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Hutchison 3G UK Limited

Response to

Mobile call termination

Proposals for consultation

NON CONFIDENTIAL VERSION

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Executive Summary

Overview

H3G is concerned that Ofcom's proposals to regulate wholesale mobile voice call termination ("MCT") are inconsistent with its statutory duty to promote competition,[1] to further the interests of citizens[2] by ensuring that high speed mobile data services are available across the UK, and to encourage investment and innovation.[3]

Ofcom's proposals do not take into account the dynamic investment and competitive effects arising in a market of four incumbents of roughly equal market share, and one smaller 3G-only new entrant. Ofcom's current attempts to be competitively neutral through equal MCT rates will have the unintended effect of reducing competition. It is widely acknowledged that H3G as new entrant has been leading the UK's development of 3G services, with faster rollout, lower pricing and innovative services, while its operation has not yet reached scale [●]. Yet Ofcom's proposals would weaken this competitive pressure (thereby reducing the competitiveness of the 3G market), [●] and would provide incentives for incumbents to delay migration of customers to 3G thus delaying valuable scale and network efficiencies for the UK telecoms sector.

[●] General factors which should be taken into account by Ofcom in amending its proposals, in line with its duties and own objectives for this review, are set out at Section 8. In addition, this response sets out the ways in which the Market Review Consultation proposals are flawed or inappropriate, focussing on: the application of SMP; the use of price caps instead of cost-orientated regulation; the averaging of costs across different technologies (2G and 3G) for the purposes of price-setting; the cost benchmark and treatment of risk; and the commencement and duration of price controls.

H3G also firmly believes that the next four years will see significant changes in the mobile market. As 3G and true mobile broadband become more ubiquitous, this will require both retail and wholesale arrangements within the industry to evolve. While H3G agrees with Ofcom that regulatory stability is required, such stability should not be imposed at the cost of holding back changing business models to take account of new technology and consumer behaviour changes. As such, H3G urges Ofcom to provide sufficient flexibility in its approach to remedies such that any arrangements can be revisited should the continuing development of mobile broadband require it. This has a significant bearing on what would be the proportionate remedy.

The Impact of Ofcom's proposals on Competition and Investment (Section 7)

The impact of the proposals on customers and other operators is small. By contrast, the impact on H3G - the maverick new entrant driving innovation - would be significant, [●]

The reason for this, doubtless unintended, consequence is that H3G has significantly more outbound than inbound traffic. This is partly a function of it being the new entrant with its customers making more calls than they receive, and partly because of

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1 Communications Act 2003; Section 3 (1) (b). In relation to market reviews Ofcom has a specific European Community duty to promote competition as well (*inter alia* under Section 4(3) of the Communications Act).

2 Communications Act 2003; Section 3 (1) (a)

3 Communications Act 2003; Section 4(d).

the UK's system of Mobile Number Portability which deters existing mobile users from transferring their incoming service to a new operator.

The effect on competition would be more extreme still. While H3G has been leading the development of 3G services, the incumbents' slow development of 3G means that the market, and hence consumers, have not yet benefited significantly from network effects and economies of scale. The new proposals would have the perverse effect of disincentivising 2G/3G operators to migrate to 3G, while requiring the operator driving 3G development to subsidise its competitors' legacy networks. This should cause Ofcom to pause and seriously consider whether it is correct in its approach (which H3G considers is not the case) as, if it continues on this path, it will thus further limit the competitive impact on the incumbents and artificially delay the adoption of newer and more efficient (in this case 3G) technologies.

SMP and CBP (Sections 2 & 3)

It remains H3G's view that it does not have SMP, and that Ofcom's proposed finding to the contrary is legally flawed, based on an inappropriate definition of SMP and continuing incorrect analysis of countervailing buyer power.

Ofcom's Approach to Remedies (Section 4)

Even if SMP were to be applied, H3G considers that price control is not the appropriate remedy. Such a remedy would be inflexible, damage H3G's ability to innovate and hence distort competition in the UK market. Ofcom's wish not to discriminate between technologies does not adequately recognise the different position of a new entrant 3G operator compared with 2G/3G incumbents. It thereby distorts competition, and fails to provide neutral incentives on 2G operators to upgrade to 3G.

The fact that a price control is premature is also illustrated by the fact that it would be applied to H3G at a much earlier stage in its life than was the case for other operators, and before the business achieves positive cash flow. The price caps proposed would also mean that the asymmetries of a new entrant will not be recognised to the extent they have been by the relevant national regulators, supported by the European Commission in, for example, Belgium and France.

Level and Structure of proposed Price Cap (Section 5)

[●] Nor does Ofcom include all relevant costs, particularly the costs of customer acquisition necessary to enable a customer to receive calls. The inclusion of the licence fee as a cost is welcome, but the approach and calculations need adjustment. The effects of MNP should be included, since these are material for H3G as new entrant, though not perhaps for other operators.

While welcoming regulatory certainty, Ofcom should not let a four-year price control period become a straightjacket constraining the market's transition to business models which might require less regulatory intervention. Pricing based on internet access charges may move the market towards "bill and keep" structures. A price control would, however, lock in "pence per minute" charging structures.

Proposed Glide-Paths (Section 6)

If price regulation were to apply to H3G, none of the three glide paths would be appropriate or proportionate. Ofcom has given insufficient weight to its duty to promote competition, investment and innovation as opposed to regulating prices: it has favoured shorter rather than longer term benefits to the consumer (and overestimated those short term benefits).

One of the key factors which Ofcom should take into account to ensure that regulation is non-distorting is to establish a glide-path which leads to neutral revenue flows between mobile operators and which does not risk distorting competition generally. This could also partially address the distorting effects of the current MNP regime, so long as this persists.

An Appropriate Approach (Section 8)

H3G recognises Ofcom's desire to move towards symmetric MCT regulation (in terms of levels of the relevant rates), but considers that, to the extent this is justified, this must be done by also ensuring that no undue discrimination results from treating operators in different positions in the same way. The fact that there are separate markets allows for differentiated treatment in appropriate circumstances. Further, Ofcom needs to take into account its other obligations to promote competition, innovation, investment and ensure build-out of high-speed mobile data services. The simplest means of achieving this is to structure a MCT rate glide-path which [is neutral] [●] as well as being based on an appropriate end-point cost benchmark - and taking into account the nature and asymmetric risk of imposing too harsh a price control.

Contents

1. Introduction

Appropriate regulation of 3G and the mobile sector more generally, is important for consumers, the telecoms industry and the wider UK economy. In exercising its powers under the Communications Act 2003 (the "2003 Act") in the context of market reviews and appropriate remedies to address SMP, it is important for Ofcom to take full account of the wider context, including factual background, in order to ensure that its decision is appropriate and proportionate. This is required by, inter alia, section 3(3)(a) of the 2003 Act.

The current consultation “Mobile Call Termination: proposals for consultation” (“the Market Review Consultation”)[4] is the first time Ofcom has consulted on full proposals for regulating mobile voice call termination (“MCT”). As such, this is the first opportunity H3G has had to assess the impact of Ofcom’s approach and consider in detail the extent to which Ofcom’s proposed methodology will achieve appropriate objectives. Ofcom initially consulted on its (very high level) price control approach in “Wholesale mobile voice call termination markets: preliminary consultation on future regulation” (the “June 2005 Consultation”). In response to (“H3G’s August 2005 Response”) H3G set out its views on the need to take account of dynamic investment incentives, competition effects, migration incentives, and the impact of regulatory distortions.[5] Ofcom’s last consultation “Mobile Call Termination: market review” (the “March 2006 Consultation”) set out Ofcom’s broad approach to setting remedies based on a “prima facie” finding of SMP. H3G responded (“H3G’s May 2006 Response”), commenting on Ofcom’s approach to setting a price control and again setting out the factors Ofcom should take into account. Despite this, and as explained below, the Market Review Consultation ignores relevant factors.

In conjunction with its various consultations, Ofcom has also been developing a detailed cost model. This estimates underlying network costs for 2G only, combined 2G/3G networks and 3G only networks. This process was started by Ofcom in June 2005. H3G has been fully engaged in this process both through responding to information requests and commenting on the modelling approach (including appropriate input assumptions and wider conceptual issues). In conjunction with the Market Review Consultation, Ofcom issued “Release 3” of the Long Run Incremental Cost (“LRIC”) model. Based on this model, the Market Review Consultation provides Ofcom’s views on the appropriate cost benchmarks on which to base a price control – for the first time for 3G networks. As explained below, there are significant uncertainties about such cost benchmarks.

In parallel, Ofcom has also been undertaking a reassessment of H3G’s SMP status for the period June 2004 to 31 March 2007, following H3G’s appeal of Ofcom’s 1 June 2004 statement. The CAT judgment and related order required Ofcom to reconsider this finding of SMP, especially in relation to the consideration of BT’s countervailing buyer power (“CBP”). In January 2006 and August2006 Ofcom sent information requests on this issue to H3G and subsequently published a consultation (also on 13 September 2006, the “H3G SMP Reassessment Consultation”). H3G responded on 25 October 2006 (“H3G’s SMP Reassessment Response”). Many of

4 Published on 13 September 2006.

5 At the same time, Ofcom also consulted on the one year extension to the existing 2G price caps “Wholesale mobile voice call termination markets – a proposal to modify the existing charge control conditions” (the “2G Extension Consultation”), published on 7 June 2005, to which H3G responded, raising many similar issues, dated 30 August 2005.

the issues around the consideration of the effect of CBP on H3G's SMP are common to both the H3G SMP Reassessment Consultation and the current market review.

Against this statutory background, this response sets out the principles which should be taken into account by Ofcom in determining whether, and if so, how to set any price controls on call termination charges. H3G notes that, throughout this process, H3G has set out the key issues and factors which Ofcom should take into account in setting a framework for the regulatory consideration of 3G MCT services. Despite this, the proposals set out in the Market Review Consultation take a different, flawed approach. Ofcom's reasons for doing so are insufficient to justify the approach taken. Were Ofcom to maintain this stance, its resulting decision will be open to challenge.

1.1. Structure of this response

This response sets out the principles which H3G believes should be taken into account in the setting of any price controls on its call termination charges. In particular, Section 1 of this response refers to some of the relevant background factors that must be considered, both in terms of the market conditions and the regulatory context. Sections 2 and, in particular, Section 3 of this response addresses SMP. H3G has previously set out its view as to the correct approach to take when determining whether or not H3G has SMP (see in particular the response to the SMP Reassessment Consultation). H3G continues to be of the view that it would be inappropriate to designate it with SMP.

The rest of the response focuses on the issue of possible remedy (assuming SMP), given Ofcom has for the first time set out its detailed view. As a preliminary point in this regard, H3G notes that it is of critical importance that, if Ofcom does designate H3G with SMP, any remedy is proportionate and set on appropriate terms, taking all relevant factors into account. As set out below, Ofcom's current proposals for a price cap on H3G will have a disproportionate effect on H3G and competition, while not providing significant benefits for consumers. In H3G's view, the current proposals are therefore inconsistent with Ofcom's general duties, in particular the requirement to promote competition in relation to the provision of electronic communications network and electronic communications services (section 4(3)(a) of the 2003 Act). Section 4 sets out the principles H3G believes Ofcom should take into account in considering any remedies. Section 5 sets out the amendments which need to be made to Ofcom's approach to setting the relevant cost benchmarks. Section 6 provides H3G comments on the glide-paths proposed in the Market Review Consultation and explains why H3G considers that each of the various options proposed would be inappropriate. Section 7 assesses the different effects of Ofcom's proposals, including the effect on competition. Drawing all of these factors together, Section 8 summarises the relevant factors for Ofcom to take into account going forward. This response also provides H3G's views on the confidential version of Release 3 of the LRIC Model which includes data for 3G only networks, as well as the way in which Ofcom has derived the cost benchmarks and its approach to uncertainty.

1.2. Benefits being delivered by 3G and the resulting increased competition

A significant factor for Ofcom to consider is the positive impact of H3G on competition in the mobile sector generally and the potential adverse impact that any price control remedy would have on this. While Ofcom is now under a duty to be technologically neutral, it remains relevant that the rollout of 3G technology is already providing significant benefits to UK citizens and consumers. New services are already being enabled through 3G technology and networks are being rolled out which will provide a long-term efficient way of providing both new and existing services.

This is, to a large extent, due to the entry of H3G. The 2000 3G spectrum licence auction reserved one licence for a new entrant, with the very aim of this new entrant acting as a spur to competition. As the user of this new entrant licence, H3G has entered a fifth mobile network into an already highly competitive market – and further increased competition to the benefit of UK consumers. H3G has already rolled out its own 3G network to cover nearly 90% of the UK in terms of population coverage (in excess of its licence obligation, which no other 3G operator has yet achieved). H3G's entry has:

- led to a reduction in overall retail consumer prices, and driven the widespread adoption of types of bundled tariff which provide a better deal for consumers (increasing number of bundled minutes and increase use of any network tariffs); and
- driven the roll-out of 3G technology and innovation in terms of communications services: leading to the successful introduction of, *inter alia*, the delivery of music tracks and video to mobile handset, mobile instant messaging[6], mobile TV services[7], user generated content sharing,[8] and mobile social networking sites.[9]

This innovation has required and continues to require large amounts of investment and H3G is continuing to invest in further service development. In particular, future investment is required to:

- continue to roll out the 3G network and increase the geographic availability and range of 3G services;
- migrate more customers to mobile broadband services; and
- implement the roll out 3G technology upgrades, including HSDPA (which will significantly increase the broadband download data speed capability) and MBMS (which will increase the efficiency with which video services can be provided to customers).

Large amounts of new investment will therefore be required over the period related to the next market review under consideration by Ofcom. It is important that competition between mobile networks is not undermined, but enhanced, over this same period to ensure that customers continue to receive the full benefits of these new services. In short, 3G is enabling a range of new ways of communicating in a truly mobile setting, including voice over IP applications, mobile email becoming a mass consumer product and instant messaging services. Ofcom should recognise

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6 H3G has successfully pioneered a mobile version of the market leading Windows Live Messenger service, linking consumers to their existing Instant Messaging network on a mobile service. Since its launch in August 2006, over 100million instant messages have been sent over this new service.

7 H3G was the first network to broadcast a live terrestrial TV channel, simulcasting ITV1 from 4 September 2006. H3G has been providing a range of Mobile TV services since at least October 2005.

8 H3G launched SeeMeTV in Quarter 4 2005, which is a highly successful way for user generated video content to be published with over 12 million downloads and 1000,000 uploads. This service has now been copied by other mobile networks.

9 H3G's social networking site Kink Community was launched in July 2006 and has attracted over 50,000 paying subscribers, posting around 350,000 messages a day.

these benefits, achieved against what can legitimately be described as a challenging background.

3G therefore has delivered significant benefits and can continue to deliver significant future benefits. For this to occur, Ofcom needs to take an approach to the market review which will ensure that all networks are able to recover their efficiently incurred costs [●]. While Ofcom may consider doing this in the name of short term consumer benefits, it would in fact mean that greater longer term consumer benefits are delayed [●]. Ofcom should be slow to regulate in such a manner.

2. Ofcom's proposed finding of SMP

Ofcom's equating of SMP essentially with any "market power" (in the strict economic sense of ability to raise price above Ofcom's interpretation of the relevant cost measure) is also inappropriate. Dominance or SMP, as defined in section 78 of the 2003 Act and as set out in the relevant case law and guidance, equates to a substantial degree of market power. This is more than simply the ability to charge above a measure of incremental cost (else nearly every undertaking would be deemed to have SMP or dominance in nearly every market).

As explained below, a more appropriate assessment suggests that Ofcom does not have sufficient evidence of H3G charging above a relevant competitive benchmark (or even the ability to do so) to make a current finding of SMP. Section 3 of this response provides H3G's comments on Ofcom's assessment of CBP in the Market Review Consultation.

2.1. Market definition and market shares

Ofcom has essentially concluded that [●] dual handsets does not impact on Ofcom's market definition because:

- Ofcom has not found sufficient evidence that H3G customers in particular (or mobile customers in general) chose networks on the basis of the costs of calling those networks; and
- consumers cannot distinguish between the different costs of calling different mobile networks.

H3G's views on the appropriate way to consider this issue, as set out in its August 2005 and May 2006 responses remains relevant in the context of the current consultation and Ofcom is referred thereto. In particular, in the context of assessing market definition using the hypothetical monopolist test, H3G considers that the reason for customers having two handsets is of only peripheral indicative value. Rather, the relevant question is whether sufficient customers have a second handset such that H3G's rates are effectively constrained. The Market Review Consultation sets out a number of factors which Ofcom believes need to be in place for this to occur.[10] First, Ofcom states that mobile subscribers need to value incoming calls sufficiently such that a reduction in such calls caused by a price increase would induce such subscribers to switch networks. This is an inappropriate assumption. Where customers have dual handsets, for whatever reason (and H3G believes that the current MNP arrangements in the UK are a material reason for the high incidence of multiple handset ownership [●]), they do not need to switch networks but simply give out a different number for incoming calls. This has significantly less cost to customers than the effort involved in switching networks and is therefore much more likely.

Ofcom then suggests that callers must be sufficiently aware that they are calling a specific network and be aware of the relevant price. Again, if customers own multiple handsets then it is likely that they will learn by experience which number to provide to those trying to contact them. Last, Ofcom suggests that callers must be sensitive to the price of calling the network they wish to reach. Again, this needs to be considered carefully in the context of called parties carrying a number of phones. Experience and the fact that calls often tend to be between the same pairs of

10 Set out in paragraph 3.16 of the Market Review Consultation.

customers (i.e. people have their own calling circle of acquaintances) will allow subscribers with two handsets to choose which network's number they provide based on experience. For these reasons Ofcom appears to be wrong when it states that:

> *"the ability of a larger than average proportion of H3G's customers to receive calls on a mobile phone connected to another network … will not impose downward pressure on H3G's termination charges".*[11]

An appropriate approach to this issue would be for Ofcom to consider whether the existence of dual handsets provides a sufficient competitive constraint in terms of the SSNIP[12] test or not. This analysis is not undertaken in the Market Review Consultation, which undermines Ofcom's market definition finding with respect to H3G.

Ofcom also notes that H3G did not provide an alternative market definition in its previous responses. This fails to recognise that the burden is on Ofcom to establish the appropriate market definition, particularly in the context of a European regulatory framework that is designed to rollback unprincipled regulation. It is in any event implicit in H3G's comments that were a second handset to be an alternative to calls received on the H3G handset, the market definition in relation to H3G's MCT would include MCT on other networks (This may be one-way substitutability of course).

Moreover, H3G's view is that there are an increasing number of potential competitive constraints which it faces in relation to call termination. A full analysis may find that no one of these individually will constrain call termination prices. However, the widening menu of communications choices whilst on the move which is becoming available suggests that the approach should be to consider all options to contact mobile subscribers. An increasing number of (possibly partial) competitive constraints on traditional circuit switch voice call termination are rapidly developing which collectively are likely to have a significant impact. Ofcom states it has no compelling evidence that these will impact during the period of the market review. This could prove to be an inaccurate statement given that mobile email, instant messaging, and VoIP are all now becoming available on mobile handsets. (H3G notes that the Dutch courts considered OPTA's decision flawed when OPTA failed to properly consider VoIP.) H3G expects that these services will be adopted as alternatives by significant portions of the customer base (and enable increasing use of PC to mobile communication as well) over the period covered by this market review, such that on a forward looking basis they will act as a competitive constraint.

Current behaviour of H3G customers suggests that there is rapidly increasing use of such alternative forms of communication (including instant messaging, social networks sites, and email). All of these alternatives to a traditional call are available for use on H3G's handsets today and are being used increasingly by its customers. The following examples illustrate this fact.

- **SMS and MMS:** in the period January to October 2006, H3G customers sent and received [●] SMS and sent and received [●] MMSs from January to October 2006.
- **Instant messenger:** H3G's customers have sent and received over 100 million instant messages between launch of the service in August 2006 and October 2006.

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11 Paragraph 3.29 of the Market Review Consultation.

12 "Small but significant non-transitory increase in price" as set out in the relevant guidance on market definition under the Competition Act and as adopted by the European Commission.

- **Email:** in the period January to October 2006 H3G customers sent [●] over 3G handsets suggesting that there could already be a significant body of customers using their phones for email communication;
- **Social networks sites:** H3G's social network site Kink Community has 52 thousand subscribers who are posting on average 350 thousand messages a day.

In relation to the development of VoIP calls, H3G welcomes Ofcom's recognition that increasing use of such calls could lead to significant changes in Ofcom's market analysis. H3G agrees with this. However, the new arrangements, which are likely to be required both at a retail and wholesale level, to allow the development of these new products will be needed before Ofcom's proposed price control period expires (and that the regulatory approach here could influence and distort incentives to innovate in these areas).

In relation to market definition, it is not clear in the Market Review Consultation whether Ofcom is including VoIP calls in its market definition or not. H3G's view is that either a wider market definition needs to be accepted which includes a whole range of potential mobile communications methods or that VoIP calls are excluded from the regulated market definition along with instant messaging, emailing and other developing alternatives.

Ofcom dismisses the notion of a cluster market as being relevant on the basis that the customers do not choose a mobile network on the basis of the price of incoming calls. That is, Ofcom is proposing that such wider competitive interactions are not sufficient to change the basic market definition of calls to an individual network. However, Ofcom does appear to accept that the waterbed effect will, in principle, at least have some effect on competition (in contrast to the position at the time of the Competition Commission 2002 Inquiry, when Oftel did not consider that there was sufficient competition at the retail level). Ofcom there accepts that there is some competitive interaction between different mobile markets. Even if Ofcom decides to set regulation on the basis of its established market definition and designate SMP in that market, H3G urges Ofcom to recognise that there are still competitive interactions between different closely related markets which then need to be taken into account at later stages of the analysis, particularly the highly competitive nature of the retail market. That is, simply because a narrow market definition has been drawn, Ofcom should not ignore related markets altogether in its consideration of proportionate remedies.

2.2. Ofcom's approach to SMP constitutes an error of law and assessment

Significantly, Ofcom has erred in its overall approach for analysing SMP, by mischaracterising what constitutes SMP. SMP is defined as a position equivalent to dominance which means that an undertaking is able to behave to an appreciable extent independently of competitors, customers and ultimately consumers.[13] In order to show that such independence exists, a national regulatory authority, such as Ofcom, is under a duty to "undertake a thorough and overall analysis of the economic characteristics of the relevant market".[14] This was also highlighted by the Electronic

[13] See OJ [2002] L108/44; section 78 of the 2003 Act incorporates this definition into the UK.
[14] SMP Guidelines, paragraph 78. OJ [2002] C165/6

Communications Appeals Panel ("ECAP").[15] Hence, it is clear that an assessment of CBP is part of the overall assessment of whether there is SMP.[16]

Ofcom has erred in the special circumstances of this case by beginning with the *prima facie* presumption of SMP and then moving on to consider whether there is sufficient CBP to overturn this presumption.[17] As noted by ECAP, to do so increases the risk of countervailing factors not being sufficiently analysed or analysed in the wrong light. In H3G's view, this is in fact what has occurred. H3G's detailed view on Ofcom's approach to the assessment of CBP is provided in the Section 3 below.

Further, the definition of SMP which Ofcom appears to be using is not in line with the established guidance and competition law precedent, (see above). SMP represents a "substantial" degree of market power, whereas Ofcom appears to be equating it with <u>any</u> finding of market power (to whatever degree, and in the technical sense of an ability to charge persistently above costs, even if marginal). For the reasons set out in Section 5 of this response, H3G believes that Ofcom's estimates of cost benchmarks are also subject to significant uncertainties which further reduces the strength of the finding that H3G even has the level of "market power" which Ofcom ascribes to H3G.

2.3. "Excessive" pricing and cost evidence

The Market Review Consultation refers to excessive pricing as a criterion to be considered as set out in the "Revised ERG Working paper on the SMP concept for the new regulatory framework". The Consultation states:[18]

> *"In the case of 3G mobile termination, the cost modelling, as set out in Section 9 below, indicates that the 3G charges presently levied by H3Gm and the implicit 3G charges of the 2G/3G MNOs are significantly above Ofcom's proposed view of the appropriate charges for MCT that is subject to consultation. Ofcom will reconsider the relevance of this criterion in light of responses to the consultation."*

However, H3G believes that the Ofcom's assessment of the appropriate cost benchmarks for a 3G only operator significantly understates the true position (see Section 5 and Annex 5). In and of itself, this undermines Ofcom's use of this criterion as evidence of SMP.

Further, H3G also notes that Ofcom's finding of cost benchmarks is subject to significant uncertainties. Ofcom has based its finding on a wide range of scenarios. Nevertheless, given the outcomes of some of Ofcom's scenarios it is incorrect to say that H3G's current rate is "significantly above" cost. Rather, Ofcom is basing this conclusion only on its proposed benchmark for the purposes of setting the price control i.e. 6pence per minute ("ppm"). As set out below, H3G believes that Ofcom's

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15 ECAP *Hutchison 3G Ireland v ComReg* [ECAP] 2004/01. Paragraph 6.58. ECAP stated that "there is evidence to suggest that [ComReg] fell into the error of assuming that market share gave the Appellant significant market power and then went on to analyse whether this was reduced by other countervailing factors. This would be at odds with the above Guideline which suggests that no assumption of dominance should be made until a thorough and overall analysis of all relevant characteristics is made. In the special circumstances of the case if one analyses the market from the assumption that the Appellant has dominance because of market share, that increases the risk of countervailing factors not being sufficiently analysed or being analysed in the wrong light".

