30 April 2004, BT provided Ofcom with estimates of actual changes in port costs in FY04. Ofcom also understands that in FY04, the Surfport contention ratio [X%] by [X%], but the Webport contention ratio [X%]. In addition, the unit cost fell by [X%] for Surfports and [X%] for Webports. The combination of these factors led to the unit cost in pounds per port per month falling by [X%] for Surfports and [X%] for Webports. When these percentages are applied to the relevant FY03 metered port costs for Consumer, Business and Powered, the weighted average fall in port costs is [X%] (see Table A.5 below) or a roll-forward cost reduction of approximately £[X] million.

Table A.5: Weighted average change in port costs (%)

<table>
<thead>
<tr>
<th>Port</th>
<th>Band</th>
<th>% Change in port rental (see above)</th>
<th>% Change in port contention ratio</th>
<th>% Overall change in port costs</th>
<th>Port weighting</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surfport</td>
<td>Large</td>
<td>[X%]</td>
<td>[X%]</td>
<td>[X%]</td>
<td>[X%]</td>
<td>[X%]</td>
</tr>
<tr>
<td>Webport</td>
<td>Elite</td>
<td>Average of large and very large</td>
<td>[X%]</td>
<td>[X%]</td>
<td>[X%]</td>
<td>[X%]</td>
</tr>
<tr>
<td>Weighted average</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>[X%]</td>
</tr>
</tbody>
</table>

(Source: Ofcom calculations)

Revised Helpdesk costs

A.23 [X….] in FY03 was planned to provide significant cost savings. Ofcom has considered the timing and the magnitude of the savings. The fact that the forecast fall in FY04 helpdesk costs compared to FY03 is far greater than the fall from FY02 to FY03 leads Ofcom to believe that many of the benefits of
[<<...]] were achieved in FY04. BT demonstrated to Ofcom that [<<...]] became operational in approximately Q3 of FY03. The main feature of [<<...]] was [<<......]. [<<......], resulting in much of the transition occurring in the early part of FY04.

A.24 The decrease in unit cost over FY04 is estimated to be approximately 50%. This results in a roll-forward cost reduction of approximately £[<<] million.

Table A.6 Summary of adjustments for cost trends (£ 000)

<table>
<thead>
<tr>
<th>BT cost categories</th>
<th>Adjustment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Port Costs</td>
<td>[X]</td>
</tr>
<tr>
<td>Helpdesk</td>
<td>[X]</td>
</tr>
<tr>
<td>Increase in profit</td>
<td>[X]</td>
</tr>
</tbody>
</table>

Adjustment to economic cost paths

A.25 It is important to recognise that whilst costs may be incurred (and in some cases accounted for) in a particular period, their economic benefit may be felt over a longer time. For example, a subscriber acquisition cost may be incurred and accounted for as an operating cost at the point of acquisition, but the benefit would be realised over the customer’s lifetime. In addressing the issue of cost recovery over time it is the cost *paths* rather than solely the costs in an individual year which are important.

A.26 In principle, the economically appropriate path of cost recovery over time is the path of costs in a competitive market. Consequently Ofcom has reviewed BT Openworld’s cost stack and considered which adjustments to an economic cost path are necessary.

A.27 Ofcom’s analysis of BT’s cost stack identified five cost types where accounting costs might be expected to provide a poor approximation to economic paths of cost recovery. These are Port costs, Development, Sales Commission, Marketing and Depreciation. In addition, Ofcom’s analysis of BT’s costs identified certain one-off costs in respect of Helpdesk which were considered to have provided benefit to more than one period. The details of the adjustments deemed necessary to convert from the accounting cost path used in the management accounts provided to Ofcom for analysis and the economic path of costs necessary for regulatory assessment are discussed below. Ofcom notes that whilst certain other costs might have been expected to provide a poor approximation to economic paths of cost recovery, no material adjustments were identified from its analysis.

A.28 Ofcom also notes that data in the management accounts provided to it by BT only first came into being for the financial year 2001/2. Conversion from accounting to economic paths of depreciation would usually entail considering a number of periods prior to the year for which adjustment is to be made. Obtaining such data would have entailed a detailed and, in Ofcom’s view, disproportionate exercise which is inconsistent with Ofcom’s analytical strategy in this case. Consequently Ofcom has instead sought to bias its analysis so as to derive adjustments to convert data from accounting to economic cost paths so as to maximise the costs used in its analysis. Ofcom has also considered the impact of higher economic costs on the outcome of its analysis as sensitivities.
Consequently, and consistent with the analytical strategy for this investigation set out at paragraph 3.71, the adjustments made by Ofcom constitute broad estimates only.

**Port connection costs**

A.30 Port costs consist of both an initial charge for connection and an ongoing monthly rental charge. In order to make adjustment to port connection costs incurred, Ofcom considered whether an appropriate treatment to convert accounting data to an economic treatment would be to amortise one-off connection costs over the average life of the ports. The effect of such an adjustment would be to increase costs in FY03, as costs deferred from earlier periods (i.e. port connection charges from when the subscriber base was being built) are then included in Ofcom’s analysis of FY03 costs. However, BT advised Ofcom that in practice the number of new port connections is now relatively small and any amounts deferred in respect of new ports would likely not be materially different from the amount amortised in respect of prior periods. Consequently Ofcom does not consider that such an adjustment would be material to its assessment.

**Development costs**

A.31 Expenditure on development costs is not driven by customer numbers, nor is it consumed through ongoing use in the business. Instead, past expenditure on development tends to be superseded by other developments required to keep the business competitive. Development costs therefore tend to have a finite life before the relevant expenditure becomes redundant.

A.32 Such costs can be considered to comprise strategic developments designed to create competitive advantage and ongoing development designed to prolong the life of existing assets. Ofcom’s analysis would normally require both types of expenditure to be spread over time rather than, as recorded in BT Openworld’s management accounts, written off as costs are incurred. Any significant change in the mix of these types of costs would likely lead to year-on-year volatility in this cost type.

A.33 Analysis of BT Openworld’s development costs identified marked differences between BT Openworld’s Consumer and Powered narrowband metered businesses. In 2002/3 a marked reduction in revenue from the Powered business resulted in a dramatic reduction in its development costs. For example, [\(\times\)] development costs declined from £[\(\times\)] million in 2001/2 to less than £[\(\times\)] million in 2002/3. Over the same period, other PAYG development costs fell from £[\(\times\)] million to £[\(\times\)] million. For the purpose of its analysis, Ofcom has assumed that the costs for 2001/2 (the higher costs) are representative of all relevant previous years. This is in line with the forecast development costs for 2003/4 of £[\(\times\)] million.

A.34 BT Openworld typically amortises any capitalised development costs over 3 years. This is considered an appropriate period for amortising costs in respect of ongoing business. However, given a [\(\times\)] in revenue from the Powered business.

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48 This is the same period adopted by Ofcom in its decision on Freeserve.com plc - BT Openworld's Broadband Pricing of 20 November 2003.
business, unamortised costs identified by Ofcom as relating to the Powered business as at 1 April 2002, plus all subsequent expenditure, has been attributed a remaining useful economic life of its remaining depreciable life, or 2 years, whichever is the shorter.

A.35 When considering the amortisation of costs over time following an economic path of cost recovery, Ofcom also considered the need to rebase these costs at relevant periods to their modern equivalent asset value. However, it is not immediately apparent that there is any reduction in the costs of development on a “per unit” basis over time. Hence unit values have been treated as being constant.

A.36 The above analysis results in an economic depreciation adjustment that increases costs by £[<X] million.

A.37 However, given the uncertainty over the level of historical investment in development, and in line with Ofcom’s analytical strategy in this case, Ofcom has therefore considered the impact of development costs prior to 2001/2 being 100% greater than the figures used in its analysis. The impact of this sensitivity is to increase costs by a further £[<X] million and reduce profit by the same amount.