16 CAT Judgment, at paragraph 110

17 Paragraph 5.1 of the Consultation

18 H3G notes that excessive pricing is not one of the factors listed in paragraph 78 of the European Commission "Guidelines on market analysis and the assessment of significant market power under the Community regulatory framework for electronic communications networks and services" (OJ [2002] C165/6, 11 July 2002) as one which can be used in assessing the ability of undertakings to act independently.

approach to dealing with the underlying uncertainties is inappropriate and therefore the use of such a benchmark to assess whether excessive pricing exists and hence SMP, *a fortiori*, cannot provide any reliable indication of SMP.

What is more, Ofcom's apparent reliance on the cost benchmark it considers appropriate for the purposes of setting a price control is not an appropriate basis on which to assess "excessive" pricing (giving this its proper meaning). Ofcom has previously stated that an appropriate "competitive" benchmark is perfect contestability:[19]

> "*The function of economic regulation is generally to mimic the outcome of a competitive market. So, the appropriate starting point for the economic depreciation profile for regulatory purposes is the pattern of the recovery of the investment costs, if the relevant market was competitive/contestable at every point in time.*" [20]

> *"The purpose of the analysis is to mimic the effects of a competitive/contestable market, because this provides an appropriate benchmark for regulation. So, the profile of cost recovery should be identified by constructing a 'competitor constraint', i.e. addressing the question: What is path of prices over time in a competitive and/or contestable market?"* [21]

In considering whether a price, in principle, is competitive or excessive, the relevant benchmark is the price under perfect contestability, not a regulatory proxy designed for the purposes of a price control. Release 3 of the cost model does not have a perfect contestability calculation but it does have an accounting calculation which is based on Current Cost Accounting depreciation ("CCA"). In principle, one would expect CCA to be a fair proxy for perfect contestability because both divide a measure of the diminution in value over a year by the traffic for that year. Figure 1 compares the outcomes of the CCA approach with the economic depreciation approach over the period 2006 to 2011. Also included is H3G's own estimate of costs under a perfect contestability approach but accepting all other Ofcom assumptions.

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19 In its discussion of the appropriate cost of capital at least, the Market Review Consultation appears to continue to consider this to be the appropriate theoretical benchmark (see paragraphs A18.67 and A18.70).

20 Paragraph 3, *Calls to mobiles: Economic depreciation*, Oftel, September 2001

21 Paragraph 10, *Calls to mobiles: Economic depreciation*, Oftel, September 2001

Figure 1: comparison of different benchmarks with current rate

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As can be seen, H3G's current effective rate is not above the relevant competitive benchmark, to the extent that CCA accounting costs are a reasonable proxy for the perfect contestability outcome, for at least part of the period Ofcom is considering.[22] It is only in the latter years, when the uncertainties and risk of forecast error increases that price is above cost (setting aside the issue of whether this can be regarded as "excessively" so). Further, this is before any of H3G's views on the reasons why this cost benchmark is too low are taken into account.

On this basis Ofcom cannot conclude that H3G's charges are or have been above the relevant cost benchmark to date. Further, in considering whether H3G has SMP, Ofcom's own approach indicates that H3G's costs will remain below cost for at least the first one to two years of Ofcom's proposed price control period. H3G's current MCT rates would only then become above the relevant cost measure in the latter half of the proposed price control period <u>if Ofcom's own forecasts are correct</u>.

In conclusion, Ofcom's evidence for excessive pricing is weak and does not provide any good evidence for a finding of SMP. Any evidence it does provide is based on the uncertainties of Ofcom's own forecasts regarding a time significantly into the proposed price control period. This does not provide a robust basis for a finding of SMP to apply from next April.[23]

Even on Ofcom's case, Ofcom's finding of SMP is subject to significant uncertainties. The tentativeness of this finding should therefore be recognised when considering the proportionate and appropriate remedy. For example, Ofcom's market definition does not recognise the fluid nature of developments in mobile broadband. Ofcom's market analysis in the context of its market definition also cannot take account of wider competitive interactions in the mobile sector (a factor recognised by the Dutch courts when reviewing OPTA's decision on similar issues.[24]

22 In this context it is also worth noting that H3G's rate is substantially below Ofcom's own estimate of the relevant monopoly price of 24.2ppm, quoted in paragraph A19.14 of the Market Review Consultation.

23 Nor does it provide a robust basis for the proposed duration of the price control, which is discussed further in Section 5 below.

24 Rulings of the Dutch Trade and Industry Appeals Tribunal Cases Nos. AWB 05/903 and 05/921 through 05/931.

3. Ofcom's consideration of Countervailing Buyer Power

The analysis used by Ofcom to support its finding that BT has insufficient CBP for there to be no finding of SMP is incorrect. H3G welcomes the fact that Ofcom's now broadly accepts the bargaining framework proposed by H3G as the appropriate way to analyse CBP issues[25]. However, despite the fact that Ofcom has accepted H3G's proposed analytical framework, Ofcom has adopted a flawed approach to the legal and factual issues surrounding an assessment of CBP.

As set out in H3G's SMP Reassessment Response, the key points of difference between H3G and Ofcom on CBP now appear to relate to a relatively small number of specific points to do with Ofcom's dispute resolution powers. The remainder of this section comments on Ofcom's current approach to assessing CBP.

3.1. Ofcom may have failed to properly consider the relevance of dispute resolution in determining the degree of CBP

In some parts of its consultation document Ofcom appears to interpret the Competition Appeal Tribunal ("CAT") judgment in Hutchison 3G (UK) Limited v Office of Communications ([2005] CAT 39, the "CAT judgement") as meaning that it must disregard all regulation, including its own role in resolving pricing disputes, in assessing CBP, and hence SMP.[26] However, it is clear from the CAT judgment (as quoted by Ofcom in paragraph 5.15) that Ofcom's dispute resolution powers *must* be taken into account when assessing BT's CBP.[27] Any attempt by Ofcom to disregard its dispute resolution powers in their entirety is a material legal error.[28]

3.2. BT's incentive to refer a dispute to Ofcom is itself sufficient to demonstrate an absence of SMP

Allowing that a consideration of Ofcom's dispute resolution powers is relevant to an assessment of CBP, the fact that BT can refer a pricing dispute to Ofcom in itself implies that BT constrains H3G from acting independently in setting prices for call termination.[29] This issue goes to the very definition of SMP which requires that an undertaking be in a position to act independently of its customers to an appreciable extent. Ofcom has recognised that BT has an incentive to exercise its ability to refer a dispute to Ofcom, which is one of the areas the CAT judgement identified as needing to be explored.[30] As such, H3G is clearly not free to act independently of its customers to an appreciable extent, nor to set the prices it wishes, since BT has both the ability and an acknowledged incentive to refer the issue to Ofcom if it is not happy with H3G's price.[31] Such a situation removes any ability to act independently which H3G may otherwise have had. In short, BT's ability to refer a dispute over H3G's termination prices to Ofcom by itself implies that H3G does not possess SMP. Ofcom does not adequately consider this issue.

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25 Paragraph 4.16 of the SMP Reassessment Consultation
26 See paragraph 5.19.
27 See CAT judgment, paragraph 142.
28 In this regard, Ofcom's approach is riddled with contradictions as, at first, Ofcom seems to acknowledge this position but then later, goes on to contradict itself and finally to consider this factor in any event. See paragraphs 5.16, 5.19, and 5.20 respectively of the Consultation.
29 Paragraph 5.94 of the Consultation notes, that if BT does not consider the terms and conditions offered by the MNO for termination to be reasonable, it can refer a dispute to Ofcom in order to try to obtain more favourable terms and conditions.
30 See paragraph 141 of the CAT judgment.
31 H3G cannot and would not ignore such an important customer. [●]

The fallacy of Ofcom's approach is illustrated by the fact that if BT had the ability to refer the matter to an independent arbitrator, who was required to set a reasonable price, it is highly unlikely that Ofcom or any other regulatory authority would argue that H3G had SMP. H3G considers that the position should not be different simply because the independent arbitrator in this case is Ofcom.

[●]

3.3. Ofcom's approach to resolving disputes between SMP and non SMP operators is flawed

Even if the mere fact that BT can and will refer a dispute to Ofcom is not considered sufficient to demonstrate the absence of SMP, Ofcom's own interpretation of its dispute resolution powers is incorrect in law, and constitutes an inadequate basis for a finding of SMP.[32]

Ofcom's conclusion that H3G has SMP effectively rests on an assumption about how Ofcom would in act in resolving a dispute. In this regard, Ofcom seeks to rely on a distinction between how it would resolve a dispute involving an operator which has SMP and one which does not. H3G does not consider that there is any legal justification for adopting such a distinction in this context. Under Article 20 of the Framework Directive, Ofcom is required to resolve disputes in accordance with Article 8 of the same. No reference is made in Article 20 to a distinction between the method for resolving disputes where one party has SMP versus disputes where neither party has SMP.

Indeed, Article 8(2)(a) expressly refers to the need to ensure that there is no distortion or restriction of competition in the electronic communications sector. This is particularly important given that the underlying economic rationale for a regulatory requirement for interconnection is the same regardless of whether or not any party in a dispute has SMP. Where there is an established operator - who possibly has SMP - the interconnection obligation is intended to negate any incentive it might have not to interconnect with a smaller operator. Where there is no established operator the parties might be expected to reach an agreement, but the basis for regulatory intervention is the same if a dispute should arise: the preservation of competition in the long-term (not just "for the market"). Given that in each case the underlying basis for regulatory intervention rests on the statutory duty to promote competition, there is no justification to impose different outcomes by way of a determination.[33]

Reflecting this, Article 4(1) of the Access Directive[34] makes no distinction between different types of operators and Recital (5) provides that, "undertakings which receive requests for... interconnection should in principle conclude such agreements on a commercial basis, and negotiate in good faith". Moreover, Recital (6) does not refer to SMP, only to differences in bargaining power, before going on to state, "National

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32 H3G notes that Ofcom has not issued a statement with respect to its *Draft Enforcement Guidelines*. It may be premature for Ofcom to come to a conclusion in this case before it has issued its final *Enforcement Guidelines*.

33 Koenig, Bartosch and Braun (*EC Competition and Telecommunications Law*, Kluwer) note that "... the issue of access to telecommunications infrastructure and services is... crucial due to the network nature of these markets. In markets with a network infrastructure, denial of access to the telecommunications infrastructure turns to be a denial of access to the end-user and, thus, to the customer. Network access is essential to new competitors... at least in the first phase after the abolition of the former monopoly operators' exclusive and special rights. *This holds true not only for competitors without a network infrastructure of their own: due to the presence of network effects, entrants that control or build up a network of their own depend on access to other telecommunication networks*. The regulatory provision of access rights.... addresses these issues..." (page 365, emphasis added).

34 Directive 2002/19/EC of 7 March 2002.

regulatory authorities shall have the power to secure, where commercial negotiation fails, adequate access and interconnection... of services in the interest of end-users."

There is, in addition, the need for interconnection to ensure end to end connectivity and interoperability of different services for consumers. This is set out clearly in Recitals 8 and 9 to the Access Directive. This also supports H3G's argument because, of course, these issues will apply whether or not any operator has market power. Indeed, they might be more important in a highly fragmented market where, in the absence of regulation, interoperability might be harder to achieve[35].

H3G has already pointed out the difficulties involved in adopting such a distinction in interpreting Ofcom's dispute resolution powers in its response to the End-to-end Connectivity Consultation.[36] Any attempt by Ofcom to rely on such reasoning in the current market review will be material. To restate H3G's position, any such reliance results in a circular line of reasoning, namely that if an operator has been found not to have SMP then the result of any dispute resolution process means that such an operator will have SMP.

Further, Ofcom's current position that its main focus in any dispute where neither party has SMP will be to ensure connectivity, and hence produce different outcomes from a dispute in which one or both parties has SMP is flawed.[37] This position appears to contradict the view expressed by Ofcom in paragraph 4.105 of the SMP Reassessment Consultation. In that document, Ofcom asserted that where an OCCN has been issued, the loss of connectivity would not be an issue, and its focus would be on the financial difference between the existing and proposed charge. As such, Ofcom's policy on this issue is opaque and inconsistent. In any event, even if there are other policy factors in play, H3G does not see how the resulting price could be said to be "excessive" in any real sense. Indeed, H3G anticipates that BT, according to Ofcom's own statement as to its incentives, would appeal Ofcom's decision to the CAT on that very basis.[38]

3.4. Ofcom adopts a test for SMP based on pricing at the competitive level that is too narrow and not in accordance with competition law

According to Ofcom, if H3G's price exceeds the "competitive level" (as defined by Ofcom), regardless of whether this price is set by Ofcom following a dispute referred by BT, this necessarily implies that H3G has SMP. Ofcom goes on to argue that since any price set via the dispute resolution process would not necessarily be at the "competitive level", there would still be insufficient CBP to offset a finding of SMP.[39]

[35] In the US in the early days of telephony in some towns there was no interoperability and, in order to be able to call any subscriber in the town, a user had to sign up to all the telephone companies and have a different handset for each.

[36] Published on 14 July 2006; H3G's response dated 15 August 2006.

[37] Paragraph 5.104 of the Consultation.

[38] In paragraph 4.98 of the SMP Reassessment Consultation, Ofcom sets out its view that BT was under similar obligations prior to the condition, on the basis that Ofcom could have used Article 5 to impose a condition if required. H3G notes that this raises significant timing issues and an apparent contradiction with paragraph 4.45 of the SMP Reassessment Consultation. Further, for the same reasons set out above in relation to resolution of a dispute under the end-to-end connectivity obligation, H3G believes that this approach is similarly flawed.

[39] Paragraph 5.104 of the Consultation

However, Ofcom is not basing its test on the definition of SMP derived from Article 82 case law and incorporated into Article 14(2) of the Framework Directive and the 2003 Act, but on an unduly narrow definition of the meaning of a "competitive price".[40]

In paragraph 5.98 of the Market Review Consultation Ofcom states that, "a terminating MNO would not have SMP if … Ofcom would resolve the dispute by setting a charge for MCT at the competitive price level. The proxy for the competitive price level used in the last MCT market review was a strict cost oriented charge based on LRIC plus mark-ups for common cost and externality." Thus Ofcom is defining the "competitive price level" for this purpose as a cost-oriented charge, i.e. LRIC plus appropriate mark-ups. Ofcom's position is that an operator has SMP if it is able to charge a price above this proxy for the competitive price level.

Ofcom's approach is not consistent with competition law, however. The relevant OFT Competition Act guideline on the Assessment of Market Power (December 2004) defines "market power" as "the ability to profitably sustain prices above competitive levels" (paragraph 1.4), and "dominance" as a position of "substantial market power" (paragraph 2.9). It goes on to say that dominance (or SMP in this context) is indicated by an ability to sustain prices that "substantially exceed relevant costs" or "profits substantially exceeding competitive levels" (paragraph 3.5). Thus the mere ability to charge prices above the "competitive level" as defined by Ofcom is insufficient for a finding of SMP. Ofcom is obliged to demonstrate that BT's CBP would be insufficient to prevent H3G from charging termination prices *over the long term* which *substantially* exceed relevant costs, or result in profits which *substantially* exceed competitive levels. Ofcom's contention that it would not impose LRIC-based, or cost-oriented, prices in a dispute falls far short of establishing the necessary foundation for an SMP finding.[41]

In fact, Ofcom has provided no reasoning or evidence indicating H3G would be able to exercise such *substantial* market power or charge prices that substantially exceed costs in the normal competition law meaning of the term. This is despite the fact that the SMP Guidelines state that SMP will be assessed using the same methodologies as under normal competition law (see paragraph 24). Ofcom has therefore erred in law. The Commission's SMP Guidelines set out criteria which can be used to measure the power of an undertaking to behave to an appreciable extent independently of its competitors. Whilst this list is not exhaustive, it is significant that the guidelines do not suggest that "excessive prices" in the narrow sense defined by Ofcom are a relevant factor for determining SMP.

Ofcom's approach is confused. This is also illustrated by the Market Review Consultation itself. The fact that prices or profits which exceed a narrow definition of the "competitive level" are consistent with an absence of SMP is recognised by Ofcom elsewhere in the Consultation. In paragraph 7.10 Ofcom states:

> *"Ofcom considers that it is still possible for firms to earn excess returns (i.e. above their cost of capital) in markets where no firms have SMP because these firms may still experience a degree of market power. However, the degree of*

[40] This is set out clearly in paragraph 4.75 of the SMP Reassessment Consultation when read together with Ofcom's definition of the competitive price level. See paragraph 5.98 of the Consultation.

[41] The position under the current regulatory framework may well be significantly different from the potentially wider latitude given by the test under the previous regulatory regime (of whether a price was against the public interest).

market power is not sufficient to be characterised as SMP and therefore warrant ex ante regulation in its own right.[42]

Thus, Ofcom itself recognises that some degree market power can be present without requiring a finding of SMP. This points to the conclusion that Ofcom is using the wrong test for SMP in its consideration of CBP.

More generally, Ofcom's statement that the price it would set would be "excessive" (under its own definition) is surprising. H3G considers that Ofcom's approach is unsupported by the jurisprudence of the courts or the European Commission's various guidelines.[43] Ofcom has ignored case law and commentary which sets out the need for rigorous analysis if a finding of excessive pricing is to be made.[44] (H3G does not see why “excessive” pricing in the sense of an abuse of dominance should differ in this regulatory context, nor has Ofcom argued as such in the Market Review Consultation). H3G notes that, in *United Brands v Commission*[45], the European Court of Justice found that a price was not excessive if it bore a reasonable relation to the economic value of the service (*United Brands*, paragraph 250). H3G also notes that in two decisions on excessive pricing in the ports sector, the Commission decided it could not determine whether a price was excessive simply "by adding to the costs incurred in the provision of the product/service, a profit margin which would be a predetermined percentage of the production costs", going on to note that "[e]ven if benchmarks on profits of ferry-ports could be established, they would in principle only be considered as an indication and would not be conclusive in themselves as to whether the price charged bears any reasonable relation to the economic value of the services provided…".[46]

3.5. Ofcom’s approach appears to assume it would set an “excessive” or “anti-competitive” price

Given the above, a detailed examination of the likely outcome of dispute resolution by Ofcom is unnecessary. Regardless of the circumstances, Ofcom cannot lawfully impose an "excessive" price within the competition law meaning of the term. Ofcom

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42 Paragraph 7.10 of the Market Review Consultation.

43 H3G also notes the comments of Dethmers and Dodoo in "*The abuse of Hoffmann-La Roche*" [2006] ECLR 537 at page 539-540. After discussing the position generally, the authors note that "When measuring whether a price is already indicative of significant market power, it can prove difficult to verify whether prices… are excessive or not. This is because there is no reliable reference price… that can be used to undertake this assessment… Not surprisingly, it is difficult to determine that a profit margin is excessive even if it appears very high at face value since the risk premium is determined by a number of factors that are unrelated to the existence of market power. For these reasons, no meaningful conclusion can be reached generally regarding the degree of competition in a market where profitability is used as a measure of market power." See also Zepeda and Walker "*Market Dominance: Measurement Problems and Mistakes*" [2003] ECLR 640 - "The competitive level is virtually always impossible to calculate." and Evans and Padilla "*Excessive Prices: Using economics to Define Administrable Rules*" (2006) 1 Journal of Competition Law and Economics 97: "There is no pricing rule or benchmark that can be used to distinguish effectively (i.e. without error) between competitive and excessive prices in practice."

44 *Napp Pharmaceutical Holdings Ltd v Director General of Fair Trading* [2002] CAT 1, paragraph 392, states that "*measuring whether a price is above the level that would exist in a competitive market is rarely an easy task*.". In "*Article 82: Excessive Pricing*', Marcus Glader (Competition Law Insight, 4 July 2006 CLI 5 7 (3)), states that: *"Competition law statutes concerned with excessive pricing and similar exploitative practices by a dominant company are inherently very delicate to implement."*. In *Commission Practice concerning excessive pricing in telecommunications*: Marcel; Haag & Robert Klotz, (Competition Policy Newsletter 1998, No 2, June) state that "*although price abuses are explicitly mentioned in Article 86 EC Treaty, formal Commission decisions concerning price abuse are rare. One of the main reasons for the absence of a more extensive case law can be found in the practical difficulties of establishing price abuse*."

45 Case 27/76, *United Brands v Commission* [1978] ECR 207.

46 "*Two important rejection decisions on excessive pricing in the port sector*" LAMALLE, LINDSTRÖM-ROSSI And TEIXEIRA, Directorate-General Competition, unit D-3, Commission's Competition Policy Newsletter, Number 3 - Autumn 2004.

is obliged to impose a "reasonable" price. If it did not do so, BT would no doubt appeal. Hence, as a matter of principle and common sense, any price imposed by a regulator cannot be viewed as "excessive" in the sense required to justify a finding of SMP. If Ofcom were to impose such a price, it would represent a transfer of value between the relevant parties. Given Ofcom's wider duties under Article 8 of the Framework Directive, this cannot be correct.

In any event, in resolving any dispute, Ofcom would necessarily take account of the results of its own LRIC model. The relevance of this model was acknowledged by Ofcom in its early correspondence with H3G. There is no reason for Ofcom to have changed its position in the interim. Ofcom's current arguments therefore appear to be inconsistent with its previous position on the relevance of Ofcom's LRIC model.[47]

Where Ofcom has developed a model and has access to relevant cost information, there is no reason for Ofcom not to take this into account in resolving a pricing dispute.[48] The results of the model would be a relevant factor which Ofcom would necessarily take into account. To argue otherwise would be tantamount to allowing a national regulatory authority, with a duty to promote competition and efficiency, to knowingly set a price that represents a transfer of value between two market participants. This cannot be correct under Article 8 of the Framework Directive.

3.6. Conclusion on CBP

In conclusion, H3G considers that Ofcom's reasoning in respect of CBP is wrong in law and allows Ofcom to find SMP on the basis of its own interpretation of its powers and not on economic or market related factors. Whilst H3G understands that Ofcom must interpret its own powers as part of its role as a regulator, H3G has serious concerns about Ofcom's approach in this case and considers that Ofcom should revisit the fundamental issues. (Ofcom is also cross-referred to H3G's response to H3G SMP Reassessment Consultation).

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47 [●]

48 Clearly, what would constitute a "reasonable" price would need to take into account how the model and data were used (and H3G notes the wide ranges for 3G-only cost benchmarks which the current version of Ofcom's model is producing). However, this is also the case in relation to the setting of an SMP remedy, whereby it is necessary to consider what an appropriate and proportionate remedy is with reference to the facts of any particular market investigation. See Article 8(4) of the Access Directive.

4. Ofcom's approach to Remedies

In this, and the following sections, H3G comments on Ofcom's approach to setting a remedy, notwithstanding its views on the inappropriateness of Ofcom's SMP finding. H3G previously commented on this topic in its May 2006 Response. In the Market Review Consultation, Ofcom sets out more detailed proposals based broadly on the same approach it had set out in the March 2006 Consultation. Nevertheless, for the reasons set out below, H3G's views remain valid. In short:

- even if a finding of SMP is appropriate, a price control is not the appropriate remedy;
- Ofcom is incorrect to assume that it can set price controls which are non-distortionary and should take into account the incentives on migration from 2G to 3G; and
- Ofcom's interpretation of operator and technology neutrality does not lead to an appropriate price control approach, as it does not take additional important factors into account.

4.1. An appropriate basis for considering regulation of H3G's termination rates

H3G's May 2006 response set out the factors on which any SMP remedy should be based (if SMP is found and price control is the proportionate remedy). Ofcom is cross-referred to Section 3.4 of that response.

Such factors continue to be relevant and need to be taken into account in order to devise a proportionate remedy. In summary, the consideration of any remedy should:

- ensure that each operator is able to recover its efficiently incurred costs, assessed on the basis of actual exogenous constraints (that is, such costs should be calculated on the basis of what operators can reasonably be expected to achieve given the actual circumstances of each operator);
- take into account the effects on investment and innovation incentives, migration incentives from 2G to 3G, and on competition (including ensuring that there are not inappropriate transfers of value to incumbent operators from new entrant networks);
- have an appropriate way [●] to ensure long-run efficiency in the mobile market;
- be sufficiently flexible such that the major commercial and technological changes expected over the next few years are not hindered by regulation or lead to operators facing inappropriate incentives due to outdated regulation;
- take account of the fact that such a remedy will, by definition, lead to some distortions in the market and ensure such distortions are the minimum necessary and appropriate; and
- take into account *all* relevant asymmetries between operators rather than using the simplistic approach that "technology neutrality" means treating operators and technologies, subject to different circumstances, the same in absolute terms.

Taking such factors into account means that a proportionate remedy will ensure that H3G as the new entrant operator is not disadvantaged by regulation, [●] and lead to a cautious approach to imposing any price control cuts. Further, as required under the 2003 Act, Ofcom needs to ensure that any analysis, on which price control of a key revenue stream is based, is thorough and robust.

4.2. Price control is not the appropriate remedy

The Market Review Consultation sets out a number of reasons why Ofcom continues to believe that a price control is appropriate. Broadly these can be summarised as:

- the regulatory guidance required would have to be detailed and the implication is that it would in any event amount to a price control;
- different operators could interpret the guidance differently thereby creating risks of protracted disputes and regulatory uncertainty;
- there could be administrative costs in resolving multiple disputes; and
- Ofcom believes that it can take account of the risk that operators cannot recover efficiently incurred costs in its approach to price controls.