Sales Commission

A.38 Sales commission relates to BT Openworld’s Virtual ISP business. Typically sales commission might be expected to arise on acquisition of a new customer to the business. However, BT has confirmed that for the consumer business, commission is payable on [<X]. Consequently, the accounting treatment adopted by BT Openworld is a close approximation to its economic value and no adjustment is required. Commissions for business customers are paid on a [<X] basis, so in theory there would be a requirement for an adjustment to economic cost path over an average customer life. However, the value of these payments is immaterial within the context of the narrowband metered business (c.£ [<X] in 2002/3) and, consequently, no adjustment has been made.

Marketing

A.39 Marketing represents the cost of advertising and promotion expenditure carried out by BT Openworld to attract customers to its narrowband metered service. Costs are not uniquely incurred by the narrowband metered business but instead are allocated to it on a basis approximating to new installs per product. Such costs are incurred for the purpose of attracting customers to BT Openworld and encouraging their continued use of BT Openworld’s services.

A.40 For accounting purposes, costs are written off as incurred rather than spread over the period when these customers generate income for BT Openworld, i.e. the average customer lifetime. The average customer lifetime is extremely difficult to measure reliably in narrowband metered services. This is because unlike other forms of internet provision there is no formal relationship between customer and supplier making it very difficult to determine when a relationship has ceased. In order to consider the economic cost of marketing in a given period, the average subscriber life must be estimated.

A.41 Some estimates of subscriber lifetimes for narrowband metered internet access suggest that this life could be as high as 50 years. Assuming that rates for
2001/2 persisted from the launch of pay-as-you-go narrowband internet services and amortising over 50 years on a straight line basis would reduce the marketing cost for 2002/3 by some £[\text{\times}] million.

A.42 However, given the mass market penetration of narrowband internet access and the rapid growth rate of broadband with customers increasingly moving up the value chain, ascribing a customer life of 50 years is excessive. Instead, a more conservative customer life has been considered.

A.43 In BSkyB a 10 year life was selected amortising the costs of customer acquisition over 10 years\(^{49}\). However the pay satellite TV market is not readily comparable with narrowband metered internet access and can be distinguished by the existence of a formal customer contract, the lack of alternative products higher up the value chain (e.g. broadband) and the wider availability of substitute services.

A.44 In Wanadoo\(^{50}\) a four year customer life was selected for broadband internet access\(^{51}\). Again this is distinguishable from narrowband metered by the connection charge levied, the minimum contract period and that broadband internet access is at the top of the value chain.

A.45 Ofcom has assumed a shorter and more aggressive customer life of three years in its analysis, amortising on a straight line basis. Against the background of falling unit costs, this has the effect of charging more of the higher unit costs incurred in earlier years of the business to the periods 2002/3 and 2003/4 in Ofcom’s analysis. This has the impact of increasing the charge for 2002/3 by some £[\text{\times}] million.

A.46 Accordingly Ofcom has adopted this more conservative estimate for marketing costs in its analysis in line with the analytical strategy set out at paragraph 3.71 above.

A.47 Given the uncertainty over the level of historical investment in marketing, Ofcom has considered the impact of marketing costs prior to 2001/2 being 100% greater than the figures used in its analysis. The impact of this sensitivity is to increase costs by £[\text{\times}] million.

**Depreciation**

A.48 The principal assets used by BT Openworld’s narrowband metered business are the servers and related equipment used to provide and support the direct provision of the internet access service. This equipment is common across a number of BT Openworld’s businesses. The relevant elements of BT

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\(^{49}\) Paragraph 433 of the OFT’s decision on BSkyB of 17 December 2002 relating to marketing costs.

\(^{50}\) Commission press release 16.07.03, decision unpublished.