Notwithstanding these points a cost orientated condition (or potentially a requirement to charge fair and reasonable prices) is a more suitable approach to setting remedies. H3G remains of the view that Ofcom has dismissed this approach too readily.[49] The benefits of a cost orientated approach are that it would provide regulatory stability on the overall approach which would have the flexibility to deal with market changes. Further, it would provide flexibility to change commercial charging approaches (for example, the current price control approach in effect is likely to mean the perpetuation of per minute charging), as well as to deal with changing technologies. [●]

In relation to Ofcom's other reasons for preferring not to use a cost orientation remedy, H3G's view is that none of these provides a basis for preferring a price control, which requires greater justification as the more interventionist remedy.

The Market Review Consultation points to the complexity of judging what is a cost orientated price and suggests that nothing

> *"short of a detailed published evaluation of costs would be sufficient to provide purchasers and suppliers with a reasonable level of clarity as to the level of charges which could be considered cost orientated."* [50]

In adopting this line, Ofcom is not taking into account the fact that the detailed evaluation of 3G costs on which it is proposing to base the price control requires a large number of judgements to be made. Appropriate guidance for a cost orientated remedy could clearly set out the criteria on which such judgements are made. This would provide the appropriate degree of flexibility, as the outcome of such considerations could vary depending on changes in commercial, technological and market conditions over time. Ofcom is correct that there will always need to be a

49 H3G's May Response set out its views that a more flexible remedy than a price control (such as a cost orientation condition) could provide for a long-run stability of regulatory rules, while still allowing for those principles to be interpreted for the particular circumstances of individual operators at any point in time, take account of technological change and any changes to the market place (as an increasing number of alternative modes of communications reach the mainstream for example). In H3G's view, this remains the proportionate approach to be adopted. [●]

50 Paragraph 8.40.

degree of regulatory discretion which could create some uncertainty in the short term. However, the picture painted by Ofcom in the Market Review Consultation of on-going uncertainty, with different operators interpreting, and reacting to, the regulatory guidance in very different ways and with multiple on-going disputes does not appear to take all factors into account.[51]

Ofcom would be in a strong position to ensure that this did not happen by setting out clear criteria in its guidance and by setting clear precedents on new issues arising through appropriate and efficient dispute resolution (and reasoned published decisions). Ofcom also suggests that operators may game the system,[52] but this could also be avoided through the setting of appropriate incentives in the criteria by which Ofcom would adjudicate disputes. It is also far from clear that any transitional uncertainty would be any greater than the uncertainty created by Ofcom's current market review process, whereby Ofcom has only published its first set of full proposals in September 2006, when the process was initiated in June 2005. Operators (and especially H3G as a new entrant) will have been subject to on-going regulatory discussions [●] for over a year and a half. In contrast, the standard period for resolving disputes is four months, which should be achievable in this context given that any such disputes would be resolved in light of clear regulatory guidance. Even allowing for a period of negotiation (which would hopefully resolve matters), the possible uncertainty would be much less [●]. Moreover, much of the work of the current market review, appropriately applied, could be used to set any such guidance, further decreasing the overall level of uncertainty. A price control is clearly not appropriate in light of such factors.

4.3. Ofcom's approach to setting a price control.

In its May 2006 Response, H3G commented on Ofcom's proposed objectives and what were termed "key dimensions" (in the March 2006 Consultation) for the review. H3G also proposed a number of further factors which Ofcom should take into account and the priorities which it was appropriate to accord to these various aims. In terms of the high level objectives, the Market Review Consultation broadly restates those set out in the March 2006 Consultation.[53] This Response does not set out in detail the same arguments made in H3G's May 2006 Response again. However, H3G welcomes the re-wording of these objectives which has separated technology and competitive neutrality into separate points, accepting that these are different concepts each of which needs to be interpreted on its own merits.

Nevertheless, Ofcom has not sufficiently addressed H3G's concerns over Ofcom's interpretation of technology and operator neutrality. Ofcom is cross-referred to H3G's May 2006 Response on this. In addition, H3G has the following comments (see also Section 5 and associated annexes of this response for detailed comments). Ofcom sets out its high level approach and preference for a charge control remedy in paragraphs 8.46 to 8.51 of the Market Review Consultation.

Ofcom suggests that having consulted widely on the approach to setting charges "it might be considered more appropriate to enforce the detailed views expressed with a direct charge control (which would remove uncertainty arising from implementation and compliance)". This fails to account for other sources of uncertainty. H3G has

51 As set out in paragraphs 8.41 and 8.42.
52 Paragraph 8.42.
53 At paragraph 6.9.

set out its reasons for believing that cost orientation remedy is more appropriate above and deals with Ofcom's treatment of uncertainty further in Section 5.1 below.

Ofcom goes on to suggest that a charge control is superior in that the timing of any intervention is known. This ignores the fact that such certainty comes at the price of being unable to take changes in circumstances into account, and that the next four years are likely to involve significant change for the mobile sector. Ofcom's preference of a price control does not take account of the fact that a more interventionist remedy requires greater justification, not less.

Ofcom takes this view, notwithstanding that, elsewhere in the Market Review Consultation, Ofcom recognises that:

> *"direct controls on charges are an intrusive form of regulation and should be designed with great care to avoid regulatory distortions and unforeseen consequences".*

It is not only in their design that this factor is important. It is highly relevant to whether to impose a direct control at all.

More generally, and subject to the above, H3G fully agrees with this statement, if "regulatory distortions" is interpreted to mean "inappropriate" regulatory distortions. In practice it is unlikely to be possible to avoid all regulatory distortions. The proposals in the Market Review Consultation in an important respect do have an unintended consequence and need to be adjusted to ensure that any regulatory distortion resulting from their implementation is justified.

4.3.1. Ofcom's interpretation of technology neutrality

This leads onto Ofcom's continued intention to set a "technology neutral" charge control, by which, as the Market Review Consultation makes clear,[54] Ofcom means

> *"a combined charge control (or controls) for the blended mobile voice call termination rate on 2G and 3G networks, irrespective of which technology is used".*

This is alternatively expressed as:

> *"a single charge control to apply to a given operator without distinction of the network used to supply MCT".*

H3G's views in its May 2006 response of this approach remain valid. In summary, Ofcom's interpretation of technology neutrality:[55]

- has a practical alternative;
- is likely to [●] adversely distort incentives [●];
- is partial and short-term;
- prejudges the outcome of the cost modelling (basing the price control on a principle in isolation of Ofcom's evaluation of the evidence); and
- is not, in fact, technology neutral in the sense of not discriminating between operators using different technologies [●].

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54 At paragraphs 9.7 to 9.13.

55 See Section 3.2.2 especially of H3G's May 2006 Response.

H3G also noted that one option identified in the March 2006 Consultation[56] was what H3G dubbed the "established technology principle" (effectively setting charges in relation to 2G costs). H3G previously set out reasons why this was an inappropriate approach.

The Market Review Consultation deals with two of H3G's objections.

First, Ofcom asserts that setting a single charge control (which applies irrespective of the technology used):

> *"provides MNOs with incentives to use the most efficient technology".*[57]

Further, Ofcom justifies this statement by the following consideration of setting different price caps for different technologies:

> *"differing levels of stringency across the two separate controls would mean that cost minimisation and profit maximisation outcomes (within the constraints of charge controls) would not be congruent. For example, in the event that operators perceive the controls on 3G call termination charges to be more stringent than those applied to 2G call termination, they may be encouraged to retain significant traffic volumes on the 2G networks".*[58]

H3G finds this reasoning unconvincing. Ofcom is accepting that there is an effect on migration from the level of profit which an operator is able to make on either a 2G or a 3G call (as evidenced, for example, by the reference to different levels of "stringency"). However, to move from this to the idea that the same level of price control will somehow provide a "neutral" incentive can only be the case if different price control levels mean different levels of margin are available to efficient operators (i.e. that the costs of 2G and 3G networks are the same). Ofcom's own cost modelling does not find this to be the case. H3G continues to believe that setting a single price control level for technologies at different stages of their investment cycle (and, for this reason if no other, therefore having different cost levels during the price control period) will adversely impact migration incentives. This is because the actual margin which can be made from minutes on one technology will be different to that which can be made on the other, therefore providing an incentive to use the technology with the greater margin. Further, Ofcom's approach, as evidenced by the reference to "the most efficient technology" is essentially static. The most efficient technology today may not be the most efficient technology in the long-run.[59] Even if Ofcom's incongruent cost minimisation and profit maximisation argument were accepted then a regulator should be setting incentives to ensure that in the long-run, the most efficient technology is used – not simply perpetuate long-run inefficiency by ensuring no incentives to migrate from a long-run <u>less</u> efficient technology. Finally, Ofcom's approach does not take into account the extent to which operators *actually* migrate traffic from one technology to another. Annex 4 provides further detail on these issues.

Ofcom also addresses the comments H3G made on the established technology principle. H3G welcomes Ofcom's clarification that it had not intended to associate

56 At paragraph 7.59 of the March 2006 Consultation.
57 Paragraph 9.12 of the Market Review Consultation.
58 Paragraph 9.10 of the Market Review Consultation.
59 This could be due to a number of reasons, including the fact that one technology is currently not at its efficient scale, due to early pioneering costs of equipment being higher in the early stages of a technologies development, continuing technological development and due to "learning by doing" (that is, operators are able to extract the most efficiency out of a technology after gaining experience with optimising its use which means that newer technologies will take some time to reach their full potential). These are all likely to be important factors when comparing radio technologies.

technology neutrality with this principle. Further H3G agrees with Ofcom's conclusion that such an approach is disproportionate by not allowing efficient cost recovery and distorting operator incentives. H3G further notes that, as explained in its May 2006 Response, the established technology principle (and any comparisons with the situation relating to BT's NGN) are not, and can never be, appropriate in the context of an operator which is not at liberty to use the "established technology".

4.3.2. Operator neutrality[60]

The Market Review Consultation suggests that responses were "broadly" in agreement[61] with Ofcom's contention that any differences between price controls for individual operators should reflect exogenous cost differences and

> *"endogenous cost differences should not be reflected in distinct charge caps, as such reflection may reward inefficiency".*

Ofcom further noted that "varied views" were expressed as to the extent and nature of exogenous cost differences.

In its consideration of operator neutrality, the Market Review Consultation uses the detailed modelling results from Release 3 and bases its consideration of the differences between operators on an analysis of the cost benchmarks used in Ofcom's proposals. As such, the principal difference identified between 3G only costs and combined 2G/3G costs arises when "a contribution to 3G spectrum costs is included".[62] H3G is therefore concerned that Ofcom has not considered other exogenous differences as raised in H3G's May 2006 Response.[63] In particular, the analysis of whether different price caps are appropriate between operators does not recognise H3G's new entrant status and the fact that its network is [●] and suffering from asymmetric originating versus terminating traffic patterns.[64]

The Market Review Consultation approaches the issue of operator neutrality under the heading "adverse impact of differentiated charge controls". H3G believes that the starting point should be recovery of efficiently incurred costs [●]. The implications of this different focus are discussed further below in Sections 5 and 7. In terms of the arguments advanced in the Market Review Consultation in favour of non-differentiated charges, H3G has the following comments.

- First, Ofcom continues to appear to be relying on a variant of the "single price for a single service" argument,[65] without dealing with H3G's criticisms of this approach and arguments that such an approach in inappropriate.[66]

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60 These issues are discussed at paragraphs 9.14-15 and 9.56-9.62 of the Market Review Consultation.

61 See paragraph 9.15 of the Consultation.

62 This can be seen in paragraphs 9.61 and 9.62 of the Market Review Consultation (when read in conjunction with the more detailed cost modelling annexes, especially Annex 5).

63 H3G's May 2006 Response set out a number of reasons why price caps should in practice differ between operators. H3G in effect argued in its earlier response that Ofcom needed to have reference to the actual costs of individual operators before it could consider whether different price caps were appropriate for different operators, and set out its views on the various exogenous cost differences which Ofcom identified. H3G also noted that it was inappropriate to talk in terms of asymmetric regulation as different circumstances require different treatment [●]. H3G noted that allocative dis-benefits and effects on competition should be taken into account in any consideration departing from this approach. Further H3G criticised the "single price for a single service" argument as inappropriate and incompatible with any competitive outcome benchmark. See Section 3.2.3 especially of H3G's May 2006 Response for the detail of these arguments.

64 This issue is discussed further in H3G's comments on the efficient path of cost recovery in Annex 5.

65 See especially paragraph 9.64 of the Market Review Consultation and surrounding arguments.

66 As set out in Section 3.2.3 of H3G's May 2006 Response, especially on pages 26 to 27.

- Second, Ofcom suggests that setting the same charges will provide efficient incentives in the context of liberalisation and prospective trading of spectrum. In particular, Ofcom suggests that setting a single charge will enable Ofcom in future to disentangle itself from detailed cost modelling in relation to new technologies (referring explicitly to "WiMAX" and "4G" wireless solutions).[67] However, H3G set out why it is inappropriate and premature to rely on spectrum trading and liberalisation (which faces formidable implementation issues which have yet to be addressed) as an argument for operator neutrality. To do so would be unfair as it is not clear how they will impact the analysis. The Market Review Consultation does not consider such factors. Further, the reference to future wireless technologies appears to be a variant of what H3G has dubbed the established technology principle, which the Market Review Consultation elsewhere suggests is inappropriate.
- Third, Ofcom refers to existing MNP arrangements in the UK as a reason for moving to a single control. H3G believes that this is a case of the tail wagging the dog. The existing MNP arrangements are flawed and should be changed as a matter of urgency, with which Ofcom's recent consultation on General Condition 18 appears to agree in many respects. Given this may be addressed in the near future, and certainly within the period that the SMP remedy would apply, it is inappropriate to give significant weight to this consideration.

Ofcom reaches its conclusions on two separate price controls for combined 2G/3G networks and the 3G only network, balancing its view of the adverse impact of differentiated charges against the effects on investment incentives. Although disagreeing that non-differentiated charges is an appropriate benchmark, H3G welcomes that Ofcom is making such as assessment. Ofcom concludes that the difference in costs between combined 900MHz/1800MHz networks and 1800MHz only networks is not sufficient to outweigh these adverse factors, while the difference between 2G/3G networks and 3G networks does lead to the need for a differentiated charge control, at least for the period of the proposed price control. In part, Ofcom deals with this issue in terms of its treatment of uncertainty over the cost estimates. H3G's detailed comments on this treatment are set out in Section 5.1 below. H3G welcomes the fact that Ofcom has recognised the need to take into account the differences between 2G/3G networks and its own 3G only network, [●].

Finally, Ofcom briefly deals with the potential impact on competition of setting the same price control for 900MHz/1800MHz operators and 1800MHz only operators. It does so on the basis of the effect being small and that the proposed "<u>range</u> within which the level will be set does not prevent [Orange and T-Mobile] from recovering their efficiently incurred costs".[68] H3G agrees that effects on competition are a relevant consideration. However, Ofcom has not fully analysed the effect on competition [●]. Ofcom's consideration therefore does not go far enough.

Overall, H3G continues to be of the view that "operator neutrality" as interpreted by Ofcom as a primary objective of setting price controls is inappropriate in the way interpreted by Ofcom. The Market Review Consultation has not provided sufficient justification to change this assessment.

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67 The assumption that such new technologies could emerge in this section of the Market Review Consultation can be contrasted with the assumption at paragraph A 5.24, used in conjunction with the relevant volume forecasts for the cost modelling process, that it is *"unlikely"* any new operators will:
"take a significant share of the total mobile market over the period under consideration".

68 Paragraph 9.72.

4.4. Treatment of other operators with mobile number ranges

The Market Review Consultation only briefly considers the appropriate regulatory approach to operators, other than the existing 2G and 3G network operators, which now control telephony number ranges. Ofcom has issued mobile telephony number ranges to a number of other operators and some of these already have prices established in BT's Carrier Price List for call termination, which do not appear to be grounded on any cost basis. The Market Review Consultation only considers this issue in relation to BT's Fusion service, and even then just in the section on market definition (despite the fact that other Communication Providers have also already launched services).[69]

H3G notes that at the time of the last market review, Ofcom found H3G and Inquam had SMP when they had relatively few subscribers. H3G is therefore currently unsure as to why Ofcom is not now, at least as a matter of ensuring a consistent regulatory approach, considering the appropriate regulation to place on these newer types of operators. H3G welcomes Ofcom's statement that it intends to monitor developments, plans a non-discriminatory and consistent approach to such operators and will consider if a further market review is appropriate in light of developments. H3G's views, that a non-discriminatory approach requires that operators in different positions are treated differently, apply equally here. As such, H3G will look to Ofcom to assess the position of such operators on its own merits and expects that simply applying the same price control level to these operators as to existing operators will <u>not</u> be non-discriminatory or consistent. Such an approach would likely lead to [●] inappropriate recovery of efficiently incurred costs and not result in a neutral competitive treatment.

4.5. Price control is premature

Even if a price control is considered to be the appropriate remedy, Ofcom's proposals would mean that H3G will be subject to price controls at an earlier stage in its investment cycle and development when compared to its direct competitors. Ofcom is proposing to apply such a remedy to H3G as a significantly earlier stage in its investment cycle and may allow a smaller difference in rates between H3G incumbent operators than other European new entrant operators (outside of the 3 Group) sooner after entry. This is relevant to whether a price control is relevant at this stage (as well as the glide-path to be adopted, were a price control to be imposed).

This can be seen in the comparisons in the following tables.

Table 1: number of years between launch and formal regulation

	2G Launch year	First regulated	Years from launch
Vodafone	1991	1999*	8
O2	1991	1999*	8
Orange	1994	2003	9
T-Mobile	1993	2003	10
H3G	2003	2007 (proposed)	4

*calls from CWC – a small fraction of total – were regulated from 1991

[69] See annex 9.

Table 2: Customer base when first formally regulated

	First regulated	Customer base (million)
Vodafone*	1999	9
O2*	1999	7.5
Orange	2003	9
T-Mobile	2003	10
H3G	2007	3.7

It is also worth noting that, at the time of the last Competition Commission Inquiry in 2002, the relevant price controls were derived from a LRIC model which assumed roughly equal market shares for each of the operators. H3G's current market share by subscriber numbers if in the region of 5%, whereas the other operators all have market shares in the region 20%-24%. This represents a further asymmetry which did not exist at the time of the last review of the MCT market. The Competition Commission was keen to test whether assumptions were "real world". In the present case, it is clear that Ofcom's assumptions are inconsistent with this test.

Turning to European comparisons, there are two examples of new entrants outside of the 3 Group for which the European Commission has accepted the need for differential price caps. Given the economies of scale involved in rolling out a radio network, asymmetries arise from being a new entrant which the Commission has accepted should lead to asymmetries in rates. Table 3 compares the rate differential allowed for the new entrants in France and Belgium compared to that proposed for H3G in the Market Review Consultation and shows that such asymmetries have been accepted in these countries for longer periods that Ofcom is proposing to allow.

Table 3: Amount by which regulated call termination charge of the late entrant exceeds that of the largest operator (Euro cents)

	Year of entry	*Years after entry*					
		6	7	8	9	10	11
France: Bouygues	1996			2.95 (2004)	2.29 (2005)	1.74 (2006)	1.74 (2007)
Belgium: BASE	1999	6.94 (2005)	6.94 (2006)	5.68 => 4.67 (2007)	4.34 => 3.85 (2008)		
*UK: H3G**	2003	2.75 (1.8p) (2009)	1.04 (0.7p) (2010)				

Assuming Ofcom's option one glide-path.

If, as Ofcom has previously accepted in other contexts, contestability is viewed in theory as the appropriate competitive benchmark, there are also arguments that H3G's rate will only rise above such a benchmark part way through the proposed price control period. As discussed in more detail in Section 5.4 below, and referring to the analysis of the appropriate competitive cost benchmark in Section 2.4 above, such an approach would suggest that it is inappropriate for a price control to be applied to H3G now, but that any such remedy should be applied, under Ofcom's current forecasts, at the earliest, in around 2009. Given the uncertainties involved, it would be appropriate in such a situation to postpone the implementation of a price control remedy and, if anything, impose a cost-orientated requirement.

5. Level and structure of the proposed price cap

Even if a price cap and Ofcom's broad principles and approach for setting such a price cap are accepted, Ofcom's implementation of this approach leads to a remedy which is inappropriate and disproportionate in relation to the nature of the problem identified, contrary to the Access Directive. H3G also believes that Ofcom's identification of the nature of the SMP problem which needs to be addressed is incorrect. (H3G's detailed views on the relevant issues on which any remedy should focus are set out in Section 8 below.)

This section sets out H3G's reasons for considering that the 6ppm benchmark proposed by Ofcom is incorrect and inappropriate (Sections 5.1 and 5.2). In Section 5.3, H3G sets out why Ofcom's approach to dealing with MNP is incorrect. Sections 5.4 and 5.5 provide H3G's comments on other aspects of the proposed price control (as set out in Section 9 of the Market Review Consultation and relevant annexes). H3G's views on the specific glide-path options set out in the Market Review Consultation are provided in the next section of this response.

5.1. Approach to uncertainty and ranges

As H3G has consistently argued, a key regulatory challenge for the current market review is appropriately managing the risks and uncertainties inherent in a forward looking price cap to be applied to a rapidly evolving new technology such as 3G and for a new entrant such as H3G. There are various appropriate ways to deal with such uncertainty (in relation to the cost modelling, especially with regard to the large degree of variance around key input parameters).[70]

Ofcom has not taken any of these different approaches in the Market Review Consultation to dealing with the relevant uncertainties. As set out in Annex 13 of the Market Review Consultation, Ofcom has started by generating a large number of scenarios which are derived under different traffic forecast assumptions and different treatments of the licence fee. However, as set out in Annex 5 of this response many of the different treatments of the licence fee are inappropriate and should be discounted.

Even setting this aside, the different demand forecast scenarios Ofcom uses create a wide range of outcomes, which Ofcom has then separated into three ranges.

Ofcom then states it:

> *"has addressed the identified risk of forecasting errors in this market review by considering a range of plausible traffic scenarios. Furthermore … in the event that unexpected market or technological developments (such as VoIP) start to have a material impact on the MCT market, such that it appears that charge controls may no longer be required, it would be possible (and appropriate) for Ofcom to review the market again before any charge control expires, with a view to withdrawing the charge control conditions."*[71]

Ofcom explains its treatment of the "risks inherent in setting charges too high or too low" in more detail later in the same section, effectively setting out brief reasons why Ofcom believes its "high" and "low" ranges are unlikely to occur, and therefore

70 See, for example, Annex 7 of H3G's May 2006 Response and H3G's letter to Ofcom on the cost of capital, dated 20 February 2006.

71 Paragraph 9.5 of the Market Review Consultation.

concluding that the middle range is the most appropriate range to use.[72] Ofcom goes on to note that the:

> *"level of the charge control which Ofcom proposes should apply to H3G is defined by a range of 1.3ppm (reflecting the higher degree of uncertainty associated with a new entrant)".[73]*

Ofcom then notes that it will pick within this middle range in light of responses to the consultation, but that:

> *"Ofcom's present view is that charge controls for 2010/11 should be set at the mid-point of the applicable cost range".[74]*

In H3G's view, this line of argument does not represent a proportionate approach to dealing with the uncertainty inherent in the 3G cost modelling for the current market review.

- First, H3G does not agree that the ranges which Ofcom identifies are based on a realistic spread of potential volume outcomes over the cost modelling period. [●]
- Second, even if Ofcom's overall set of three ranges is accepted, its reasons for the dismissal of the high cost range are that the "negligible growth in voice or data traffic" assumed for this range is inappropriate in light of "industry consensus" and because:

  > *"such low traffic forecasts seem inconsistent with the value of the MNOs' 3G spectrum that they reflect in their accounts."[75]*

  This ignores the reason for looking at ranges in the first place. Ofcom is looking at a number of scenarios in order to assess the risk of the cost modelling process producing a wrong answer (and hence a price control not allowing costs to be recovered). Therefore to take one end of the range estimated and curtail it, because at the current time it is considered unlikely, is simply not to deal with the risk involved of regulatory error (that current expectations turn out to be wrong). In effect, all Ofcom's approach here is doing is to assign a zero probability to that outcome, which simply begs the question of why that scenario was devised, and costs estimated for it, in the first place.
- Third, Ofcom's suggestions that it has "reflected" the higher degree of uncertainty inherent in a new entrant 3G only network by using a wider range is spurious for similar reasons. Ofcom is currently indicating that it will use the mid-point of the range to set the end-point for the price control glide-paths. As such, it would make no difference to Ofcom's analysis if this was the mid-point of a range which was 0.2ppm, 1.3ppm or 10ppm wide. To suggest therefore that the width of the range somehow takes new entrant risk into account is logically incorrect. Indeed, simply estimating a number of scenarios and deriving ranges, does not in itself take into account the risks associated with uncertainty and regulatory error over the course of a relatively

72 Paragraphs 9.74 to 9.77 of the Market Review Consultation.
73 Paragraph 9.78 of the Market Review Consultation.
74 Paragraph 9.79 of the Market Review Consultation.
75 Paragraph 9.77 of the Market Review Consultation.

long proposed price control period.[76] Such uncertainty is taken into account or not in the way such ranges are then used.

As such, Ofcom's approach does not, in fact, take account of such risks. This is despite the fact that Ofcom clearly recognises the asymmetric dangers of regulatory error (in terms of the damage it will do to [●] the long-run interests of consumers) i.e. there are greater costs from setting too strict a price cap than setting too lenient a price cap.[77]

H3G has previously set out what could be appropriate approaches to dealing with such uncertainty in the regulatory modelling. To be clear, *taking account* of such uncertainty, and dealing with the asymmetric risks involved, requires Ofcom to go beyond simply *recognising* such uncertainty by the creation of different scenarios. i.e. picking the mid-point of a mid range does not deal with asymmetric costs of uncertainty, regardless of how wide or narrow the range is. Given the significance of this, it is unclear why Ofcom has not addressed the various potential approaches suggested by H3G which sought to provide ways of dealing with this crucial issue in an appropriate manner. H3G will be happy to discuss these approaches further with Ofcom if permitted, but in summary, H3G suggests that an appropriate approach would:

- either make use of the ranges estimated in terms of assigning some form of probability distribution to the various possible outcomes and using a average overall (weighted by the different probabilities and taking account of the asymmetric nature of the costs of any error); and/or
- taking account of the risk through an acknowledged premium on the relevant cost of capital; and/or
- take account of the risk by picking towards the upper end, if not the top, of whatever range is considered appropriate; and/or
- introduce and take appropriate account of a downside scenario which reflects the risk of emerging competition.

In relation to the cost of capital, H3G notes that Ofcom has simply picked the middle of the estimated range for the weighted average cost of capital, which means any probability weighted approach has definitely not been taken, unless Ofcom are assuming all scenarios are equally likely which does not appear to be the case..[78]

[●] a relevant factor in picking between these various approaches may simply be the practicality of putting them into effect. The simplest approach would be to take the third option of picking towards the top end, if not the top, of whatever range is considered relevant. H3G notes that the implications of its comments above, and its detailed comments elsewhere in this response, with respect to Ofcom's ranges are that the relevant range here would likely be different and higher than Ofcom's mid range of 5.4-6.7ppm.

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76 [●]

77 As set out in paragraph 9.75 of the Market Review Consultation.

78 Regulators in other industries have explicitly considered the issue of specific cost and revenue risks and used this consideration to justify choosing a value for the cost of capital which is different to the mid-point. See for example, the Civil Aviation Authority's ("CAA") treatment of BAA in the last review of its regulated charges (CAA Decision, "Economic Regulation of BAA London Airports (Heathrow, Gatwick,and Stansted", February 2003); and Office of Rail Regulation's choosing within the range of rates of return estimated for National Rail in the 2003 interim review of charges ("Access Charges Review 2003: Final Conclusions", December 2003).

5.2. Ofcom's proposed 3G only benchmark

The previous sub-section of this response set out H3G's views on the ranges Ofcom has used and its approach to picking within those ranges. Notwithstanding H3G's disagreements with Ofcom's approach on those issues, even if Ofcom's treatment of uncertainty was appropriate, the 6ppm figure that Ofcom derives as a result is wrong due to a number of flaws in Ofcom's approach to deriving LRIC plus appropriate mark-ups. H3G believes that the overall effect of correcting these flaws would be to raise Ofcom's figure well above not only the top of its own high range of 9.3ppm but also well above H3G's current levels of charges. That is, there are strong reasons for believing that the 6ppm figure set out in the Market Review Consultation is substantially below an appropriate estimate of H3G's costs for the purposes of a price control benchmark. The remainder of this sub-section summarises H3G's views on these issues (see also Annexes 5-7).

5.2.1. CARS Costs

Through the market review process, H3G has repeatedly raised the issue of Customer Acquisition and Retention Services ("CARS") costs and the need to take these into account in setting any call termination price controls.[79] At a meeting on 7 August 2006, Ofcom verbally responded to H3G's 2 February 2006 initial discussion paper on this issue.[80] The Market Review Consultation deals with this issue in Annex 15.[81] Broadly, this discussion repeats Ofcom's previous position that subscription is an identifiable separate service and that CARS costs are incremental to it.

H3G's view is that this approach does not lead to a coherent definition of services in that it is not possible to set out a classification of services and costs attributable to them which makes logical sense.

The inclusion of subscription as a "service" means that the provision of any service implies the provision of subscription, which in turn implies the provision of every service. This in turn implies that there are no incremental costs associated with individual services or subsets of services, i.e. *there are only common costs*.

An apparently equally valid line of argument, however, leads to precisely the opposite conclusion, i.e. that all costs are incremental to every service and there are no common costs. This logical circularity results from using inconsistent definitions of services.

CARS costs are nothing more than the cost to an MNO of achieving and sustaining given levels of demand for each of the services it provides. As such, they are common to each service i.e. call origination and termination.

As H3G has already pointed out:

- the existence of an identifiable cost does not imply the existence of a service;
- Ofcom has not provided any evidence of the existence of separate identifiable "demand" for a subscription service; and
- the cost of providing a "subscription" service for any given level of demand would include an MNO's entire network costs, since otherwise the "ability" or "option" of making and receiving calls would not be provided, i.e. under

79 See, for example, references in Annex 6 of H3G's May 2006 Response.
80 At that meeting H3G was explicitly told that Ofcom's reasoning on CARS costs would be set out in full in the then forthcoming consultation (i.e. the current Market Review Consultation).
81 Paragraphs A15.7 to A15.14.

Ofcom's definition almost all MNO costs would be "incremental" to the "subscription" service.

Since Ofcom has failed to respond substantively on any of these issues in the Market Review Consultation H3G is compelled to repeat them.

H3G's 2 February 2006 paper set out a logical approach to considering CARS costs, and Ofcom has not provided an alternative classification of services where it can be demonstrated that CARS costs are solely incremental to some retail subscription service. H3G again invites Ofcom to do so, if it is to maintain its current position on CARS costs. In this regard, Ofcom is referred to Annex 6, which provides more detailed comments on Ofcom's approach to CARS costs in the Market Review Consultation in Annex 15. H3G's 2 February 2006 paper is also attached for ease of reference as Annex 7.

Therefore H3G continues to hold the view that the appropriate treatment of CARS costs involves some allocation to mobile call termination. This is significant and any rejection of such an approach needs to be justified given that, even if the rest of Ofcom's approach is accepted, H3G believes a correct assessment would imply that the 6ppm end-point for a 3G only operator glide-path should increase to over 10ppm.

5.2.2. Treatment of 3G licence fee

The only appropriate way to ensure efficient cost recovery is to take the full amount of the licence fee actually paid by H3G into account.[82] Ofcom has rejected this approach and has set out its approach to this important and substantial issue (for the first time during the course of the current review) in Annex 14 of the Market Review Consultation.

H3G's full comments are provided in Annex 5 of this response. In short, Ofcom's discussion of different treatments of the 3G licence fee gives the false impression that there is a wide range of equally reasonable scenarios: when in fact the great majority of the scenarios advanced by Ofcom are plainly unreasonable and inconsistent with Ofcom's treatment of all other costs. The reality is that only two of the scenarios advanced in Annex 14 of the Market Review Consultation are considered by H3G to be relevant. In terms of pence per minute which should be applied to the termination charge this suggests a higher average than Ofcom cites in its conclusions on the licence fee. As such, H3G believes that Ofcom is understating the extent to which the 3G licence fee should increase the relevant cost benchmarks.

Further, H3G has identified two potential calculation errors in Ofcom's treatment of the licence fee which affect most of the scenarios it considers (including the two which H3G believes are likely to be relevant), which leads to a further under-statement. These are explained in more detail in Annex 5, but, in brief:

- Ofcom has included the licence fee payment in 2000 prices, when every other input and output relating to the model is expressed in 2006/07 prices, which materially deflates the impact of the licence fee; and

82 H3G's views on the appropriate treatment of the licence fee were available to Ofcom even before the start of the current market review. These views were set out in principle in H3G's evidence in its appeal of the June 2004 designation of H3G as having SMP. H3G has since confirmed to Ofcom (during discussions as part of the current market review process). See Adam Mantzos reports to the Competition Appeal Tribunal dated 10 October 2004 and 25 February 2005 in Hutchison 3G (UK) Limited v the Office of Communications.

- Ofcom's modelling treatment of the licence fee means that it is not all recovered in its lifetime (i.e. before the licence expires) which is inconsistent with the treatment of every other asset in the model under Ofcom's economic depreciation approach.

As such, H3G believes that the 6ppm cost benchmark should be increased significantly if the licence fee were appropriately considered and these errors were corrected. Taking these factors alone, even if the rest of Ofcom's approach is accepted, this would imply that the 6ppm end-point for 3G only operator glide-path should increase to around 7.5ppm.

5.2.3. Path of cost recovery

The approach that Ofcom is taking to setting the path of cost recovery fails Ofcom's own objective of mimicking the effects of a competitive market in order to provide the appropriate price signals for consumption and investment. Ofcom is referred to Annex 5 for further detail of H3G's views on this issue.

H3G continues to believe that the perfect contestability approach mimics the outcomes of an idealised competitive market and generates a path of prices which is allocatively efficient at every point in time, effectively meeting Ofcom's own objectives. H3G remains unconvinced by Ofcom's objections to this approach, which appear to ignore questions of efficiency and economic welfare.

Ofcom's favoured economic depreciation approach is based on an arbitrary distortion to competitive conditions and would appear to be based not on the stated objective of the efficiency of resulting price signals but rather on a prejudgement on Ofcom's part of a subjectively desirable price path. Ofcom's economic depreciation approach may well lead to:

- excessive prices in the long term;
- an inefficient structure of prices;
- distortion of consumer choice; and
- inequitable distributional effects.

These are all properties Ofcom considers likely to result if termination charges are unregulated[83].

H3G is surprised that the perfect contestability approach is not even mentioned in the Market Review Consultation. In H3G's view, the complete omission of this issue from that document constitutes a serious failing in the completeness and transparency of Ofcom's consultation process.

In the light of this omission, H3G has considered whether there are any readily available proxies for the perfect contestability approach that could serve as second best options. H3G believes that two proxies are available: Ofcom's Current Cost Accounting (CCA) approach; and a low market share adjustment similar to that made by the Competition Commission in its 2002 inquiry into Calls to Mobiles[84].

Both proxies share with perfect contestability the characteristic that unit costs are inversely proportional to utilisation. H3G believes that this characteristic, which was explicitly endorsed by the Competition Commission in its 2002 inquiry, is an essential

83 Paragraphs 7.6 to 7.34 and paragraph A19.1, Market Review Consultation
84 Paragraphs 2.277 to 2.280, 2002 Competition Commission inquiry

feature of a perfectly competitive market. The characteristic is, moreover, of especial importance in relation to H3G given its likely (and assumed) lower market share for the duration of the proposed price control period.

H3G believes that if Ofcom continues to adopt the economic depreciation approach, it will omit to take into account a relevant difference for H3G over the period of the proposed price control. This will result in inefficient investment and consumption signals and contravene Ofcom's own stated principles (and its statutory obligations). As an indication of the impact of this issue, and accepting for these purposes all of Ofcom's other assumptions and approaches, adopting the CCA approach as a proxy instead of the economic depreciation approach would increase the 2010/11 benchmark by around 0.2p, from 6.0ppm to 6.2ppm. The effect in earlier years would be much greater, with an increase of around 6ppm in 2007/08.

5.2.4. Other concerns with the approach to 3G only benchmarks

In the time available thus far to review Ofcom's model, H3G has also identified various other concerns with a number of key input parameters and assumptions. H3G's other comments on Ofcom's approach and Release 3 of the Ofcom LRIC model are also set out in Annex 5. In summary, H3G believes the following factors still need to be addressed in the cost modelling process.

- While Ofcom's current assumptions for subscriber numbers are more appropriate than in the previous version of Ofcom's LRIC model, H3G has concerns that Ofcom's short term forecast is based on inaccurate information and that its long term forecast is too speculative. H3G continues to believe that Ofcom's departure from H3G's own forecasts of subscriber numbers is based on assertion rather than evidence.
- Ofcom's own "low" voice scenario represents the most appropriate median assumption, given that it simply represents an extrapolation of a well established trend.
- Ofcom's low demand (voice only) scenario erroneously includes video calling which should not be included in an explicitly conservative scenario.
- H3G believes that Ofcom's range of data demand scenarios is inappropriate. Ofcom should, as it recognises in certain sections of the Market Review Consultation, be taking a conservative approach in relation to such a new area where there is significant risk of forecasting error. However, Ofcom's assumed medium demand scenario appears too speculative to H3G and it is proposed Ofcom should use H3G's own submitted forecasts for this scenario for the 3G only operator.
- Finally, H3G continues to believe that the 3G cell radii assumed in the model over-states the actual cell radii which H3G as an efficient 3G only operator can in fact achieve in its working network. As such H3G believes that, on average, the 3G cell radii for the 3G only operator should be reduced by around 8%.

Combined (and ignoring the issues of CARS costs, the inappropriate treatment of the 3G licence fee and the issue around the relevant path of cost recovery all discussed above) these effects mean that the 6ppm cost benchmark should increase to over 13ppm.

5.3. Ofcom's treatment of mobile number portability

The proposals in the Market Review Consultation effectively conclude that the impact of MNP is not material on this assessment. As a result, Ofcom proposes that the price cap only applies to that traffic for which the relevant operator sets the charge (i.e. not minutes to ported numbers under the current MNP arrangements).[85] This assumption of immateriality is not in fact true in the case of H3G. The current MNP arrangements have a very significant effect on the effective charge H3G achieves (reducing the effective charge it receives [●]). [●] The reasons for this having a very different effect on H3G compared to the other operators are because:

- as Ofcom has to some extent recognised, H3G has a higher cost than the established operators as a new entrant 3G only operator, meaning that is not achieving its higher termination rate for calls to ported in numbers and having to pay above cost for calls to ported out numbers;
- as a new entrant, H3G naturally has more ported in than ported out numbers, whereas the incumbent operators are more likely to have a balance between these; and
- for those H3G customers who have ported their number to another network, H3G has to "trombone" the calls through its network. Under the present arrangements the 2G MNOs charge the H3G call termination rate i.e. higher than their regulated average.

This material effect has not been taken into account by Ofcom when considering the glide-paths and appropriate end-point rate. The LRIC model does not exclude minutes to ported numbers but assumes an operator is able to recover its costs over all minutes. As such, the appropriate end-point for any glide-path for H3G should be uplifted to take account of the fact that this is not in fact the case under Ofcom's proposed price cap.

H3G notes that Ofcom has recently published a consultation on the arrangement for MNP in the UK, following H3G's appeal. That document is consulting on implementing a change to the present indirect routing system which would not, on Ofcom's currently preferred option, come into effect until 2009 – well into the proposed price control period. H3G's views on such timing will be provided in its response to that consultation, but if Ofcom can commit to the relevant date in time to set the charge control, this could in principle be included in the calculations leading to the appropriate price cap. Alternatively, Ofcom should take the approach it has in relation to the rest of the cost modelling (basing the price controls on current technology – i.e. the current MNP arrangements) and then considering re-opening the market review when such arrangements change, if Ofcom considers this is appropriate at the time.

5.4. Duration of price control

H3G is pleased that:

> *"Ofcom recognises… that a lengthy charge control may exacerbate the effects of forecasting or costing errors. The consequent risks must, therefore, be taken into account when deciding on the duration of any charge control."*[86]

[85] This is set out in paragraph 9.110 of the Market Review Consultation.
[86] Paragraph 9.5 of the Market Review Consultation.

However, in practice, Ofcom's proposals do not, in fact, take into account the relevant uncertainties. As set out above in Section 5.1, Ofcom's approach to taking account of uncertainties and risks of regulatory error appear to be inadequate and flawed. Therefore, the proposal to set a four year price control is entirely arbitrary and open to exactly the asymmetric dangers and costs which Ofcom itself has recognised it should avoid. Moreover, Ofcom's approach to price controlling mobile call termination costs does not allow for any future allowance for past under recoveries should the price control level be considered inappropriate for any unforeseen reason, which further compounds this danger and increases the regulatory risk. [●]

[●] There are a wide range of uncertainties around consumer behaviour and demand over the next few years, as outlined in more detail elsewhere in this response. Market and commercial developments could have a significant effect on Ofcom's current analysis which would significantly affect Ofcom's current proposals in terms of both market definition and the cost modelling. It was for this reason that H3G's May 2006 Response suggested that Ofcom should either set a very conservative price cap or a shorter review period. In H3G's view, the Market Review Consultation takes neither of these approaches.

Further, with the range of uncertainties acknowledged by Ofcom in the Market Review Consultation, Ofcom's reference to a potential re-opener (set out in paragraph 9.5 of the Market Review Consultation and quoted above) to deal with these is to be welcomed. H3G agrees that there is a need for regulatory stability in the mobile sector, to enable further investment and innovation to continue. However, H3G urges Ofcom to ensure that such regulatory stability does not, in and of itself, become a straight jacket which stops any such innovation (either in technological or tariff terms). In moving to a mobile broadband world, there is every possibility that wholesale charging arrangements will need to evolve.

H3G urges Ofcom to take this into account and build in safeguards and assurances to ensure that the four year period of the price control will not be allowed to become a barrier to such change if required. The equivalent of interconnect arrangements in the internet world (and with IP based networks) are significantly based on the wholesale concept of "bill and keep". In its August 2005 Response H3G suggested that consideration of such a move at that time would have been premature. Further, the discussion in that consultation process was more focused on the retail concept of moving to "receiving party pays".

However, it is a function of the fast moving nature of mobile communications that this issue may well be appropriate to revisit in a shorter timeframe than four years. H3G believes that retail pricing structures for mobile broadband are evolving. Therefore it may be appropriate for wholesale pricing structures to change as well in a time period which is less than four years into the future. H3G recognises the uncertainties inherent in predicting any such changes and supports a consistent and stable regulatory environment in the meantime. However, a more bill and keep type approach to wholesale charging may deal with many of the competition issues which H3G has identified elsewhere in this response and, appropriately implemented, could lead to significant benefits for mobile consumers. As such, H3G urges Ofcom to recognise that the form and approach to wholesale regulation could be overtaken by events in many different ways (the Market Review Consultation only suggests that it may be the case new products change the relevant market definition); should Ofcom consider this evolution has occurred then it would be appropriate for Ofcom to reconsider appropriate aspects of the current market review.

Further, given Ofcom's analysis as set out in the Market Review Consultation, there is an argument that it is inappropriate to start the proposed price cap on H3G in April 2007. As discussed in Section 2.4 above, there is no indication of excessive pricing on the part of H3G when its rates are compared to appropriate cost benchmarks. Suggesting that H3G's current rate will become above cost during the price control period is, in effect, basing the finding of SMP on Ofcom's own forecasts. Even if Ofcom believes SMP is likely to arise on the balance of probability at some point during the current market review period:

- there is no case for a finding of SMP or for any *ex ante* price control before such a point is arrived at; and
- setting an *ex ante* price control now for the time after Ofcom forecasts or estimates that prices would suggest SMP is disproportionate in view of the uncertainty as to whether SMP will actually exist.

Ofcom is implicitly assuming that it must either set H3G a price control now for 2007/08 to 2010/11, or wait until 2011/12. This appears to be driven by administrative convenience around the timing of the market review and assuming that such timing is appropriate for all operators, given that Ofcom is having to review the price control on the other operators at the same time. Especially given that Ofcom's market definition is operator specific, Ofcom should instead be considering the timing of the start of any price control on H3G on its own merits, not simply to align with the next relevant period for the incumbent operators. A separate market review process for H3G may be appropriate to properly consider the market evidence in relation to H3G.

The relevant evidence relating to H3G, including that set out in Section 2.4, suggests that a price control in April 2007 is premature. Even if Ofcom's views on CBP have merit (H3G has set out above why this is not the case) the earliest that any SMP finding and direct price control could possibly be justified is 2009/10. Before setting any such price control Ofcom should take account of all the latest available evidence. In other words, Ofcom should not subject H3G to a price control now but it should pause and re-conduct this whole analysis (for H3G) in 2 years' time, in 2008. Of course, an added advantage of this is that by this time some of the current uncertainties may well be resolved. As Ofcom has already developed the model, this should not be too burdensome.

5.5. Ofcom's proposed 2G/3G benchmark

H3G's analysis of the cost modelling and its main comments on Ofcom's approach to cost benchmarks (as set out in this response) has focused on the 3G only operator for obvious reasons. Some of H3G's comments above in this context would, of course, have implications for the figures which Ofcom has derived for a combined 2G/3G benchmark (in particular, by affecting the 3G element of those benchmarks). For example:

- [•]
- Ofcom's approach to a combined benchmark means it would be increased, but to a lesser extent, by the issues H3G has identified above in relation to the allocation of the 3G licence fee.

Figure 9.3 of the Market Review Consultation shows that Ofcom's approach to deriving a combined cost benchmark is based on a 2G benchmark which is below the blended value through-out the control period and a 3G benchmark which is above for the whole proposed price control period (taking account of the effects identified above by H3G for 3G costs would only exacerbate this effect). These calculations are based on an assumed level of migration from 2G to 3G (there is no requirement that operators achieve such migration levels). Elsewhere in this response (see in particular Annex 4), H3G provided its views on the incentive effects provided by such an approach and the need for separate price caps. However, if Ofcom does conclude that the appropriate way forward is to retain its proposals for a combined price cap and cost benchmark, H3G suggests that some mechanism should be included to remove the disadvantageous incentive effects of this approach. That is, if the rate of migration turns out to be substantially different from that assumed by Ofcom, there should be a regulatory mechanism for taking this into account in this or future reviews, such that the incumbent operators are not able to take advantage of the resultant over-recovery of costs, under Ofcom's estimates of those costs.

H3G also notes that the uncertainties around 2G costs are significantly less than those surrounding 3G cost modelling. It is therefore appropriate that the relevant range of potential outcomes (and also possibly the timing and duration of any price control) for the incumbent operators is smaller and the approach to dealing with such uncertainties could appropriately be different to that applied to H3G as a 3G only operator and a new entrant.

6. Proposed glide-paths

The Market Review Consultation proposes three different options on potential glide-paths over the duration of the proposed price control period. Even if it is accepted that H3G has SMP, that a price control is the appropriate remedy, that Ofcom's approach to deriving the cost benchmarks is correct and the end-point for the glide-paths in 2011 which Ofcom has chosen is correct – this section sets out H3G's views on why all three of Ofcom's proposed glide-paths are still inappropriate. None of these glide-paths suitably deals with the nature of the problem identified (in large part because Ofcom's analysis has not taken into account an important unintended consequence in relation to competitive effect).

Ofcom's three potential glide-paths are set out in the Market Review Consultation, and are referred to in this response as options one to three, consistent with their classification by Ofcom's.[87] The Market Review Consultation further sets out the factors which Ofcom considers it needs to balance in coming to a conclusion on which of these three very different glide-paths is most appropriate. Ofcom essentially presents the issue as needing to strike a balance between:

> *"the short term and longer term interests of consumers which may be addressed by charge controls."*

Ofcom further presents this as a trade-off between the "material detriment" faced by consumers by short term higher prices and longer term interest of consumers arising from:

> *"a material risk to further investment in mobile services".*[88]

This section of this response first considers the three glide-paths proposed by Ofcom in light of the approach set out by Ofcom. It then goes on to consider the important elements which Ofcom's proposed framework for considering this issue does not, and should, take into account. Finally, this section provides some comments on the glide-paths Ofcom has proposed for the combined 2G/3G operators [●].

6.1. Ofcom's proposed glide-paths for H3G

6.1.1. Balancing short-term and longer term consumer interests

[●]

Balanced against these [●] negative impacts, any of the proposed glide-paths are unlikely to lead to any significant short term consumer benefit. The competitive impacts in the wider mobile market, discussed below, may well counteract any benefits seen by callers to H3G's network. H3G currently only has around a 5% market share of UK mobile subscribers. The immediate impact of any reduction in the wholesale price of calls to H3G number ranges will also be diluted by a range of factors which will mean that any reduction in wholesale charges is unlikely to be passed on in full to consumers and will only apply to a subset of the minutes sent to H3G's network. As such, given current market and regulatory conditions the short term benefits to consumers of any immediate reduction are likely to be relatively small. This is a significant factor for Ofcom in determining what is a proportionate remedy and / or glide-path.

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87 See paragraph 9.86 of the Market Review Consultation.
88 Paragraph 9.88 of the Market Review Consultation.

The Market Review Consultation does not contain a detailed assessment of these issues or a proper cost benefit analysis looking into the relative size of these different effects. Ofcom's assessment of the relative benefits of its three options is cursory and its justification for considering option two appears to be based on a perceived need for a compromise approach between options one and three. The choice should not be characterised as being between the three options identified in the Market Review Consultation. It will not be justified for the final conclusions in the market review process simply to suggest that there are benefits and costs to each approach and that therefore the middle option is an appropriate balance between these various effects, which would constitute Ofcom closing its mind to other relevant options. Further, it would not be sufficient to suggests that responses on this issue were divided (commercial reality suggests that this will inevitably be the case) and as a result suggest Ofcom should choose the "compromise" option two as a result. Rather, it is incumbent on Ofcom, in line with its statutory duties, to undertake a proper analysis of this issue weighing the actual costs and benefits identified in consultation responses (as far as possible, on an issue such as this, such an assessment should include quantitative effects).

As such, Section 7 of this response therefore provides more detail on H3G's views on such an assessment, as well as the further costs and benefits which Ofcom should take into account, in its assessment of the appropriate glide-path. It is clear to H3G that were the choice to remain constrained to the three glide-paths which Ofcom has set out in the Market Review Consultation, the approach which has the least adverse net effect is option 1: a "smooth" glide-path under which charges are reduced at a constant percentage rate.