\(^{51}\) The Commission in its findings considered a number of amortisation profiles for acquisition costs amongst comparator businesses. These included Oreke (amortised over an average of 18 months); Tiscali (amortised modem costs over 12 months) and T-Online France (amortised modem costs over 2 years) and the French Telecommunications Regulatory Authority depreciates the charge made for providing access over three years).
Openworld’s platforms are allocated to and capitalised by the narrowband business which is charged depreciation on those assets.

A.49 Other assets required to support the operation of the narrowband metered business (most significantly ports) are not owned outright, but with a charge being levied on the business for their use. Consequently these assets are not capitalised in the accounts of the narrowband metered business and hence no depreciation is charged on them.

A.50 In a mature business or one that is operating at steady state, Ofcom would generally expect the annual depreciation charge and annual investment in capital expenditure to be broadly equivalent. The number of metered internet access minutes supplied in 2002/3 \[\times\%\] from the usage for 2001/2 by \[\times\%\]%\textsuperscript{52}. This is consistent with a business that is \[\times\ldots\], as might be expected where customers are being encouraged to move up the value chain.

A.51 The straight line depreciation charged in 2002/3, by contrast, fell by \[\times\%\] compared to 2001/2. Ofcom’s analysis has suggested that there are three principal factors contributing to this:

i) First, at a meeting on 19 March 2004, BT advised Ofcom that a number of the assets acquired during the early phase of development of the business became fully depreciated in FY02 whilst continuing to be used in the business.

ii) Second, a write down of certain asset values in 2001/2 reflecting certain legacy issues.

iii) Third the cost of replacement assets is less than the cost of the assets originally purchased due to technological developments. As more expensive assets are replaced over time, this leads to proportionately lower investment in capital expenditure with a consequent reduction in depreciation. This is reflected in the modern economic asset concept.

A.52 Ofcom notes that year on year costs for fixed assets for the purpose of its analysis are likely to lie somewhere between the costs for 2001/2 and for 2002/3. For the purpose of its analysis, Ofcom has assumed that the costs for 2001/2 (the higher costs) are representative of all relevant previous years and consistent with its analytical strategy has applied the costs for 2001/2 in its analysis.

A.53 Unlike marketing costs, the life of tangible assets is more specific and Ofcom would expect a useful economic life of three years for assets such as servers. This is the life that was used for broadband infrastructure in Oftel’s investigation into BTOpenworld’s pricing policies for residential broadband services, concluded on 20 November 2003\textsuperscript{53}. It is clearly possible for this life to be extended beyond 3 years as evidenced by BT’s explanations for the declining depreciation cost however beyond 5 years Ofcom would expect

\textsuperscript{52} BT response to notices under section 26 of the Act

\textsuperscript{53} http://www.ofcom.org.uk/bulletins/comp_bull_index/comp_bull_ccases/closed_all/cw_613/?a=87101
continued use of this equipment to have become uneconomic and for it to have been replaced.

A.54 Ofcom has therefore assumed that the costs incurred in earlier years have been depreciated over three years compared to a life in use of four years, assuming that the depreciation charge in 2001/2 is representative of a full year's charge for all assets at steady state. Applying a straight line depreciation approach has the effect of charging more of the higher unit costs incurred earlier on in the business to the financial years 2002/3 and 2003/4 – a conservative approach consistent with Ofcom's analytical approach set out at paragraph 3.71 above.

A.55 The effect of this is to increase depreciation charged in 2002/3 by £[\times] million.

A.56 Given the uncertainty over the level of historical investment in capex and related depreciation, Ofcom has considered the impact of depreciation prior to 2001/2 being 100% greater than the figures used in its analysis. The impact of this sensitivity is to increase costs by a further £[\times] million.

Helpdesk

A.57 Helpdesk costs in 2001/2 reflect investment in a number of strategic initiatives which resulted in reduced costs in 2002/3 and subsequent periods. In particular, two one-off items of expenditure were incurred which will benefit subsequent periods. These were costs of migration to a new helpdesk platform budgeted at £[\times] million in 2001/2 (narrowband allocation £[\times]) and a [\times] in 2002/3 of £[\times] million (metered allocation £[\times]). As with marketing costs, both of these items relate to the ongoing cost of generating revenue from BT Openworld's customer base.