6.1.2. Further factors which Ofcom should take into account

H3G believes that if Ofcom continues to reject H3G's various arguments that a price cap is inappropriate, then Ofcom should conclude on an alternative glide-path to those set out the in the Market Review Consultation, once all relevant issues are taken into account (see also Section 8 of this response). Even an assessment on the basis of the short and longer term impacts which Ofcom itself identifies would, in H3G's view, lead to such a conclusion. However, there are important additional factors which Ofcom has not yet identified in its discussion on how it plans to identify an appropriate glide-path which Ofcom should take into account.

The principle of these further issues is the effect of Ofcom's proposals on competition in the mobile sector. Ofcom's statutory duties require it to promote competition.[89] One of Ofcom's own objectives for the market review is:

> *"ensuring competitive neutrality and avoiding economic distortions, for example in the downstream retail market".*[90]

H3G presumes that if distortions "for example" in the retail market are considered to be adverse, then distortions in wholesale markets and in the mobile sector generally must also be considered as undesirable. In commenting on the draft objectives which Ofcom set out in the March 2006 Consultation (which were very similar to those expressed in the current consultation) H3G noted that Ofcom has statutory

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89 This is expressed as one high level and over-arching duty in section 3 of the 2003 Act; further in relation to the setting of remedies in the context of a market review under the European Regulatory framework, promotion of Competition is also a duty under section 4 of the 2003 Act and required by Article 8 of the Framework Directive.

90 Paragraph 6.9 of the Market Review Consultation.

duties to promote competition (not simply ensure competitive neutrality) and further noted that Ofcom should not simply set remedies by looking for the same outcome, but should take into account relevant differences between operators. In relation to ensuring that there are no inappropriate economic distortions (which must logically include distortions to competition), H3G suggested that Ofcom clarify this objective and explain how it would assess it.[91] H3G notes that the Market Review Consultation declines to do this.

Given this, H3G's view is that Ofcom needs appropriately to take into account the difference in competitive impact of the different proposed price controls. [●] As set out in detail in Annex 3, H3G's view is that [●] traffic imbalances arise as a result of H3G's current position as a new entrant and due to the inadequacies of the current MNP arrangements in the UK. H3G notes and welcomes that Ofcom plans to address the latter, but Ofcom's recent document is at this stage still a consultation and it is likely that the effects of moving towards a more appropriate MNP solution (making it easier for customers to switch networks) will take some time to have an effect in practice on H3G's traffic imbalance. [●]

[●]

The glide-path should also be set taking into account the significant uncertainties which exist around Ofcom's modelling process, and the forecasts on which it is based, for a 3G only operator especially. Such uncertainties are most significant when considering the appropriate overall long-run cost benchmark (as discussed above in Section 5.1 of this response). However, relevant risks should also be borne in mind in relation to selecting the relevant glide-path and, *ceteris paribus*, would tend to argue for a more conservative and shallower glide-path.

In light of its duty to promote competition and its objectives not to create undue economic distortions in the wider mobile sector through any price cap, Ofcom should conclude that these effects in combination suggest that a shallower glide-path is more appropriate than any of the options proposed in the Market Review Consultation. In Section 8, H3G proposes that one way to take all of these factors into account would be to set a glide-path which leads, in expectation, to net-neutral revenue flows for interconnect payments between mobile operators.

6.2. Ofcom's proposals for glide-paths for other operators

Ofcom states that its proposed four year price control period is the appropriate timeframe over which all operators should reduce their rates to Ofcom's assessment of the appropriate cost benchmark. There is no discussion in the Market Review Consultation as to why this is the appropriate period over which prices should be reduced to Ofcom's estimated cost benchmarks, or why it is necessarily appropriate for the relevant period to be the same for incumbent operators as for H3G.

Ofcom appears to be minded to allow the other mobile operators the full four years to achieve the relatively modest cuts Ofcom's approach requires, while suggesting that the severer cuts required by H3G are achieved over the same time frame. This is despite the much greater period allowed before any price cap was imposed on the other mobile operators (as set out in Section 4.5 above, Ofcom is further proposing to impose a price cap on H3G earlier its overall investment cycle than was done for any of the other operators).

91 Section 3.2.1 of H3G's May 2006 Response on page 21.

If four years were considered the appropriate period in which H3G should reach Ofcom's proposed cost benchmark (assuming Ofcom's price cap approach is appropriate), then the incumbent mobile operators should be able to achieve the cost benchmarks Ofcom proposes for them much sooner. [●]

Alternatively, if four years is retained as the appropriate period for the incumbent operators to reduce their charges to Ofcom's proposed cost benchmarks, then the appropriate period of time allowed for H3G to achieve similar levels should be longer (i.e. beyond the timeframe of the current market review). Given the dangers of abrupt regulatory interventions in a market as innovative and fast moving as the mobile sector [●], H3G expects that this latter approach is likely to be a more proportionate and suitable approach. This approach is consistent with the framework Ofcom sets out in terms of ensuring that efficient costs can be recovered and not adversely affecting investment incentives to the long term detriment of consumers. It would also be consistent with the arguments made above in Section 6.1 specifically in relation to H3G's glide-path.

7. Impact of Ofcom's proposals: competition and investment

In addition to the considerations discussed in the previous section, H3G also believes that Ofcom's statutory duties to promote competition and objectives for the current market review of minimising regulatory distortion and discrimination between technologies also mean that Ofcom should take into account competitive impacts, where Ofcom's proposals lead to an outcome which is not anticipated or considered in the Market Review Consultation. As was also outlined in Section 6 above, H3G also suggests that any such consideration of the relative benefits of different price control glide-paths needs to be thorough, consider all of the relative impacts on different stakeholders and be as quantitative as possible.

In light of the above, this section provides H3G's current views on the impacts of Ofcom's proposed glide-paths on different groups of stakeholders in turn (and on competition in general), which would also provide an input to any such assessment. H3G's quantitative assessment has focused on the financial impact on H3G only, as it is not best placed to assess the quantitative impact on other stakeholders. However, H3G would be pleased to discuss this further with Ofcom and provide any further input Ofcom should require in making this assessment.

7.1. Short-run impact of Ofcom's proposals on consumers

H3G expects that each of Ofcom's proposed glide-paths for H3G will not have a major significant impact on consumers which outweighs the other costs of those proposals.

Ofcom's welfare analysis in Annex 19 of the Market Review Consultation estimates that, in total, over the four years of the price control the proposals set out in the document will have a positive impact of £3.3 billion. Annex 19 does not explicitly state it, but H3G assumes that this estimate is based on the entire amount of any reduction in wholesale charges being passed onto consumers.

In light of this analysis, H3G has the following comments in relation to the impact on consumers of a charge control on H3G.

- First, H3G notes that this is a global analysis which is effectively calculated as a weighted average of 2G and 3G operators. As such, the costs used for this welfare analysis are based are lower overall than the relevant 3G only costs for the period of the price control (and hence can be considered to over-state the positive welfare effects for calls to 3G only phones). For the purposes of an illustrative overall analysis, the cost figures used in Ofcom's calculations set out in Annex 19 may be appropriate, but for the purposes of choosing between specific glide-paths for H3G this overstatement needs to be recognised.

- Second, for all the reasons set out in Section 5 of this response, H3G believes that the 3G only cost which Ofcom has inputted to this calculation is an under-statement for the purposes of this price control purpose. This provides another source of over-statement of the benefits.

- Third, H3G currently only has a market share of around 5% of mobile subscribers. The contribution of a reduction in H3G's rates to the overall consumer welfare benefits calculation will be correspondingly small.

- Fourth, H3G does not have visibility on how Ofcom has calculated the fixed to mobile retention of 3.51ppm. While this may well be an appropriate average for the calls to all mobile operators, H3G notes that the fixed to mobile retention for calls to H3G numbers appears to be, on average, higher than this figure (see Annex 10 of this response).
- Fifth, despite discussions earlier in the market review process, H3G notes that Ofcom has not shared the detail of the relevant welfare model with H3G. As such, H3G is not able to provide any detailed comments on the appropriateness of the calculations.[92]

In summary, H3G expects that the specific welfare benefit of reducing H3G's MCT charges will be relatively small. Further, although not explicitly stated in Annex 19 of the Market Review Consultation, H3G presumes that this analysis is on the basis that all of the benefit of reduced wholesale charges is passed onto consumers in the form of lower retail prices. If this is not the case, then it is unlikely that consumers will, in fact, see much of the proposed benefit.

Specifically, the following factors can be expected to reduce the extent to which wholesale price reductions for H3G will have a major impact on retail prices.

- In relation to mobile to mobile calls, there is an increasing prevalence in the market of larger included minutes and "any network" bundles. The pricing of such retail packages is influenced by a number of factors, including the wider competitive conditions in the mobile market, and therefore reducing H3G's rate (while it still has a small market share) is unlikely to mean that the overall price of such bundles will be significantly reduced across the mobile sector.
- In relation to fixed to mobile calls to H3G, H3G notes that fixed operators already tend to make higher overall margins from calls to H3G numbers than calls to other mobile numbers for many tariffs, when such tariffs are analysed and compared. (It may well be that one factor enabling fixed operators to do this is H3G's current market share.) Further, as Ofcom's own recent analysis shows, the fixed retention for calls to mobiles has been increasing recently[93] (see Annex 10). As a result of this, it would seem to be a reasonable assumption that the effect on consumers of any reduction in H3G's wholesale rate would be diluted by an increase in the fixed to mobile retention for such calls.

In conclusion, the impact of Ofcom's proposals for H3G's rates for consumers can be expected to be relatively small. Clearly, Ofcom's overall welfare analysis calculations indicate that overall there are still significant welfare gains to be made from reducing 2G rates (which are still the predominant form of calls by minutes). Ofcom has not stated in Annex 19 how the weighting between 2G and 3G networks has been done for the purposes of the welfare analysis. However, H3G expects that reducing the price of calls to 2G mobiles more in line with cost (as opposed to the effectively weighted average combined price cap between 2G and 3G calls) would lead to greater consumer benefits. Given the relative volumes of calls, H3G also expects this would have a far greater impact on overall consumer welfare than a more aggressive price cap on H3G.

[92] See, for example, Ofcom's memo to stakeholders dated 2 December 2005, "Mobile call termination – cost modelling issues – economic pricing".

[93] See Ofcom's "Consumer Experience Research Report", dated 16 November 2006.

7.2. Impact of proposals on other operators

The Market Review Consultation, while undertaking an overall analysis of the consumer welfare benefits, as discussed above, does not contain a detailed financial analysis of the impact of the various proposals on mobile operators. Clearly much of the evidence required for any such analysis will require access to commercially confidential material. As such, H3G cannot provide any detailed discussion of the impact of the proposals on the other mobile operators. At a high level, H3G expects that the proposals set out in the Market Review Consultation will not have a significantly negative impact on the other operators. The modest reduction in their own rate will over time reduce their revenues from fixed to mobile calls. However, H3G believes that the traffic between the other operators is broadly balanced. Hence the impact on mobile to mobile calls (other than H3G) will be negligible (as their costs will reduce by broadly as much as their revenues). The impact on the other operators of reducing H3G's rate will be significantly beneficial given the traffic imbalances discussed elsewhere in this response.

[●]<u>the other operators will also gain significantly from the reduction in the intensity of competition which H3G believes will occur as a result of these glide-paths.</u>

7.3. Impact on H3G

In contrast, and as indicated above, H3G's view is that it will suffer a significant negative effect from any of Ofcom's proposed glide-paths. Whether Ofcom agrees with H3G or not regarding the ultimate outcome, it should recognise that H3G has for some time based its approach on the fact that such revenues were appropriate and reflective of efficiently incurred costs. [●]

In strict financial terms, H3G estimates that the [●]negative impact of the three proposed glide-paths over the four years of the proposed price control on H3G would be:

[●]

It is not clear why H3G should be required to insulate the incumbent operators from the financial effects of losing customers to a new competitor, but that appears to be the practical effect of the glide-paths proposed in the Market Review Consultation.

This reduction in revenue and impact on H3G's overall margin will naturally have an adverse impact on H3G's wider financial (and competitive – see below) position [●].

A key driver of these impacts, [●] is the asymmetry in traffic faced by H3G between incoming and outgoing calls. This imbalance is a function of H3G's new entrant status in the market, in particular it is a result of:

- the strategies H3G has had no choice but to follow in order to enter a saturated and competitive mobile market; and
- the inadequate MNP solution in the UK.

[●]

Further, the weakness of the incentives provided to the other operators to migrate traffic from 2G to 3G networks (as discussed above in Section 5 and in Annex 4) has a negative impact on H3G. Faster and wider adoption of 3G would mean that 3G as a whole reaches scale quicker and therefore, *inter alia,* would reduce costs for H3G s a 3G only operator. Faster and wider adoption of 3G would also ensure that the wider network effects of a larger 3G base in the UK could be realised, allowing H3G to innovate and widen the appeal of new 3G services. Such positive network effects arise from the wider ability of 3G customers to call other customers using new services (such as video calling and IM). There are also positive network effects arising from a larger 3G base making it more attractive for service providers to develop new products for 3G. This will lead to a virtuous circle being initiated whereby this will make the 3G platforms more attractive to consumers which in turn will provide more investment opportunities for service providers partnering with 3G networks and so on. By hindering such migration, H3G therefore directly suffers as a 3G only network and the benefits to UK consumers of wider 3G services are delayed.

7.4. Impact of proposals on competition

Reducing the strength of the competitive influence of H3G[●] will have a disproportionately greater influence on the competitiveness of the overall mobile sector, given H3G's role as the "maverick" new entrant. H3G's rapid roll-out of 3G network and services have provided an important influence driving the adoption of this important new technology. This is exactly the effect a new entrant was intended to have and a major reason for reserving one of the five 3G spectrum licences for a new entrant operator in the 2000 3G spectrum licence auction. Further, H3G has driven service and tariff innovation and increased the competitiveness of the mobile sector generally (reducing retail mobile prices). The other mobile operators have been forced to reduce prices and introduce similar services to H3G in order to continue to compete. As such H3G's competition has acted as an influence to constrain prices paid by <u>all</u> mobile customers.

In its discussion of the so-called "waterbed" effect Ofcom acknowledges that there is an interaction between call termination revenues and the wider level of competition in the mobile market. Ofcom refers to the distributional effects which arise from mobile termination rates being at the "wrong" level "even if the waterbed effect is complete".[94] As a first point, H3G's view is that Ofcom is mistaking its role under the 2003 Act and misinterpreting its duties. Ofcom should identify whether there is SMP and decide what is a proportionate remedy. Even if SMP is established, the "waterbed effect" is, evidently, much greater now than on previous occasions given H3G's development as a maverick competitor and is a relevant factor to consider.

Given the waterbed effect, consumers in general will benefit from the competition between the mobile operators. It may be the case that Ofcom does not "like" the way that the mobile operators compete against each other - but this is the form of competition in the market given the regulatory backdrop (calling party pays). As the Court of First Instance has recognised in *GlaxoSmithKline v Commission*, although competition may be shielded to a certain extent in one area, it may well be vigorous in another. In imposing a direct price control on MCT because Ofcom considers there is a negative effect on the structure of resulting charges at the retail level, should also take into account other distortions.

H3G also believes that an important corollary of this is therefore that if MCT charges lead to a distortion of the competitive position of different mobile operators or types of mobile operators then this will have much wider impacts on the ability of some operators to compete effectively. H3G also notes that Ofcom has no reason (and has given no reasons) why the "waterbed effect" is not complete.[95]

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94 See the discussion in Section 7 of the Market Review Consultation.

95 As is clear from paragraph 7.8 of the Market Review Consultation Ofcom has not reached a firm conclusion either way on this issue. H3G believes that there is no evidence to suggest that competition in the retail

There are multiple examples of H3G's competitive influence and H3G believes that Ofcom recognises this wider effect H3G's entry has had. Some key examples include the facts that:

- H3G has pioneered a range of firsts in terms of services which other operators have then adopted to the benefits of mobile customers generally (such as H3G's dual music download service to handsets and PC and H3G's SeeMeTV user generated content service); and
- since its launch H3G has offered extremely competitive tariffs with bundles of any network minutes and driven the wide adoption of such bundles which other operators have had to sell widely as well to remain competitive.

As such, H3G has acted as an important "maverick" competitive influence. In a market with a relatively small number of players, H3G's different incentives as a new operator have shaken up the market and increased the intensity of competition.[96] H3G is currently continuing to have this competitive effect. Its recent announcement of new mobile broadband service offerings and pricing (bringing flat rate pricing which enables key internet services to be experienced on the move on the same terms as consumers are used to for the fixed version of such services) is another ground breaking introduction which will help consumers and intensify competition. 3G is in a rapid state of evolution and new services and new technology (such as the introduction of HSDPA which is currently underway) mean it is as important as ever to the interests of UK mobile consumers that H3G's competitive influence can be maintained.

7.5. Conclusion on the impact of proposals

Drawing all of these various impacts together, H3G's view is therefore that:

- any of the three glide-paths proposed in the Market Review Consultation will not have a major positive short-term benefits for consumers; and
- [●]
- thereby, reducing competition [●] incentives which will harm both the short and the long term interests of UK mobile consumers.

In setting any price cap, Ofcom needs to take these various effects into account and potential ways in which this could be achieved are set out in the next section of this response. H3G needs regulatory certainty over key revenue streams to maintain its strong competitive influence and reduced risk over its ability to recover efficiently incurred costs from terminated calls.

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96 mobile market is anything less than fierce with consequent implications for any assessment of the waterbed effect and the inter-relationship between competition in different parts of the mobile sector. The ability of one smaller firm to have a disproportionate positive benefit on competition competitive conditions is now recognised in the economic literature.

8. An appropriate approach

Notwithstanding H3G's wider views on the market analysis and suitability of different types of remedy, this section sets out the principles and factors which H3G proposes should be taken into account in any amendment of Ofcom's proposals. This outlines the issues which Ofcom should take into account to ensure that any resulting price control does not have the adverse impacts identified in the previous section of this response and does not expose H3G to the regulatory risk, to which Ofcom's current proposals as set out in the Market Review Consultation lead.

8.1. Principles which should be taken into account in setting remedies

Consistent with its earlier responses and a proper and full interpretation of Ofcom's own objectives and principles for the current market review, H3G's view is that the over-arching principles for setting any remedy be based on:

- the need to ensure that competition in the wider mobile market is not adversely distorted and that H3G's key position as a new entrant competitive force is not put in jeopardy;
- [●]
- a consideration of H3G's position as a new entrant and recognising that the competitive and regulatory conditions in the UK mobile market mean there is a traffic imbalance which must be taken into account;
- the uncertainties involved in modelling 3G costs and the importance of maintaining competitive and investment incentives mean that a precautionary approach to setting 3G cost benchmarks must be taken;
- [●]
- providing appropriate incentives to migrate from 2G to 3G networks, not providing an inappropriate short-run incentive for the incumbent operators to maintain customers on old 2G networks; and
- include sufficient flexibility in the remedy such that any changes in the commercial circumstances and business models evolving over a move to next generation networks and IP interconnect can be taken into account and such innovation is not hindered by regulation.

Such an approach would be consistent with Ofcom's statutory duties to promote investment, innovation and competition, as well as being an appropriate interpretation of the objectives Ofcom has set out for the market review.

However, simply put, in its assessment of the appropriate remedies (in terms of both the relevant cost benchmarks and appropriate glide-paths), the approach set out in the Market Review Consultation has not yet taken into account certain of these important factors and a number of relevant consequences not discussed or anticipated.

Crucially, the impact on competition (and hence the resulting negative impact on [●] retail mobile prices) of the proposals [●] have not been addressed. [●]

8.2. An appropriate approach to any price control

These factors could all be taken into account in setting any price control by setting an appropriate cost benchmark and a full assessment of the various effects in deriving an appropriate glide-path to that cost benchmark.

8.2.1. An appropriate cost benchmark

H3G believes that the following factors should be considered in addition to derive a suitable long term cost benchmark target for the price control period.

- First, the relevant uncertainties around the cost modelling process and the regulatory forecasts on which it must be based should be addressed with appropriate ranges and an appropriate approach to picking a value within those ranges. H3G's view is that risks it faces as a new entrant and as a 3G only operator push towards picking a value towards the upper end (if not the top) of the appropriate range.
- Second, the derivation of the appropriate cost benchmark should make some allowance for the fact that H3G as a new entrant will be sub-scale for the duration of the proposed price control period, even under Ofcom's own assumptions. This was a factor which the Competition Commission recognised in the 2002 Calls to Mobile Inquiry and which the derivation of the cost benchmarks in the Market Review Consultation does not take into account.
- Third, the cost modelling should be updated to take account of the outstanding errors in calculation which H3G has identified in this response, in particular in relation to certain key input assumptions on demand forecasts, subscriber figures and the treatment of the 3G spectrum licence fee.
- Fourth, an appropriate approach should be taken towards the allocation of some of the CARS costs to call termination, to ensure a consistent overall conceptual approach to the treatment of costs and that H3G's position as a new entrant operator is does not lead to it being discriminated against.

Each of these issues provides a justification for a higher end-point cost benchmark for the proposed price control period for H3G than the 6ppm proposed in the Market Review Consultation. H3G's view is that all of these factors suggest that its current rate is not above cost. The proportionate glide-path should therefore be considered in terms of a higher assumed end-point.

8.2.2. An appropriate glide-path for H3G

For the reasons set out above, H3G believes that any glide-path should take account of the competitive position of H3G to ensure that the overall impact of any price controls is positive in both the short and longer term. H3G has calculated what glide-path for charges might ensure that over the price control period as a whole it was a neutral competitive position with regard to its direct competitors. This is set out in Figure 2, based on H3G's forecast of volumes used in its 2005 business plan, compared with glide-paths proposed in the Market Review Consultation. Figure 2 shows such a glide-path both with the MNP effect excluded and taking account of the MNP effect.

Figure 2: [●] neutral glidepath

[●]

Figure 3 is similar, but rather than smoothing the effect over the whole control period looks at the position quarter by quarter.

Figure 3: Quarter by quarter [●] neutral [●] glide-path

[●]

H3G notes that Ofcom's recently published proposals for amending General Condition 18 in relation to MNP will not take effect (and therefore remove the current distortion created by MNP) until 2009, well into the proposed price control period.

In setting any glide-path, therefore the [●]neutral competitive position set out in Figures 2 and 3 needs to be a factor which is taken into account, along with the balancing of short-term and longer term consumer interests set out in the Market Review Consultation. For the reasons set out in Sections 6 and 7 above, H3G also firmly believes that within the framework for considering these issues set out in the Market Review Consultation there is strong justification for a shallower glide-path for reduction of H3G charges.

8.2.3. Conclusion on the appropriate range for any price control

Taking all these factors into account, a price control approach which would provide a suitable balance between the effects on H3G's competitive, investment and innovation incentives as compared to the short-term effects on consumers would be based:

- a glide-path which takes all of these effects into account, and is therefore likely to be shallower; and
- a higher long-run cost benchmark.

Finally, Ofcom should recognise the uncertainty around these ranges with the rapidly evolving market and be prepared to keep this under review during the current market review period. It may be that other approaches to wholesale pricing will become more appropriate (ensuring competitive neutrality and leading to greater benefits for consumers) during the period of the proposed price control, for example based on some form of bill and keep wholesale arrangements. Any price control contains some risk that the regulatory assumptions on which it is based will turn out to be incorrect. Ofcom has already recognised this in the Market Review Consultation.[97] In relation to the mobile broadband sector, these risks are amplified by the fact that not only is there a danger that individual volume forecasts and input assumptions will turn out to be wrong, but also that the structure of wholesale pricing which Ofcom is proposing to regulate is itself likely to evolve.

In other price regulated sectors, when faced with such uncertainties about the period under analysis, other regulators have provided specific commitments to revisit and re-analyse their analysis before the end of the price control period. Ofcom should consider whether such regulatory best practice would be appropriate here.[98] Such a commitment to re-open the price control and reconsider whether the level, structure and existence of a price control remains appropriate, could be made with respect to specific market developments (for example, which result in forecasts on which the cost modelling or market analysis are based turning out to be incorrect) or in the form of an interim review at a specific point in time during the proposed price control

[97] Paragraph 9.5 of the Market Review Consultation.

[98] Regulators which have included provisions to enable a regulated company formally to request such re-openers in specific circumstances include Ofwat, Ofgem, and the ORR.

period which considers whether the then current arrangements remain appropriate. Such an approach would in fact increase rather than decrease regulatory certainty.

Given Ofcom's approach to regulating mobile wholesale markets and the market analysis on which it is based, the proportionate regulatory response is therefore to base any remedies on cautious assumptions and keep the situation under review. Such an approach will ensure that during any transitional phase, H3G as the new entrant is not placed at a disadvantage compared to its direct competitors and able to continue to lead innovation in the sector. This will be in the short term and long term interests of all UK consumers.

Annex 1: Response to individual consultation question

Question 1: Do you agree with Ofcom's market definitions?

Ofcom's relatively narrow market definitions do not take into account the wider competitive interactions in the mobile sector or the developments in the mobile broadband sector which are already increasing the number of communications choices available to mobile customers. This trend of increasing communications choice in the mobile environment is expected to continue and accelerate during the period of the proposed price control. H3G's views on these issues are set out in Section 2.1 above. Ofcom is encouraged to recognise that its analysis of competition within this market and its assessment of the proportionate remedy needs to take these risks to its market definition over the forward looking period of the price control and the wider effects of such a remedy in related markets.

Question 2: Do you agree that each of the five MNOs has SMP in the market for wholesale mobile voice call termination provided by it to other Communications Providers in the UK?

No. H3G continues to believe it does not have SMP. As set out in Section 2.3, a suitable analysis of the relevant competitive benchmarks provides no evidence that H3G has SMP. Especially in relation to CBP, Ofcom's approach does not provide a sufficiently robust analysis to demonstrate that H3G has SMP, as set out in Section 3 of this response.

Question 3: Do you agree that it is appropriate to impose the following SMP conditions on each of the five MNOs;

- **A charge control on mobile to mobile MCT to apply until 31 March 2011.**
- **A charge control on fixed to mobile MCT to apply until 31 March 2011**
- **A prohibition of undue discrimination**
- **An obligation to meet reasonable requests for MCT on fair and reasonable terms**
- **An obligation to publish access contracts**
- **An obligation to publish charges and notify call volumes**

No. Given its views on SMP, H3G does not believe that the proposed remedies are proportionate. H3G believes that the rapidly evolving nature of the mobile broadband sector and the nature of Ofcom's finding of SMP (as well as significant uncertainties remaining around the cost modelling process) point towards a more flexible set of remedies. If Ofcom decides that a price control is appropriate, then these factors should also be taken into account in setting such a price control, for the reasons set out in Sections 4 to 8 of this response.

Question 4: Do you agree that the appropriate level of the target average charge to apply to mobile to mobile MCT and fixed to mobile MCT in 2010/11 in respect of H3G is 6ppm (2006/7 prices), and in respect of the 2G/3G MNOs is 5.3ppm (2006/7 prices)?

No. The benchmarks derived for the 3G only operator are inappropriate: both in terms of the mid-point Ofcom has used (due to the continuing flaws in the cost modelling inputs, inappropriate treatment of the 3G licence fee, and the exclusion of an allocation for CARS costs) and also in terms of Ofcom's approach to uncertainty and the ranges used. H3G's detailed views on these issues are set out in Sections 5.2 and 5.1 of this response respectively.

In relation to the 2G/3G benchmark, H3G views are set out in Section 5.5 above, but H3G believes that this cost benchmark should take account of the migration incentives from 2G to 3G.

Question 5: Which of the following glide path options should be used to define H3G's target average charge in each of the first three years of the charge control period:

- **Option 1 - A smooth glide path with charges reducing at a constant percentage rate in each of the four years from today's average charges to the target determined for 2010/11.**
- **Option 2 - A one-off partial cut to 8.5ppm (2006/6 prices) for the first year followed by a smooth glide path to ensure that the maximum average charge aligns with the target determined for the final year of the charge control.**
- **Option 3 - A cost based glide path with charges reducing immediately to align with the 3G-only operator cost benchmark for 2007/8, and then set equal to the forecast cost path thereafter, such that in 2010/11 the maximum average charge aligns with the target determined for that year**

Section 7 of this response sets out in detail H3G's analysis of the overall negative impact of each of these proposed glide-paths. Each of these would result in H3G incurring a net interconnection financial outflow, [●] H3G believes that none of Ofcom's proposed glide-paths represent a proportionate remedy appropriate to the finding of SMP and these glide-paths do not take into account all relevant factors. In particular, the net interconnection cost to H3G is an unintended consequence of Ofcom's approach, which leads to an adverse impact on competition from these glide-paths. Ofcom's statutory duties (especially to promote competition) and its objectives for this review (not to distort competition in related markets) both imply that this is an additional factor which should be taken into account when assessing the appropriate glide-path. Even an assessment on the basis of the framework set out in the Market Review Consultation, balancing the short-term and longer term effects on consumers (i.e. "static" economic benefits from more immediate price reductions compared to the effects on investment incentives) would suggest that a shallower glide-path is appropriate for H3G.

Section 8 of this response suggests how such factors could be taken into account. A higher end-point to the glide-path is also appropriate given the uncertainties H3G faces as a 3G only new entrant with a smaller market share, and the various problems with Ofcom's approach to deriving the cost benchmarks as set out in Sections 5.1 and 5.2 of this response.

Question 6: Do you agree that the 2G/3G MNOs should be required to reduce their charges in line with a smooth glide path of constant percentage rate in each year of the charge control such that average charges in the fourth year (2010/11) align with the target determined for that year?

H3G notes that Ofcom's proposals in this regard are inconsistent with its approach to setting the 3G only price cap. By applying the same approach to a glide-path to operators in different substantive positions, Ofcom risks distorting investment, innovation and migration incentives. There is a significantly different cost benefit analysis from balancing the consumer benefit to be derived from any price cap on the combined 2G/3G networks with any damage to investment incentives from the relatively modest proposed cuts.

Annex 2: CONFIDENTIAL [●]

[●]

Annex 3: CONFIDENTIAL H3G's traffic imbalance as a new entrant

H3G believes that there are two principle reasons why it has an imbalance between incoming and outgoing traffic. These are:

- the strategies H3G has had no choice but to follow in order to enter a saturated and competitive mobile market; and
- the inadequate MNP solution in the UK.

[•]

Annex 4: Technology neutrality and incentives to migrate to 3G

The Market Review Consultation recognises that the level of the price control with respect to the different technologies (2G and 3G) does have the potential to impact incentives for individual incumbent operators to migrate between the two technologies, but driving a wedge between the cost minimisation and profit maximisation outcomes. Ofcom's reasoning in this respect is set out in paragraphs 9.10 and 9.11 of the Market Review Consultation.

> *"9.10 The option to set a control for voice call termination on the 2G network, and separately, a control on the 3G network would prevent operators from setting blended charges above the regulated levels. However, such an approach may influence the rate of migration between the two networks, depending on the actual or perceived relative stringency of the controls. In this regard, and as explained in paragraph 7.54 of the March 2006 Consultation, differing levels of stringency across the two separate controls would mean that cost minimisation and profit maximisation outcomes (within the constraints of charge controls) would not be congruent. For example, in the event that operators perceive the controls on 3G call termination charges to be more stringent than those applied to 2G call termination, they may be encouraged to retain significant traffic volumes on the 2G networks even where migration to 3G networks may present a more efficient (i.e. lower cost) longer term outcome.*
>
> *9.11 Ofcom is therefore of the view that a single charge control to apply to a given operator without distinction of the network used to supply MCT, described as a 'technology neutral' approach in the March Consultation, is appropriate and consistent with Ofcom's duties under Section 4(6) of the Act. It would provide appropriate incentives for operators to invest in and migrate traffic to the most efficient network, i.e., that with the lowest unit costs, such that cost minimisation and (constrained) profit maximisation are congruent. In Ofcom's view, a single technology-neutral control would also provide operators with appropriate incentives to invest in and utilise the lowest-cost technologies to the benefit of end users. "*

H3G believes that its previously expressed views (on the impact of a combined price control on the incentives of operators of combined 2G and 3G networks to migrate to 3G will be adversely impacted) remain valid, in the light of these paragraphs and Ofcom's wider approach expressed in the Market Review Consultation. The remainder of this annex provides some further comments on this issue.

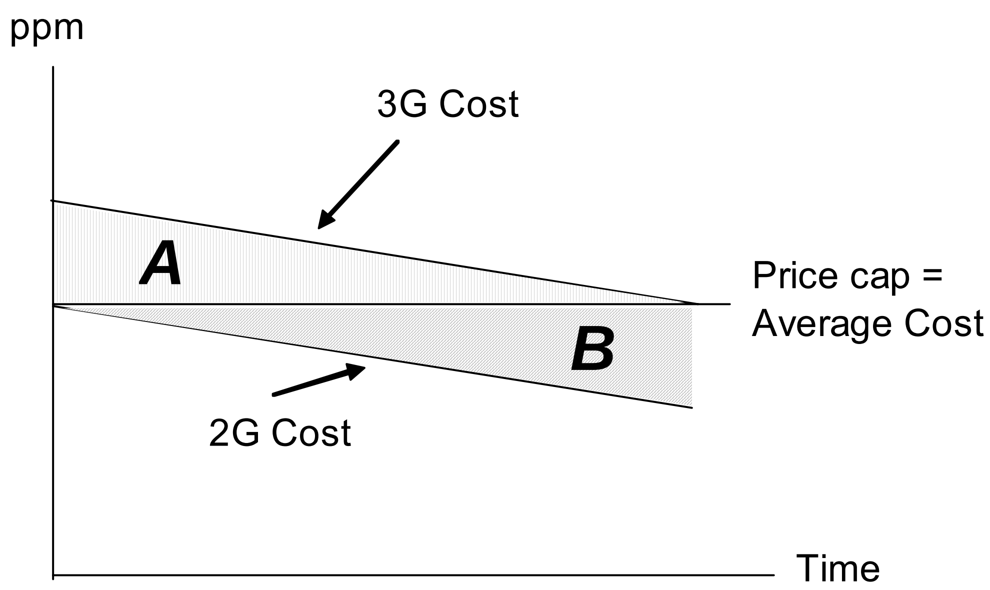
H3G agrees with Ofcom that the issue at point here is the relative stringency of the price control (or controls) with respect to 2G and 3G termination. (Although, H3G does not understand the significance or relevance of Ofcom's observation that this is a function of either actual or perceived stringency.) The relative stringency of a price control relates to the margin which it allows on different services. Put simply, this is a function of the margin between the rate allowed by the charge control and the appropriate cost benchmark of the relevant service.

In light of Ofcom's findings on the relevant costs for 2G and 3G combined networks (and the resulting combined 2G and 3G cost benchmark for the purposes of setting a combined price control), paragraph 9.11 therefore appears to be a non-sequitur in suggesting that Ofcom's interpretation of technology neutrality leads to an equally stringent price control for 2G and 3G services. Ofcom has found that the relevant costs are different. Unless Ofcom is using a different measure of cost for these purposes (which has not been explicitly expressed or explained in the Market Review Consultation) then Ofcom's conclusion that its proposed combined price control will lead to no distortion of incentives to migrate is mistaken.

This can be seen in very simple terms by considering the following figures, which are stylised versions of Figure 9.3 in the Market Review Consultation for these purposes.[99]

Figure 8 effectively illustrates the position which Ofcom appears to have assumed. The 3G cost and 2G cost are averaged on the basis of forecast traffic assumptions to provide an average cost, which is then also the price cap. As such, area A and area B in Figure 8 are equal and opposite. By cancelling each other out when the operator charges at the price cap, Ofcom therefore appears to be suggesting that there is then no incentive on the operator to pick one technology over the other (total profit is zero) other than for cost minimisation reasons (which therefore promotes efficiency). This is what H3G is assuming Ofcom means by its reference to the congruence or otherwise of cost minimisation and profit maximisation outcomes.

Figure 8: Combined price cap ensuring equal average margin



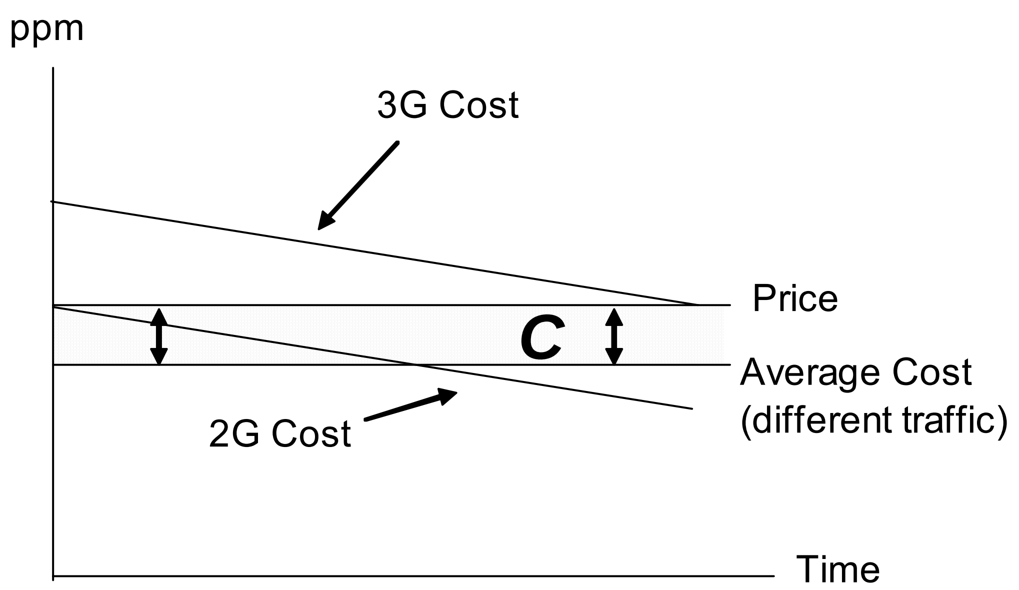
However, this analysis does not take into account one crucial factor. The above line of argument relies on the traffic volumes used to calculate the average cost (logically the average cost and therefore price cap is based on a <u>weighted</u> average of the two costs) being exogenous. For the reasons set out below, H3G does not believe that the balance of traffic between 2G and 3G networks is exogenous, for an operator which owns and controls both types of network.[100] By influencing the actual traffic balance between a 2G and 3G network, an operator would, *ceteris paribus*, be able to increase its profit by shifting more traffic to the 2G network. This would reduce the weighted average <u>cost</u> for the duration of the price control (by increasing the amount

99 Figures 8 and 9 are purely theoretical and illustrative of the point being made here and are not meant to imply any judgements about the relevant benchmarks.

100 i.e. the situation is qualitatively different for a 3G only operator such as H3G which has to purchase 2G roaming, leading to different incentives for it.

of the lower 2G traffic on which this would be calculated). The combined price cap approach based on the forecast levels of traffic would be above this cost. The operator would then earn excess profits represented by the area C in Figure 9. The ability to do this is therefore an incentive to retain traffic on the 2G network for the duration of the proposed price control. This is despite the fact that, as Ofcom recognises, 3G is longer term the most efficient technology. H3G's view is that delaying the migration to 3G in this way would delay the date at which such efficiencies can be realised at the very least.

Figure 9: Incentive to delay migration from combined price cap



The ways in which a combined 2G / 3G operator could influence the quantities of 2G and 3G minutes on their network are, in summary:

- the operator can influence the handsets it sells through the offers and subsidies offered around such handsets and therefore has significant control over the rate at which it migrates customers from 2G handsets to 3G handsets in aggregate; and
- such an operator can alter its network settings to influence the extent to, and ease with, which existing 3G handsets roam back onto its own 2G network, affecting the overall volumes of 2G and 3G traffic.

Therefore, H3G's view that the proposed combined price control provides a regulatory distortion through creating an incentive not to migrate to 3G remains valid in the face of the Market Review Consultation. H3G acknowledges that this is only one of many incentives in this area, but urges Ofcom to ensure that this particular incentive is not allowed to create an adverse distortion. However, if operators react to the regulatory distortion which is provided then the price cap will also lead to over-recovery of costs, given Ofcom's approach to setting the cost benchmark.

Annex 5: Detailed comments on Ofcom's cost benchmarks

As with previous submissions, H3G's focus has been on those model parameters which it considers are still not appropriate and which have a material effect on the outputs of the model. Our review is ongoing and it may be necessary to provide further comments at a later date. This annex provides detailed comments on these issues in the context of Release 3 of Ofcom's confidential 3G only LRIC model, provided to H3G on 13 September 2006 ("Release 3"). This also makes relevant comparisons with the previous version of the model sent to relevant stakeholders on 17 March 2006 ("Release 2")

Subscriber numbers

H3G is pleased to see that Release 3's medium term forecast for the 3G only operator's subscriber numbers is far more realistic than that contained in Release 2. However H3G has major concerns that the short term forecast is based on inaccurate information, and that the long term forecast is unsupported, and driven more by Ofcom's desire for what it sees as competitive neutrality than by the available evidence of what is reasonable.

In the short term, H3G believes it is important that, in the case of the 3G only operator, the model correctly reflects the actual number of past and current subscribers that H3G has. As noted in our submission of 5 June 2006, Ofcom explicitly accepted this principle in our meeting of 18 April 2006. The principle is, moreover, consistent with that adopted for the combined 2G/3G operators, where as we understand it the model has been calibrated to reflect actual aggregate subscriber numbers, as reported in Ofcom's own telecommunications markets data tables.

H3G also believes that the model should be consistent and non-discriminatory in its definition of subscriber numbers as between the combined 2G/3G operators and the 3G only operator. In the case of the combined 2G/3G operators, the calibration of the model against Ofcom's data tables suggests that subscriber numbers should be based on active subscribers, with the threshold period for activity being set at 90 days. Thus subscriber numbers for the 3G only operator should also be measured on a 90 day basis.

[•]

H3G also has significant concerns about the longer term subscriber numbers forecast in Ofcom's model. In particular, H3G is concerned that the assumed level of subscribers for the 3G only operator by 2021 of 14.0million (or 20% of the overall market) has been driven more by Ofcom's desire for what it sees as competitive neutrality than by the available evidence of what is reasonable.

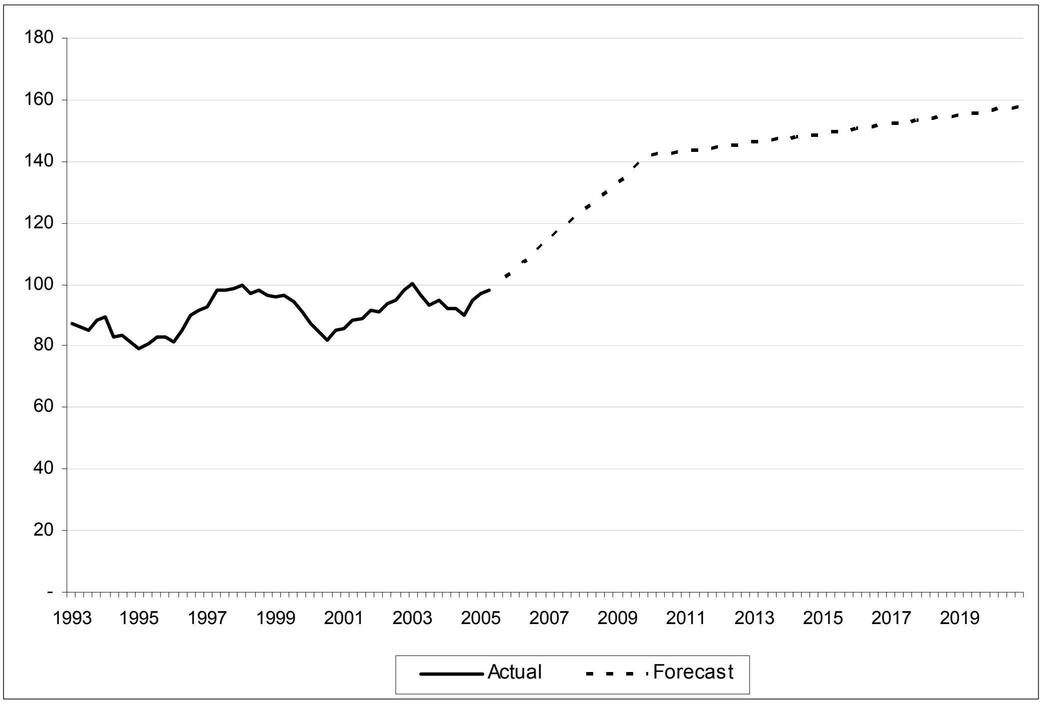
[•]

Voice demand per subscriber

H3G notes that Ofcom's medium demand estimate for voice demand per subscriber shows no material change from the estimate used in Release 2.

H3G repeats the concern, expressed in our 26 May 2006 submission, that despite the fact that demand per subscriber has stayed virtually flat over the last 12 years, Ofcom continues to assume an increase in demand of more than 50% over the next 14 years, as shown in Figure 10 below (figures are for the market as a whole).

Figure 10: outgoing plus on-net minutes per subscriber per month: medium demand scenario



The rationale underlying this assumption remains unclear. [●]

Video demand per subscriber

As a relatively new service with very limited history, [●]. In this context, H3G believes that Ofcom has a duty not to be unduly speculative in its assumptions.

As a result H3G's has concerns in two areas.

The first area concerns Ofcom's use of the "voice only" demand scenario. In its proposals, Ofcom repeatedly refers to this scenario generating "*conservative*" cost estimates. The "medium demand" forecast for voice which is included in the "voice only" demand scenario is discussed above; here, H3G notes that Ofcom's "voice only" scenario erroneously includes Ofcom's "medium demand" forecast for video as well as voice. [●]

Data demand per subscriber

As with video, as a relatively new service with very limited history, there is a high degree of uncertainty around future demand for data - a point that Ofcom acknowledges. In this context, H3G believes that Ofcom has a duty not to be unduly speculative in its assumptions for the purposes of setting a cost benchmark for a price control.

[●]

A key issue with Ofcom's medium demand assumption is not however in the total level of data demand but in the assumed interaction with network costs. Ofcom's model continues to assume that the proportion of demand which falls in the "busy hour" is equal across all services. [●] There is no particular reason to suppose that the natural busy hour for data is the same as the natural busy hour for voice. [●]

Finally, H3G has previously advised Ofcom of the importance of the model reflecting the impact of HSDPA, which is having and will continue to have a fundamental impact on the network requirements for and cost of data[101]. This is current and relevant technology: H3G completed a successful trial earlier this year [●]. However, Ofcom's model does not attempt to reflect the impact of HSDPA. In H3G's view, the distorting effects of this omission at the levels of data demand assumed for the "high demand" scenario are great enough to make the model unfit for purpose in this scenario. No reliance can therefore be placed upon the results of the "high demand" scenario, since they are fundamentally affected by high levels of data demand and at the same time ignore the impact of current efficient technology for dealing with such data demand.

Ofcom claims[102] that for a given level of demand, HSDPA "would likely result in efficiency gains which would result in a lower efficient target charge". This statement does not take account of the interdependencies in Ofcom's own model. An innovation such as HSDPA, which makes data more efficient, is likely to have the effect of increasing and not reducing the efficient target charge for voice termination. This is because a higher proportion of shared costs get allocated to voice through the routing factor and economic depreciation calculations. This effect can easily be observed by adjusting the data downlift factor in the model, as a proxy for radio network efficiency of data. As the downlift factor increases (i.e. data becomes more efficient over the radio network), the cost of voice termination increases.

Treatment of 3G licence fee

H3G believes that Ofcom's discussion of different treatments of the 3G licence fee is misleading. It gives the false impression that there is a wide range of equally reasonable scenarios, when in fact the great majority of the scenarios advanced by Ofcom are unreasonable and inconsistent with Ofcom's treatment of all other costs.

Moreover, H3G believes that Ofcom's model contains two basic calculation errors which serve to significantly understate the impact on the termination rate of the great majority of the scenarios advanced.

Ofcom advances a total of 10 licence fee scenarios in its proposals[103] as set out in Table 9.

101 See H3G submission of 2 May 2006
102 Paragraph A5.13, Market Review Consultation.
103 Annex 14, Market Review Consultation

Table 9: Ofcom's scenarios for allocating the 3G licence fee

Scenario	Value	Carriers	Market share	Allocation
1 (a)	£4.4bn	3	20%	Radio traffic
1 (b)	£4.4bn	3	20%	Total traffic
2 (a)	£4.4bn	3	25%	Radio traffic
2 (b)	£4.4bn	3	25%	Total traffic
3 (a)	£4.0bn	2	20%	Radio traffic
3 (b)	£4.0bn	2	20%	Total traffic
4 (a)	£3.3bn	2	20%	Radio traffic
4 (b)	£3.3bn	2	20%	Total traffic
5	zero	2	20%	n/a
6	zero	3	20%	n/a

Ofcom also suggests a further 4 scenarios, resulting from the use of a revenue base, as opposed to radio traffic or total traffic, to allocate the licence fee.

Scenarios 5 and 6 are based on valuing the licence fee at zero. Ofcom claims that

> "*there are some arguments in favour of not including any recovery of the licence fees*" and that "*such an approach would lead to a substantially lowered level for the efficient charge*".[104]

These claims are logically inconsistent with both Ofcom's stated objectives and its treatment of other costs.

Ofcom appears to base its arguments in favour of these scenarios on the assumption that the licence fee "*could be considered a sunk cost investment*" [105] and that forward looking marginal costs are therefore zero. In the very next paragraph, however, Ofcom notes that the licence fee is not in fact a sunk cost investment:

> "*With the introduction of spectrum trading, MNOs will be able to sell spectrum to other interested parties. MNOs' spectrum holdings will have a realisable*

104 Paragraph A13.50, Market Review Consultation
105 Paragraph A14.6, Market Review Consultation

> *value on a forward looking basis and therefore it may not be appropriate in the context of a forward looking cost model to treat spectrum as a sunk cost.*" [106]

Three pages later, Ofcom again confirms that in its view the licence fee is not a sunk cost:

> "*in Ofcom's view spectrum is not a fixed cost of production in the context of the time horizon being modelled in Ofcom's cost model. From a long run perspective MNOs can vary the quantity of spectrum they use in line with demand for its capacity.*" [107]

Since Ofcom is itself convinced that the licence fee is not a sunk cost investment, and recognizes that scenarios 5 and 6 both rest on the premise that it is a sunk cost investment, H3G does not understand how Ofcom can logically advance the two scenarios as being relevant in any way.