A.58 Ofcom has considered the impact of amortising these sums over periods from 3 to 50 years consistent with the periods used in the average customer life discussion set out at A.40. On a straight line basis this would increase the charge for 2002/3 by a modest £[\times]-[\times] depending on the length of the period selected. Accordingly Ofcom has adopted this more conservative estimate for helpdesk costs in its analysis in line with its analytical strategy.

Table A.7: Summary of adjustments to account for economic cost paths (£000s)

<table>
<thead>
<tr>
<th>BT cost categories</th>
<th>Adjustment</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Port connection</td>
<td>[\times]</td>
<td>No adjustment deemed necessary</td>
</tr>
<tr>
<td>Development</td>
<td>[\times]</td>
<td></td>
</tr>
<tr>
<td>Sales Commission</td>
<td>[\times]</td>
<td>No adjustment deemed necessary</td>
</tr>
<tr>
<td>Marketing</td>
<td>[\times]</td>
<td>Reflects the effect of earlier, higher marketing investment</td>
</tr>
<tr>
<td>Depreciation</td>
<td>[\times]</td>
<td>Reflects the effect of higher depreciation charged in earlier periods</td>
</tr>
<tr>
<td>Helpdesk</td>
<td>[\times]</td>
<td>Impact of earlier one-off costs</td>
</tr>
<tr>
<td>Total reduction in profit</td>
<td>[\times]</td>
<td></td>
</tr>
</tbody>
</table>
Adjustment to LRIC

A.59 BT Openworld’s narrowband metered Profit & Loss accounts for FY03 provided cost data prepared approximating to a Fully Allocated Cost (FAC) basis at a BT Openworld level. The key difference between this allocated cost basis and LRIC is in the treatment of common costs. An allocation of common costs is included in BT’s allocation methodology but common costs are excluded from a LRIC analysis to the extent that they are not incremental, even in the long-run, to the service under consideration. As a result, FAC are likely to be higher than the equivalent LRIC of a service. Where appropriate, Ofcom has therefore, on the information currently available to it, made certain adjustments to the allocated cost based items in the management accounts to derive a reasonable LRIC approximation.

A.60 The difference between FAC and LRIC is illustrated in the following example. Suppose that a business operates two services, A and B, both of which use a common overhead. Assume that the total expenditure on this overhead does not increase whether the firm operates only one or both of the services. If the profitability of service B is assessed on a LRIC basis, then the cost of the overhead would be excluded if the firm is already producing service A. This is because given that the firm is already producing service A, the incremental overhead expenditure required to produce service B is zero. However, on an FAC basis, service B would be expected to bear some of the costs of the overhead.

A.61 Therefore, if BT Openworld passes the margin squeeze test on FAC data, then it will also pass on a LRIC assessment (as FAC is a higher cost standard than LRIC). However, should BT Openworld fail the margin squeeze test on an FAC basis this would not be conclusive evidence that a margin squeeze exists as BT Openworld may still pass on a LRIC basis.

A.62 In its analysis of BT Openworld’s cost data, Ofcom analysed each of BT Openworld’s cost categories in turn to assess whether or not those cost categories may include costs which are not purely incremental to the narrowband metered business, but may also be shared with another BT service. Where appropriate Ofcom made certain adjustments to the FAC based cost items in the Accounts to derive a reasonable LRIC approximation. Ofcom decided that it was appropriate to make LRIC adjustments to the costs of the Helpdesk, Platform Allocation Model (PAM), Development, Marketing and Team Costs.