Even if it were true that the licence fee was a sunk cost investment, it would still be unreasonable to value the licence fee at zero in assessing termination costs. Unless Ofcom wishes to argue that sunk costs are inherently inefficient, doing so would be inconsistent with the principle of allowing operators to recover their efficiently incurred costs. Ofcom itself clearly and repeatedly recognizes the importance of this principle:

- Ofcom states that one if the primary objectives of its mobile call termination review is "*seeking to ensure operators recover efficiently incurred costs*" ;[108]
- Ofcom states the principle that an operator should be able to recover efficiently incurred costs as the main reason for benchmarking the 3G only charge against a 3G only cost rather than a combined 2G/3G cost;[109]
- Ofcom recognises the principle again in its proposal to apply a single charge control to all four 2G/3G operators, noting that a failure to comply with the principle could impact on investment decisions, which "*would be unlikely to serve the longer term interests of consumers*" ;[110]
- Ofcom recognizes the principle again when considering the path of charge reductions, "*Ofcom considers that MNOs should not be denied the opportunity to recover their efficiently incurred costs*"[111]
- Ofcom states in support of its proposed charge conditions that the incorporated charge range "*does not prevent those MNOs from recovering their efficiently incurred costs*"; [112] and
- last but not least, Ofcom states in relation to the licence fee "*that regulation should not deny regulated firms the opportunity to recover their efficiently incurred costs*".[113]

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106 Paragraph A14.7, Market Review Consultation
107 Paragraph A14.21, Market Review Consultation
108 Paragraph 6.9, Market Review Consultation
109 Paragraph 9.25, Market Review Consultation
110 Paragraph 9.70, Market Review Consultation
111 Paragraph 9.82, Market Review Consultation
112 Paragraph 10.40, Market Review Consultation
113 Paragraph A14.8, Market Review Consultation

H3G therefore believes that there are no reasonable arguments to support scenarios 5 and 6. They are irrelevant to the assessment of termination costs, and they should not be included in Ofcom's calculated range of scenarios.

That leaves 8 potentially relevant scenarios, generated from 2 different allocation bases for each of 4 value/carrier/market share scenarios (or 12 scenarios, generated from 3 different allocation bases if the revenue base option is pursued).

Many of these scenarios result from the use of different allocation approaches. Ofcom explains that licence fees "*should appropriately be allocated according to drivers reflecting the opportunity cost*" of spectrum usage.[114] As noted above, Ofcom also concludes that spectrum is an incremental rather than a common cost, noting that it "*is a scare resource*" [115] and that:

> "*it is not a fixed cost of production in the context of the time horizon being modelled. From a long run perspective MNOs can vary the quantity of spectrum they use in line with demand for its capacity.*" [116]

In that context, Ofcom proposes three approaches for allocating licence fees between services (although only the first two are then quantified in the modelling scenarios):

- allocation in proportion to each service's share of lifetime radio traffic in MB;
- allocation in proportion to each service's share of lifetime total traffic in MB; and
- allocation in proportion to each service's share of revenues.

Ofcom explains that the radio traffic approach, where each MB of traffic is adjusted for its demands on the radio network, reflects "*demand on spectral capacity*".[117] As such this approach is directly related to the opportunity cost of spectrum usage, and meet's Ofcom's own criterion for the appropriate means of cost allocation. Moreover, this approach is consistent with Ofcom's treatment of all other network assets, and all other incremental costs, where allocation is determined by the cost driver that is relevant to the use of the asset in question.

It is notable that although Ofcom observes that the link to spectrum demand is a benefit of the radio traffic approach, it identifies no benefits for either of the other two approaches. It simply observes that they are alternative possibilities.

They are not, however, possibilities with any merit. Neither the total traffic approach nor the revenue approach reflects demand on spectral capacity. Both approaches therefore fail Ofcom's own criterion that the allocation should reflect the opportunity cost of spectrum usage. Moreover, both approaches are inconsistent with Ofcom's treatment of all other network assets, and all other incremental costs.

The tone of Ofcom's discussion suggests that the only apparent "benefit" of the last two approaches is that they lower termination charges than the first approach. This is not a relevant consideration when deciding on principles.

Since the total traffic and revenue approaches are irrelevant, their inclusion in Ofcom's discussion is entirely misleading. In its discussion of different allocation approaches, Ofcom appears to suggest that the 26% allocation to termination

[114] Paragraph A14.13, Market Review Consultation
[115] Paragraph A14.4, Market Review Consultation
[116] Paragraph A14.21, Market Review Consultation
[117] Paragraph A14.14, Market Review Consultation

charges resulting from the radio traffic approach is somehow generous, on the basis that it is higher that the allocations that would result from the other two approaches. This is not the case, since the other two approaches have no merit.

More importantly, the unwarranted inclusion of the total traffic approach in the range of scenarios used by Ofcom to set its medium cost ranges in Annex 13 inevitably leads to an unwarranted bias in those ranges.

Of the 14 scenarios noted above, this leaves only four potentially relevant scenarios asset out in Table 10.

Table 10

Scenario	Value	Carriers	Market share	Allocation
1 (a)	£4.4bn	3	20%	Radio traffic
2 (a)	£4.4bn	3	25%	Radio traffic
3 (a)	£4.0bn	2	20%	Radio traffic
4 (a)	£3.3bn	2	20%	Radio traffic

Scenario 1(a) is based on H3G's actual payment, and its actual allocation of spectrum, applied to Ofcom's forecast of subscriber numbers. H3G believes that this scenario would be relevant if it was adjusted to meet the concerns expressed above regarding Ofcom's forecast of subscriber numbers.

Scenario 2(a) is based on H3G's actual payment and its actual allocation of spectrum, but contains an adjustment to the 3G only operator's assumed market share, to reflect "*an indication of the scale*" of the "*competitive advantage*" [118] afforded to the 3G only operator, and one of the 2G/3G combined operators, as a result of having a 3 carrier allocation, compared with the 2 carrier allocation of the remaining three 2G/3G combined operators.

As Ofcom notes, the model already takes account of the cost advantages of having 3 carriers rather than 2. Ofcom's supposition that the allocation of an extra carrier gives a market share advantage is unfounded, and its estimate of that advantage as an additional 5% market share is speculative.

The scenario is, moreover, logically inconsistent with the rest of Ofcom's proposals. As noted above, Ofcom clearly states that the subscriber number assumption which underlies the rest of its calculations, and which also happens (erroneously we believe) to result in a 20% market share by 2020/21, must be reasonable on its own merits, and in support of the contention that it is reasonable Ofcom states that it is based on third party forecasts. Those third party forecasts will already have taken account of any potential competitive advantage afforded by the allocation of 3 carriers to H3G. It is illogical to then apply an uplift to that core subscriber number assumption to reflect the competitive advantage for a second time.

H3G therefore believes that Scenario 2(a) is irrelevant to any reasonable assessment of the licence fee.

118 Paragraph 14.38, Market Review Consultation

Scenario 3(a) is based on ignoring H3G's ownership of a third carrier and on the premium paid by H3G for its spectrum allocation over the amounts paid by those 2G/3G combined operators who acquired 2 carriers.

H3G accepts that this may be relevant, in so far as it is theoretically possible that it could have marginally outbid one of those combined 2G/3G operators for a 2 carrier allocation. What is a lot less clear is whether the final bids for those allocations would have remained at around £4bn had one of those combined operators faced the prospect of losing the bid, or whether H3G's involvement would have raised the final bid considerably higher.

Scenario 4(a) is based on scenario 3(a), but with a write down of 17.5% reflecting the weighted average of O2's write down in 2003 and the lack of write down by the other two 2 carrier 2G/3G combined operators.

H3G strongly rejects Ofcom's suggestion that there is any valid extrapolation to be made from O2's write down to the value of spectrum to H3G or the 3G only operator. O2's circumstances and business strategy are entirely different from H3G's and Ofcom has provided no evidence in support of its suggestion, beyond vague speculation. As Ofcom is well aware, having requested detailed information on the issue, H3G's licence fee payment has been subject to a rigorous impairment review by its external auditors, who have concluded that no impairment has occurred.

Ofcom suggests in its proposals that the impairment review:

> "*does not provide entirely unambiguous support for the opportunity cost of the 3G spectrum being what was paid in 2000*" on the grounds that "*the impairment review is based on the value of an MNO's entire UK business rather than the value of services explicitly related to owning the 3G spectrum*". [119]

Since H3G's entire UK business is reliant on owning the 3G spectrum, H3G does not understand how this can be a valid objection in the case of the 3G only operator.

In the light of the clear independent evidence from H3G's impairment review, and the lack of any support for Ofcom's extrapolation of O2 specific circumstances to the 3G only operator's situation, H3G believes that scenario 4(a), and any scenario based on an impairment of the licence fee, is wholly irrelevant to any reasonable assessment of the licence fee.

In H3G's view therefore, although Ofcom advances up to 14 scenarios for different treatments of the 3G licence fee, only two of them are relevant: scenarios 1(a) and 3(a). The other scenarios are unreasonable and their inclusion in Ofcom's discussion gives the impression of a degree of uncertainty on this issue which does not in fact exist. The Market Review Consultation refers to the average effect of the different scenarios as translating into 1.9ppm for the 3G only operator in 2010/11 [120]. Ofcom further states:

> "*Overall the scenarios discussed in this section are used to inform the range for proposed charges for MNOs.*"

Even using Ofcom's own calculations of the outputs of the scenarios (which are erroneous for the reasons set out below), the average figure quoted by Ofcom is too

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119 Paragraph A14.29, Market Review Consultation
120 Paragraph A14.44, Market Review Consultation

low when irrelevant scenarios are excluded. H3G's views on the use made of these scenarios is discussed in Section 5.1 of this response.

Turning from the choice of scenarios to their calculation, H3G believes that Ofcom's model contains two basic mathematical errors which serve to significantly understate the impact on the termination rate of the great majority of the scenarios advanced, including the two which H3G believes are relevant.

The first error relates to the conversion of the chosen 2000 value to the value reflected in the model. Ofcom explains that the model:

> "*does not deploy a 3G licence fee asset until the first year of demand on the 3G network... the purchase cost of the licence fee has been adjusted to give the same net present value as if it had been purchased in 2000/01*" [121].

Under each scenario, the model therefore adjusts the amount actually paid by the compound real discount rate from 2000/01 to the assumed year of first deployment (2003/04 in the case of the 3G only operator, and 2004/05 in the case of the 2G/3G combined operators).

Although this adjustment deals with the lag between actual purchase and assumed deployment correctly, Ofcom has failed to recognise that the resulting value is still expressed in 2000/01 prices, and that the whole of the rest of its model is expressed in 2006/07 prices. Therefore, in order to make the licence fee input logically consistent with the model, it needs to be adjusted further by 6 years' worth of inflation, which according to Ofcom's model amounts to an uplift of 15.74%.

The second error relates to the application of the economic depreciation algorithm to the licence fee. The model assumes that the licence fee has an 18 year life from deployment. In principle this should result in the requirement for a new licence in 2021/22 for the 3G only operator, which seems appropriate as the licence expires on 31 December 2021. However the model assumes that no further licences are acquired, and no further spectrum costs are incurred. Under Ofcom's economic depreciation approach, in principle this need not be a problem in assessing costs within that 18 year period, as long as the model assumes the recovery of the current licence fee over the period of the current licence fee. However it does not. The model assumes that only around two thirds of the cost of the current licence fee is recovered over that period, and that the remaining one third of cost is recovered thereafter.

This would appear to be a basic logical error in Ofcom's modelling. Whatever the assumed scenario for spectrum allocation and cost beyond 2021/22, it cannot be correct for the current licence fee to be recovered beyond the expiry of the licence. Even if Ofcom believes that spectrum would be free beyond 2021/22, its own economic depreciation methodology would require the current licence fee to be recovered by 2021/22, on the grounds that the effective value of spectrum would reduce to zero thereafter.

Ofcom's model needs to be corrected for these two errors. H3G notes that the effect of doing so is significant. We have estimated, for example, that under the medium demand scenario, the impact of the licence fee under scenario 1(a) rises from 2.16p to 3.51p, i.e. an extra 1.35p on per minute termination rates.

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121 Paragraph A5.60, Market Review Consultation

Cell radii and coverage

H3G has in previous submissions made it clear that it believes that the cell radii assumed in Ofcom's modelling are overstated. Ofcom has for its part made it clear that it has relied on model calibration (i.e. the ability of its model to replicate, at least in broad terms, actual operator asset counts) in order to support assumptions on cell radii and similar parameters.[122]

H3G has undertaken further thinking and analysis on this subject and believes it is now in a better position to explain the concern in a way which is consistent with Ofcom's emphasis on model calibration.

The core problem arises from the fact that the measure of coverage used in Ofcom's model is outdoor or street voice coverage. This measure is consistent with statements made by operators (including H3G) of coverage levels, and with techniques used by and for Ofcom (e.g. Ofcom's interpretation of the 3G rollout obligations[123]).

However subscribers today expect to have ubiquitous indoor coverage. Indoor coverage has a loss of around 10-20dB compared to outdoor coverage along with a substantial increase in standard deviation. The result is that the street level signal required by the market, particularly in Urban and Suburban environments, is greatly higher than that suggested by outdoor voice coverage levels. It should be noted that a 10dB coverage "margin" represents approximately 1/4 of the coverage and 20dB represents 1/16 of the coverage. Consequently the planned and implemented cell radii required in practice differ hugely from the radii theoretically required for outdoor coverage alone.

Subscriber expectation today is based on experience of 2G networks. It could be argued that 2G levels of indoor coverage are only as high as they are because 2G sites have been added for primarily capacity reasons. However in order for a 3G only network to offer comparable coverage and performance it is necessary to have at least comparable coverage to 2G networks. [●]

Network design - RNCs

H3G believes that Ofcom's model understates the required number of RNCs. [●]

Network design - MMSCs

Ofcom claims that the dimensioning of SMSCs is driven by the volume of SMSs and MMSs[124]. MMSs are however handled by MMSCs rather than SMSCs. It is not clear from Ofcom's model how MMSC costs are captured.

Path of cost recovery

H3G continues to believe that the perfect contestability approach to setting the path of cost recovery is the only approach which delivers Ofcom's consistently stated objective of a price path which "mimics" the effects of a competitive market in order to provide the appropriate price signals for consumption and investment. Perfect

[122] For example, paragraph A12.13, Market Review Consultation
[123] Paragraph 7.27, 3G Rollout obligations - Statement and Consultation, Ofcom, July 2006
[124] Figure A5.12, Ofcom September 2002 proposals

contestability is the only competitive standard for natural monopoly industries to have received wide acceptance by economists in light of its efficiency properties[125].

Ofcom has repeated this objective in the Market Review Consultation. H3G is surprised and disappointed that the perfect contestability approach is not even mentioned in the Market Review Consultation. In H3G's view, the complete omission of this issue from that document constitutes a serious failing in the completeness and transparency of Ofcom's consultation process.

H3G's principal arguments in favour of the perfect contestability approach are set out in its previous submission[126] and are not repeated in detail here. In summary:

- By mimicking the outcomes of an idealised 'competitive' market, perfect contestability generates a path of prices which is allocatively efficient at every point in time, as previously accepted by Ofcom.
- Ofcom's objection to the approach on the grounds that it involves assumptions about new entrants that seem unrealistic is misplaced. Very few, if any, perfectly competitive or perfectly contestable markets exist in reality. They are ideal constructs which regulatory policy seeks to mimic because of their desirable welfare properties. Ofcom's own assumptions on entry are highly unrealistic, in that they assume that entrants can enter the market and begin to steal an incumbent's subscribers faster than the incumbent can respond by changing its prices (a feature it shares with 'hit and run' entry in contestability theory).
- Ofcom's objection to the approach on the grounds that it results in unit costs being inversely proportional to utilisation is arbitrary and inconsistent with the Competition Commission's 2002 findings, which explicitly endorsed that very characteristic.
- Ofcom's objection to the approach on the grounds that its results are sensitive to assumptions could equally be levied against the other approaches being considered, and is in any event no reason to abandon the competitive path benchmark.
- Ofcom's economic depreciation approach will not in general result in an efficient path of prices.

In a paper to stakeholders in March 2006[127], Ofcom advanced a further objection to the perfect contestability approach. Ofcom claimed that it required a high degree of modelling complexity and was therefore particularly challenging to implement. As H3G has explained in a meeting with Ofcom,[128] H3G does not agree that this approach is necessarily as complex to model as Ofcom has suggested. H3G outlined a simpler approach to Ofcom, but Ofcom chose not to discuss the issue further, and now that perfect contestability is not even mentioned in its published proposals, the views of wider stakeholders on the issue are not available.

In its current proposals, Ofcom continues to support the economic depreciation approach. It continues to claim that economic depreciation mimics the outcome of a

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125 For example, see K. Viscusi, J. Vernon and J. Harrington (1995) *Economics of Regulation and Antitrust*, pp. 162-164.

126 See H3G's discussion paper on the optimal path of cost recovery, dated 7 February 2006.

127 Determining the profile of cost recovery - explanation of initial approach, Ofcom, 20 March 2006

128 Meeting held on 26 June 2006.

competitive market[129]. This is incorrect. As noted in our February submission, economic depreciation assumes a barrier to competition in that a new entrants can only attract customers at the same rate as the incumbent's original acquisition of customers. A market with a barrier to entry of this nature cannot be described as competitive.

Ofcom explains that the purpose of seeking a price path that is consistent with a competitive market is economic efficiency, in terms of price signals for consumption and investment:

> *"There are two theoretical objectives in determining the appropriate path of cost recovery. Firstly, the profile of cost recovery should give the best signals for consumption and investment. This implies that the profile of cost recovery should be identified by determining the path of prices in a competitive market. Secondly, regulation should avoid denying operators the opportunity to recover their efficiently incurred costs, including a reasonable return on investment.* " [130]

All of the approaches under consideration are capable of meeting Ofcom's second objective of cost recovery in principle (indeed, there are an infinite number of price paths which meet this objective). Accordingly the choice of approach should therefore be guided by the first objective, i.e. the approach which provides the best signals for consumption and investment decisions. The implication behind Ofcom's choice of economic depreciation (based on an imperfectly competitive market) over perfect contestability (based on a perfectly competitive market), is that economic depreciation must therefore be the cost recovery path which yields more efficient signals for consumption and investment. But there is no reason to believe that this will be true.

Figure 11 below shows the quantity Q of termination consumed, given a demand curve D and prices P. As Ofcom recognises, long-run average cost LAC is decreasing over time, and will eventually reach a level Pac. The efficient level of consumption in the long-run is Qac, where the demand curve D cuts the LAC curve.

Under Ofcom's economic depreciation approach, termination prices are above Pac, at Ped, due to the premium added to recover additional costs caused by earlier under-utilisation. This results in a suboptimal level of consumption in the long-run of Qed. <u>The economic depreciation approach is therefore likely to result in inefficient levels of long-run consumption.</u>

In contrast, since perfect contestability generates prices equal to LAC at every point in time, it results in a long-run price of Pac, and long-run consumption of Qac. The perfect contestability approach therefore yields the efficient levels of long-run consumption.

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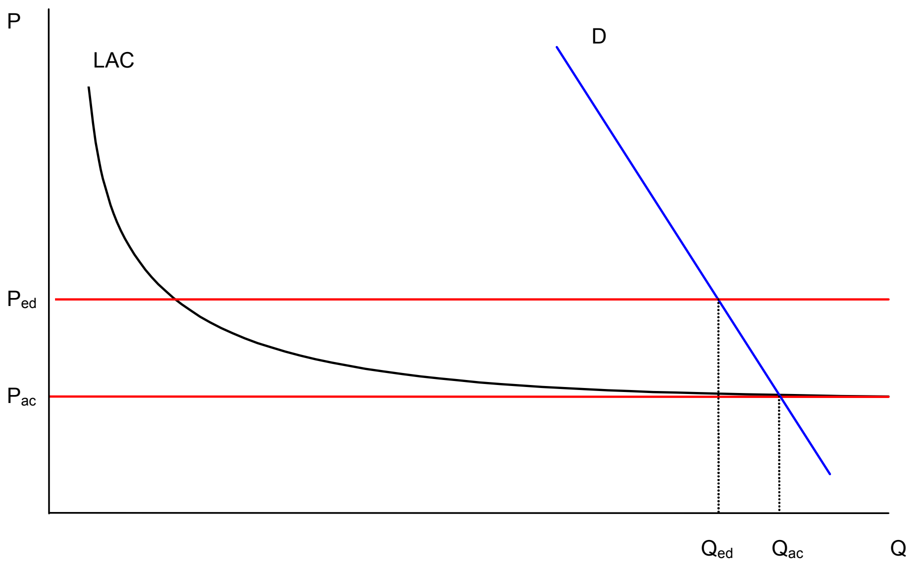
129 Paragraph A13.14, Market Review Consultation
130 Paragraph A5.85, Market Review Consultation

Figure 11: Perfect contestability



Consequently, perfect contestability can lead to more efficient price signals for consumption than economic depreciation[131]. Since the efficiency of these signals is Ofcom's driving objective for choosing a path of cost recovery, Ofcom's continued favouring of economic depreciation seems illogical[132].

In summary, Ofcom's economic depreciation approach may well lead to:

- excessive prices in the long term;
- an inefficient structure of prices;
- distortion of consumer choice; and
- inequitable distributional effects.

These are all properties Ofcom considers likely to result if termination charges are unregulated[133].

The market imperfection chosen by Ofcom to support its economic depreciation approach is arbitrary and appears to be specifically designed to deliver a path of cost recovery that Ofcom deems subjectively desirable.

131 The welfare distortion caused by the economic depreciation approach will be particularly severe if, for example, "early adopters" have relatively price inelastic demands compared with "late adopters". Then a lower than LAC price in early periods will generate no significant additional demand, but a higher than LAC price may result in significant demand curtailment in later periods.

132 Ofcom's modelling approach implicitly assumes that intertemporal demands are independent of prices. In other words, perfectly price-inelastic demand curves for termination at every point in time. But this assumption is unrealistic, as Ofcom itself recognises in Annex 16 and in Annex 19, paragraphs A19.6 – A19.11; also Oftel, "Termination Charges in the Absence of Regulation," 2002). When we allow for some demand elasticity, then the problem of finding a constant or near-constant average charge which recovers total long-run costs over asset lifetimes becomes much more complex. Indeed, there is nor *a priori* reason to expect there to be a unique solution to this problem, so Ofcom's economic depreciation approach may yield a large number of possible price paths.

133 Paragraphs 7.6 to 7.34 and paragraph A19.1, Market Review Consultation

Ofcom acknowledges that economic depreciation does not result in unit costs being inversely proportional to utilisation, but says of this inverse relationship:

> "*Ofcom does not consider that this property is necessarily desirable in the context of setting termination rates.*" [134]

This objection is without foundation. Ofcom should not make choices of this nature on the basis of its subjective reasons. The inverse relationship is an essential feature of a perfectly competitive market, and was explicitly endorsed by the Competition Commission in the 2002 inquiry:

> "*In principle, we agreed with T-Mobile that the cost of terminating calls should, in the short term, take into account the extra cost of an MNO with a market share of total traffic lower than the average. This should ensure that even a relatively small MNO receives enough income to finance its termination business. The appropriate cost, in the short term, for an operator with a lower than average market share is the cost of an efficient operator with that actual market share.*" [135]

In the light of the Competition Commission's explicit endorsement of an inverse relationship to account for lower market share, or under-utilisation, H3G is at a loss to understand how Ofcom can claim that a cost path with such a relationship:

> "*would represent a significant deviation from the conceptual approach... accepted by the Competition Commission*." [136]

H3G therefore continues to believe that Ofcom's economic depreciation approach is inappropriate and that costs should in principle be calculated using the perfect contestability approach.

H3G's favoured approach is perfect contestability. As noted above, Ofcom has chosen not to discuss perfect contestability in its proposals, let alone to advance this approach as an option. In the light of this omission, H3G has considered whether there are any readily available proxies for the perfect contestability approach.

One potential proxy, at least for the price control period being proposed, could be Ofcom's Current Cost Accounting (CCA) approach. Under the perfect contestability approach, each year's total capital cost is, in broad terms, driven by the cost to the owner of the assets of that year's loss in asset value (due both to the erosion of the assets' remaining useful life and any changes in Modern Equivalent Asset Values). This is not dissimilar to the loss in value charged under the CCA approach. In principle therefore one might expect the CCA approach to be a fair proxy for perfect contestability. H3G has undertaken some modelling which suggests that the CCA approach could be a reasonable proxy for perfect contestability over the period of the proposed price control.

Another potential proxy is to apply the adjustment made by the Competition Commission in the 2002 inquiry. There, in the case of an operator with below average, or long-run, market share, the Competition Commission inflated the results of Ofcom's economic depreciation approach by a factor equal to the long-run market share divided by the operator's actual market share for the year in question[137].

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134 Paragraph A13.14, Market Review Consultation
135 Paragraph 2.277, 2002 Competition Commission inquiry
136 Paragraph A13.14, Market Review Consultation
137 Paragraphs 2.277 to 2.280, 2002 Competition Commission inquiry

H3G recognises that such an adjustment may not always be an accurate proxy for the perfect contestability approach. It does, however, incorporate an inverse utilisation relationship, and notably appears to have been adequate for the Competition Commission's purposes.

In H3G's view, if Ofcom finds the perfect contestability approach inappropriate for any reason, it should at a minimum use of one or other of these proxies.

H3G notes that Ofcom would appear to have a number of objections to the use of CCA, as a proxy or otherwise.