A.63 Ofcom recognises that given the limited information available to it the proposed LRIC adjustments are necessarily based on certain assumptions regarding the common costs included in the data provided in the management accounts. To address this concern Ofcom has therefore produced the following three distinct LRIC adjustments for each cost item and will consider the implications of the resulting range of adjusted data:

   i) “Max” - The largest adjustment is the adjustment assessed by Ofcom as being required to be confident of having removed all non- LRIC costs. This

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54 BT’s submission of 24 October 2003 in response to Ofcom’s formal request for information dated 8 October 2003.
risks writing down costs to a level below true LRIC and consequently may result in costs post adjustment being at a level less than or equal to true LRIC;

ii) “Mid” – Ofcom’s assessment of the adjustment most likely to result in the cost post adjustment being a reasonable approximation of true LRIC;

iii) “Min” - The smallest adjustment is the adjustment assessed by Ofcom as its minimum assessment of non-LRIC costs. In most cases this assumes non-LRIC costs are zero. This risks including some non-LRIC costs. It will result in costs post adjustment being at a level greater than or equal to LRIC and less than or equal to FAC

A.64 Having reviewed each element of the cost stack provided in the management accounts, Ofcom decided that it was appropriate to make LRIC adjustments to the costs of the Helpdesk, Platform Allocation Model (PAM), Development, Marketing and Team Costs. A summary of the cost impact is shown in Table 5 below.

**Table A8 Summary of Ofcom’s LRIC adjustments (£ 000)**

<table>
<thead>
<tr>
<th>BT cost categories</th>
<th>Min %</th>
<th>Mid %</th>
<th>Max %</th>
<th>Min</th>
<th>Mid</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td>Helpdesk</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PAM</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Development</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marketing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Team costs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total reduction in cost</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

A.65 Ofcom then put the details of these adjustments to BT. BT responded that:

“…The adjustments seem reasonable, apart from 'Development', where we consider that the proportion of fixed costs would be higher, due to the commonality between metered and unmetered products. I would suggest [...]”

A.66 This implies that BT Openworld considers that Ofcom’s LRIC figures may be an overstatement of the true LRIC. In keeping with the stated analytical strategy, Ofcom has maintained its more conservative assessment. If BT’s suggested higher adjustment for development costs had been incorporated, the LRIC figures for development costs would be lower by £[>]<k, and return on turnover higher by [>]<%.

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Annex B

Return on Turnover Comparators

Table B.1 Return on Turnover for some comparator companies, most recent financial year available

<table>
<thead>
<tr>
<th>Company</th>
<th>EBIT margin</th>
</tr>
</thead>
<tbody>
<tr>
<td>CP</td>
<td>0%</td>
</tr>
<tr>
<td>W</td>
<td>2%</td>
</tr>
<tr>
<td>BT Group</td>
<td>4%</td>
</tr>
<tr>
<td>BT Retail</td>
<td>6%</td>
</tr>
<tr>
<td>Energia</td>
<td>8%</td>
</tr>
<tr>
<td>Virgin Mobile</td>
<td>10%</td>
</tr>
<tr>
<td>Castlere</td>
<td>12%</td>
</tr>
<tr>
<td>Dixons</td>
<td>14%</td>
</tr>
<tr>
<td>J Sainsbury's</td>
<td>16%</td>
</tr>
<tr>
<td>Marks &amp; Spencer</td>
<td>18%</td>
</tr>
<tr>
<td>Tesco</td>
<td>18%</td>
</tr>
<tr>
<td>Debenhams</td>
<td>18%</td>
</tr>
<tr>
<td>John Lewis Partnership</td>
<td>18%</td>
</tr>
<tr>
<td>Carpetright</td>
<td>18%</td>
</tr>
<tr>
<td>Littlewoods</td>
<td>18%</td>
</tr>
<tr>
<td>Asda Group</td>
<td>18%</td>
</tr>
<tr>
<td>Focus Wholesale</td>
<td>18%</td>
</tr>
<tr>
<td>Karen Millen Group</td>
<td>18%</td>
</tr>
<tr>
<td>BHS</td>
<td>18%</td>
</tr>
</tbody>
</table>

Source: Annual Reports; www.fasttrack.co.uk