First, Ofcom claims that CCA:

> "*does not attempt to mimic the outcomes of a competitive market*" [138].

As noted above, H3G believes that this is a criticism better levelled against economic depreciation than against CCA, and that CCA is in practice a fair proxy for the perfect contestability approach.

Second, Ofcom claims that CCA is inconsistent with the approach accepted by the Competition Commission, and that as a result it would lead to windfall gains and losses. As noted above, H3G believes that the Competition Commission clearly endorsed an inverse utilisation relationship, and that CCA, which incorporates such a relationship, appears more consistent with the Competition Commission's findings than the economic depreciation approach, which does not incorporate an inverse relationship.

Third, Ofcom claims that CCA is sensitive to assumptions on costs and traffic. This is a similar objection to that levied by Ofcom in the past against the perfect contestability approach, and H3G's response is the same. As H3G has clearly demonstrated in its proposals, its own economic depreciation approach is also sensitive to assumptions. Moreover, Ofcom should not choose an inappropriate path of cost recovery over an appropriate path on the grounds that the inappropriate path can at least be estimated with greater accuracy. It is better to be approximately right than precisely wrong.

Fourth, Ofcom claims that CCA is complex to calculate. This is not a valid objection against CCA in comparison with economic depreciation. Ofcom's own model clearly demonstrates that the CCA approach calculations are less complex than the economic depreciation calculations.

If Ofcom continues not to use the CCA approach, then the alternative appropriate course of action would appear to be to adopt the Competition Commission's 2002 adjustment as a proxy for perfect contestability.

Externality Adjustment

Ofcom's revised estimate of the appropriate externality adjustment, as set out in Annex 16 of the Market Review Consultation, is based on a market wide assessment. As such, it derives an efficient level of "subsidy" required based on market wide parameters. H3G notes that, as a 3G only operator, it cannot achieve certain of these key parameters in addressing "marginal" subscribers. [●] In contrast, Ofcom's market share and subscriber assumptions are based on the concept that H3G will be able to achieve equal market shares with the other subscribers. H3G urges Ofcom to address this inconsistency in Ofcom's proposals. [●]

138 Paragraph A13.12, Market Review Consultation

Annex 6: CARS Costs

Introduction

In a paper sent to Ofcom on 2 February 2006 ("Customer Acquisition, Retention and Service ("CARS") Costs")[139] H3G has explained in detail why Ofcom's definitions of MNO services do not withstand careful scrutiny, and do not imply that CARS costs are incremental to a service described as "subscription". In that paper H3G established that:

(i) there is no coherently identified service called "subscription";

(ii) if there were, it would not be true that CARS costs are incremental to the "subscription" service; and

(iii) customer acquisition, and CARS costs more generally, are prerequisite to any service provided by an MNO. CARS costs are therefore part of the stand-alone cost of every service, i.e. *they are common to every service*.

H3G also pointed out that Ofcom has been inconsistent in its approach to this issue. CARS costs are treated as common costs between wholesale or retail services in a number of areas where Ofcom has regulatory authority.[140]

This annex briefly summarizes H3G's main arguments and considers relevant related points which have been raised in the Market Review Consultation.

Subscription Service and the Classification of Costs

To define the incremental, stand-alone and common costs associated with any service provided by a multi-product firm, it is necessary to define services in a way which does not entail logical circularities. This is necessary because incremental costs, for example, are defined as the costs the firm would avoid if it ceased to provide a particular service *at a given level of demand*, but continued to provide all other services *at given levels of demand*.[141] In other words, it must be possible to coherently ask questions about the firm's costs in the presence or absence of any particular service.

Ofcom's definitions of the three basic services provided by MNOs – subscription, call origination and call termination – do not satisfy this requirement. Therefore, any conclusions reached on the classification of costs reached are likely to be logically inconsistent.

In particular, in order provide subscription (i.e. the "option" or ability to make and receive calls), it is first necessary to provide both the origination and termination services. Otherwise subscribers would be acquiring a mobile phone handset which

139 Attached as Annex 7 to this response for reference.

140 For example in, *"Charges between Communications Providers: Number Translation Services Retail Uplift charge control and Premium Rate Services bad debt surcharge: A Statement and Notification of an SMP Condition and modification of an SMP Condition*, Ofcom, 28 September 2005 (Paras 3.6 and 3.55); and in " Provision of Technical Platform Services: A consultation on proposed guidance as to how Ofcom may interpret the meaning of "fair, reasonable and non-discriminatory" and other regulatory conditions when assessing charges and terms offered by regulated providers of Technical Platform Services," *Ofcom, 2 November 2005* (*Para 6.38*).

141 Defining the costs associated with the provision of any service requires that the level of demand to be met by each service be pre-specified. G. R. Faulhaber (2005) "Cross-subsidy analysis with more than two services," *Journal of Competition Law and Economics*, 1, September, 441-448, is particularly clear on this.

was unconnected to any functioning mobile network, and hence not acquiring the "ability" to do anything at all. Even if one can associate an identifiable cost with this "service" there would clearly be no demand for it. Thus the subscription service must subsume in its definition all of the call services provided by the MNO.

Likewise, in order to provide call origination and termination it is first necessary to provide subscription. The key element of the subscription service is the provision of (subsidised) mobile phone handsets to customers. These handsets are an integral part of the MNO's network, and are required for any calls to be originated and terminated. In short, to provide termination and origination *at any given level of demand* requires a given number of subscribers with mobile handsets. Hence both origination and termination subsume, as part of their definition, the subscription service. These services are clearly ill–defined, as none can be provided without assuming the prior provision of the others.

The inclusion of subscription as a "service" means that the provision of *any* service implies the provision of subscription, which in turn implies the provision of *every* service. This in turn implies that there are no incremental costs associated with individual services or subsets of services, i.e. *there are only common costs*.

An apparently equally valid line of argument, however, leads to precisely the opposite conclusion. If the MNO ceased to provide a particular service, e.g. termination, then it would by definition be unable to offer "subscription", and hence also unable to offer origination. So the costs saved from ceasing to offer termination should be the firm's total costs. Since this is true for origination and subscription as well, we are forced to conclude that *all costs are incremental to every service and there are no common costs.*.

We have thus demonstrated that all MNO costs are simultaneously common and incremental to every service, a logical absurdity which results from using inconsistent definitions of services.

There clearly is no "service" described by the term "subscription" any more than an electricity customer is purchasing a "service" from her local electricity supplier when she pays her quarterly standing charge. This is merely to confuse the elements of a two-part tariff (i.e. the fixed and variable charges) with the purchase of different "services."

<u>CARS costs are nothing more than the cost to an MNO of achieving and sustaining given levels of demand for each of the services it provides. As such, they are common to each service i.e. call origination and termination.</u>

The Current Consultation Document

In Annex 15 of the current consultation document (paragraphs A15.7 – A15-.14) Ofcom has not responded to these points. Rather, it has merely repeated a number of its previous assertions. In paragraph A15.11 Ofcom states, "*subscription is a service in its own right with a distinct demand and cost*." But H3G has already pointed out that:

- the existence of an identifiable cost does not imply the existence of a service;
- Ofcom has not provided any evidence of the existence of a "demand" for a subscription service distinct from the demand to originate or terminate calls; and

- the cost of providing a "subscription" service for any given level of demand would include an MNO's entire network costs, since otherwise the "ability" or "option" of making and receiving calls would not be provided, i.e. under Ofcom's definition almost all MNO costs would be "incremental" to the "subscription" service.

Since Ofcom has failed to respond substantively on any of these issues, we can do no more than repeat the points here.

Finally, in paragraph A15.13 Ofcom provide the apparently new argument that:

> *"There would seem to be no costs necessarily incurred by an MNO to acquire and retain its customers of call termination (i.e. originating operators and indirectly callers to mobiles). Fixed operators and other MNOs should not be expected to pay for costs such as advertising and marketing incurred by an MNO to acquire and retain its own subscribers."*

This is merely another logical absurdity. The costs '*incurred by an MNO to acquire and retain its customers of call termination*' are the costs incurred in acquiring and retaining <u>the customers who receive the incoming calls</u>. Without incurring CARS costs, callers to mobiles would have nobody to call and the MNO would be unable to acquire customers of call termination at the given level of traffic. In any event Ofcom's assertion that, "*fixed operators and other MNOs should not be expected to pay for costs such as advertising and marketing incurred by an MNO to acquire and retain its own subscribers*" is clearly a normative statement which has no bearing on the issue of which services CARS costs are incremental or common to.

Termination as a Wholesale Business

In a meeting with H3G, Ofcom appeared to suggest that it could distinguish between an originated and termination wholesale business and retail business, and that it was only concerned with estimating the LRIC of the "wholesale termination business".[142] In order to provide a wholesale termination business no CARS costs need be incurred because a "wholesale MNO" would only require relationships with other purely "retail MNOs". It would therefore only need to incur the costs of negotiating and managing the relevant "wholesale contracts".

H3G doubts that this is an economically meaningful distinction. Even if it were, it would be unclear whether the putative "wholesale" or "retail" MNO was the business with market power over subscribers, so it would be unclear which service should be regulated (i.e. wholesale or retail termination).

Further, this approach would appear to be contradicted by Ofcom's treatment of the externality surcharge, e.g.

> *"it would be appropriate to allow MNOs to add an additional mark-up on cost when setting charges for mobile termination services… to ensure that MNOs account for the external benefits that callers to and from mobile telephones*

[142] Meeting of 7 August 2006 between Ofcom and H3G. This approach is not explicitly set out in the Market Review Consultation, but in a letter to H3G dated 29 September 2006, Ofcom stated "In our view we do not consider there to be a difference between the arguments in the consultation document and those discussed with you at the meeting you refer to at Ofcom on 7 August. To confirm, Ofcom considers that the reasoning set out in the consultation document supports our proposed position on the treatment of CARS and all stakeholders are able to respond to the arguments advanced in the consultation document as they consider appropriate."

> *receive from the addition of new subscribers to the network, and the maintenance of existing subscribers on the network"* [143]

> *"the purpose of the network externality surcharge is to correct for potential economic inefficiencies that may be created if the subscription charge levied by MNOs only reflected the costs of supply"* [144]

Clearly a purely "wholesale MNO" which incurred no CARS costs would not be the firm which should benefit from an externality surcharge on wholesale termination rates.

In addition, Ofcom asserts (in footnote 109, p. 216) that an element of customer service costs may be described as "common" (i.e. customer call centre costs incurred in helping to resolve technical problems that affect incoming calls). These are clearly a retail rather than wholesale related function. Hence Ofcom is inconsistent on this issue.

[•]

New entrant CARS costs

A final point which H3G has raised is the fact that the average pence per minute rates calculated by a LRIC model depend on the traffic forecasts assumed. The level of traffic is dependent on the level of spending on CARS costs. Therefore a new entrant into a saturated market, such as H3G, is effectively discriminated against by the exclusion of CARS costs from calculated call termination costs. Any level of assumed traffic will have a customer acquisition cost associated with it. The higher the traffic levels assumed (and hence excluding CARS costs the lower the average pence per minute call termination charge), the higher the CARS costs required to achieve these traffic levels.

Ofcom recognises these effects in the Market Review Consultation at paragraphs A15.15 to A15.19, but dismisses their relevance on the following grounds. First, Ofcom re-iterates its view that CARS costs are incremental to retail services and therefore should not be recovered from wholesale services. H3G has set out above why it considers this argument to be incorrect. Further, even if the argument were accepted, this does not remove the fact that a new entrant into a saturated market will face different costs to its competitors in achieving the MCT costs assumed by Ofcom, which is not taken into account. Second, Ofcom suggests that it would not be efficient for such higher spending to be taken into account "by setting an excessive charge". Given Ofcom's definition of excessive as above cost, this is circular. If CARS costs are properly taken into account then appropriate costs are higher and therefore a charge reflecting these costs cannot be excessive (above cost). As such, this is not a separate argument but simply a different restatement of Ofcom's view that CARS costs cannot be attributed to wholesale incoming calls.

Finally, Ofcom concludes on this issue at paragraph A15.19, with the following statement.

> *"In Ofcom's view the key issue is that Ofcom should consider whether the forecast traffic volumes applied to H3G are reasonable."*

This merely begs the question of "reasonable" given what level of CARS spending. There is a wide range of potential demand forecasts which could be considered as

[143] Paragraph 6.20, Ofcom June 2004 statement
[144] Paragraph D.4, Ofcom June 2004 statement

“reasonable” but each has a different level of required CARS costs associated with it. [•]

Annex 7: H3G's 2 February 2006 paper on CARS costs

Customer Acquisition, Retention and Service Costs

1. This note sets out Hutchison 3G UK Limited's ("H3G") current thoughts on the appropriate treatment of customer acquisition, retention and service ("CARS") costs in the combined 2G and 3G cost modelling exercise, which Ofcom is undertaking as part of its on-going market review on calls to mobiles from April 2007.

Ofcom's Approach to Determining Termination Charges

2. Ofcom has adopted a specific approach to determining termination charges, which it has consistently reiterated to be as follows:

   "Ofcom has set the target charge on the basis of long run incremental cost (LRIC) plus a mark-up for common costs, based on the equi-proportionate mark-up (EPMU) approach, and a network externality surcharge." [145]

Ofcom's Existing Position on CARS Costs

3. Ofcom has identified CARS costs as incremental to "retail services":

   "As stated in the May consultation, CARS costs do not vary with incoming traffic, therefore, the Director considers that CARS costs are neither incremental nor common to termination. These costs are incremental to the provision of retail services, specifically subscription and mobile-originated calls. Hence CARS costs should be recovered from the prices for these retail services." [146]

4. The "subscription service" has been defined as follows:

   "An economic service exists when there is a distinct demand and/or when there is an identifiable cost. In the case of subscription there is a distinct demand because of the option value of subscription (i.e. the option of being contactable and of contacting other telephone users). There is also a specific cost associated with acquiring and retaining subscribers. Hence, the Director considers subscription to be a service in its own right with a demand, a cost and a price." [147]

5. Ofcom has stated that customer acquisition costs in particular are incremental to subscription because:

   "In the specific case of customer acquisition costs, these are driven only by the number of subscribers and are, thus, incremental to the provision of subscription services and would not be incurred if an MNO did not offer subscription services." [148]

6. H3G has a number of comments on this approach. H3G's current view is that this does not provide a robust approach towards CARS costs going forward.

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[145] Paragraph 6.4, *Wholesale Mobile Voice Call Termination: Statement*, Ofcom, 1 June 2004 ("Ofcom June 2004 statement").

[146] Paragraph F.149, *Wholesale Mobile Voice Call Termination: Proposals for the identification and analysis of markets, determination of market power and setting of SMP conditions. Explanatory Statement and Notification*, Oftel, 19 December 2003 ("Oftel December 2003 statement").

[147] Paragraph F.153, Oftel December 2003 statement

[148] Paragraph F.150, Oftel December 2003 statement

a) The suggestion that "*CARS costs do not vary with incoming traffic*" should not imply that they are not incremental to termination, since this is true of any fixed cost. Nor does it imply that they are not common to termination. Costs are common to a service if: (i) they form part of the stand-alone cost of that service; and (ii) they are not incremental to that service. If CARS costs are invariant to the level of incoming traffic this does not provide proof that such costs are or are not common.

b) The existence of an identifiable cost is a necessary but not, as Ofcom appears to claim, sufficient condition for the existence of a "service". For example, each of the elements in Ofcom's LRIC model for 2G termination has an identifiable cost, but they are not services.

c) The proposition that customer acquisition costs "*would not be incurred if an MNO did not offer subscription services*" is only true if, by not offering subscription, it is meant that the operator offers no services at all, because the provision of any other mobile service first requires subscription services to be purchased. On this basis, the cost of subscription, i.e. customer acquisition, is by definition common to all services (since it can only be avoided by the cessation of all services) and not incremental to subscription alone.

7. In summary, the remainder of this note discusses the following points.

a) Ofcom's definition of the subscription service is not only logically incompatible with the conclusion that CARS costs are incremental to subscription, but leads to the conclusion that virtually all costs, including network costs as well as CARS costs, are common costs.

b) A weaker definition of the subscription service would not lead to the conclusion that network costs are common costs, but it would still not be true that CARS costs are incremental to subscription.

c) Customer acquisition costs, and CARS costs more generally, are a prerequisite to providing any service provided by an operator. CARS costs are therefore part of the stand-alone cost of every service, i.e. they are common to every service.

d) Ofcom has suggested to H3G that, even if CARS costs are common to every service, they are more appropriately dealt with through the externality surcharge. This note provides H3G's initial comments on this approach.

e) H3G also notes that Ofcom treats CARS costs as common costs between wholesale and retail services in a number of other areas where Ofcom has regulatory authority.

Ofcom's Subscription Service and the Classification of Costs

8. Ofcom's definition of subscription as the option (or ability) to make and receive calls has significant implications for the classification of costs.

9. It follows from this definition that certain combinations of services are logically impossible. The following uses the notation S for the subscription service, O for the origination service, and T for the termination service. Clearly, an operator cannot provide the set of services (O,T) (i.e. origination and

termination without subscription), because the ability to make and receive calls, S, is a logically necessary condition for the provision of O and T.

10. The logically possible sets of services are limited to:

    a) (empty set of no services)

    b) (S)[149]

    c) (S,O,T)

    d) (S,O)[150]

    e) (S,T)

11. The fact that the list of possible sets is constrained is of considerable importance in the identification of incremental costs, since, in a multi-service firm, the incremental cost of a service is defined as the costs the firm would avoid if it ceased to provide a particular service (at a given level of demand), but continued to provide all other services (at given levels of demand[151]). Alternatively, as Ofcom itself has pointed out, it is "*the cost caused by the provision of a defined increment of output given that costs can, if necessary, be varied and that some level of output is already produced*" [152].

12. Under either definition, in order for a service to have an incremental cost, it must be possible to compare the cost of a set of services which includes the service in question with the cost of a set of services, other than the empty set of no services, which excludes the service in question.

13. It is notable that, in the case of subscription, there is no set, other than the empty set, which excludes the service in question. Hence, it is a logical consequence of Ofcom's definition of the subscription service that there can be no incremental cost for that service, or indeed for any subset of services which includes subscription.

14. As a result, all costs, including CARS costs, must either be incremental to one or both of origination and termination, or common to all three services.

15. In order for an operator to provide subscription alone at the given level of demand (for example with around 12 million subscribers) each of whom it must be assumed may choose to exercise their option to make and receive calls, the operator must have in place all the capabilities required for both origination and termination for 12million subscribers. Otherwise subscribers

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149 It would not be possible for an operator to offer S alone, since S would require O and T to be offered as well: an offer of the ability to make and receive calls is only meaningful if supplemented by offers to make and receive calls. It would however be possible for an operator to provide S alone, if it turned out that no customer ever exercised the option to make or receive calls. Similarly, it would be possible for an operator to provide (S,O) without T (if no customer ever exercised the option to receive calls) or (S,T) without O (if no customer ever exercised the option to make calls).

150 It could be argued that it would be possible for an operator to provide O without providing S if instead of S the operator provided the ability to originate, but not terminate, calls (the service So). Similarly, an operator could provide T without providing S if instead the operator provided the ability to terminate, but not originate, calls (the service St). For the purpose of this paper, it is assumed that there is no material difference between the three services S, So and St. Although there may in practice be some differences, H3G's current expectation is that any such differences would not materially change the arguments in this paper.

151 Defining the costs associated with the provision of any service requires that the level of demand to be met by each service be pre-specified. G. R. Faulhaber (2005) "Cross-subsidy analysis with more than two services," *Journal of Competition Law and Economics*, 1, September, 441-448, is particularly clear on this.

152 Annex F, Ofcom June 2004 statement

would be acquiring a mobile phone handset which was not connected to a mobile network capable of functioning at the given level of demand, and not in fact acquiring the ability to make and receive calls at that level of demand, i.e. not being provided with a subscription service as defined.

16. Thus the only difference between the cost of providing subscription alone, for which we can use the notation C(S), and the cost of providing subscription plus any combination of origination and termination, i.e. C(S,O,T) or C(S,O) or C(S,T), will be the short run marginal costs which are incurred when a call is actually made or received.[153] Assuming such costs away gives:

    a) C(S) = C(S,O,T) = C(S,O) = C(S,T)

17. Following Faulhaber (2005) [154], the incremental cost of any service is defined by IC(O) = C(S,O,T) - C(S,T), and so on:

    a) IC(O) = C(S,O,T) - C(S,T) = 0

    b) IC(T) = C(S,O,T) - C(S,O) = 0

    c) IC(O,T) = C(S,O,T) - C(S) = 0

18. And so incremental costs are zero for (O), (T), and for (O,T) together. Since, from above, there is no incremental cost for (S), (S,O) or (S,T), there are no incremental costs for any single service or subset of services. In other words, all costs are common to all three services S, O and T.

19. It is therefore a logical consequence of Ofcom's definition of subscription not only that no cost can be incremental to subscription, but also that that virtually all costs, including network costs as well as CARS costs, are common costs.

Alternative Definitions of the Subscription Service

20. We could imagine a weaker definition of the subscription service than that adopted by Ofcom. For example, subscription could be defined as the ability to use whatever other services are provided, including the ability to originate calls if termination is not provided, or the ability to terminate calls if origination is not provided.

21. Under such a definition, it would no longer be the case that the total cost of subscription alone would be approximately equal to the total cost of all services and therefore that virtually all costs would be common costs. Such a definition would correspond more closely to the definition implicit in Ofcom's LRIC modelling work: the incremental costs of termination would then be the costs that would be saved if the operator ceased providing both the service of

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153 It is possible to argue that the level of CARS costs is linked to the level of revenue (or more accurately margin or value), as the Competition Commission did (paragraph 2.327, 2002 report), and that CARS costs would therefore vary according to the number of services provided. However, it is incorrect to assume that the level of CARS costs is proportional to management's desire to attract customers. A subscription plus origination service for a certain customer base might be inherently unprofitable due to competitive constraints from other technologies, but that does not mean that such a service would be able to acquire customers for nothing. Even if some limited CARS costs were variable in this way, this would mean that the costs were incremental to revenue/margin generating services including termination. The net resulting allocation of costs might not be materially affected. In any event, Ofcom has in the past argued against the conclusion that CARS costs are incremental to revenue generating services including termination (Paragraph C.105, Ofcom June 2004 statement).

154 G. R. Faulhaber (2005) "Cross-subsidy analysis with more than two services," *Journal of Competition Law and Economics*, 1, September, 441-448. See also G. R. Faulhaber (1975) "Cross-subsidization: pricing in public enterprises," *American Economic Review*, 65(5), December, 966-977.

call reception and the ability to receive calls, but continued providing the service of call origination and the ability to originate calls.

22. It would still however be the case that there could be no incremental cost for the subscription service, since it would still be logically impossible to provide a set of services, other than the empty set of no services, which excluded subscription.

23. It would also still be the case that CARS costs would be common. All incremental costs (in respect of CARS) would be zero, since the same number of subscribers and handsets, and therefore the same level of CARS costs, would be required for all possible sets of services other than the empty set of no services[155]: (S), (S,O,T), (S,O) and (S,T).

24. Another alternative definition of the subscription service, would be one which allowed for the possibility that origination and/or termination might be provided in the absence of subscription. In practice, such a definition is highly unrealistic.

25. However, under such a definition, it would again no longer be the case that virtually all costs would be common costs. It would also be possible for there to be incremental costs associated with subscription.

26. *It would still be the case that CARS costs would be common* (and that CARS costs would not be incremental to subscription). Even though the list of possible sets of services would now extend to include (O), (T) and (O,T), all possible sets other than the empty set would still require the same number of subscribers and handsets, and therefore the same level of CARS costs. All incremental costs (in respect of CARS) would again be zero.

27. It would therefore appear that under any sensible definition of subscription as a service, CARS costs would remain common costs.

Relationship with the Externality Surcharge

28. Ofcom suggested in the meeting between Ofcom and H3G on 14 December 2005 that even if CARS costs are common costs, it might nevertheless be more "appropriate" or "efficient" to deal with CARS costs through the externality surcharge.

29. H3G requests that Ofcom clarifies its position on this point further. H3G notes that this approach is consistent with Ofcom statements such as:

"a contribution to the recovery of acquisition and retention costs is relevant to the termination charge only through the network externality surcharge" [156].

30. However, the position set out in the meeting of 14 December 2005, if H3G has understood this correctly, is in fact materially different, because in the past Ofcom's position was based on the premise that CARS costs are not common costs.

155 CARS costs are nothing more than the cost to the firm of sustaining the given levels of demand for each service. For any level of demand chosen for any service, a required level of CARS costs follows. One of the principal logical failings of Ofcom's position is that it assumes, in its modelling of termination costs, a level of demand which allows low per unit network costs, but ignores the CARS costs necessary to achieve that level of demand.

156 Paragraph F.154, Oftel December 2003 statement

31. This is significant, because if CARS costs are in fact common costs, then dealing with them through the externality surcharge contradicts Ofcom's established approach to determining termination charges, under which common costs are recovered by way of an EPMU over incremental costs, and externalities are reflected through the network externality surcharge. If Ofcom is proposing that CARS costs are a common cost which should be treated differently from other common costs, H3G believes this needs significantly further explanation.

32. H3G's understanding of Ofcom's previous relevant statements is that the network externality surcharge is something which is added after all the costs relevant to termination (i.e. incremental and common costs) have been dealt with. For example:

"it would be appropriate to allow MNOs to add an additional mark-up on cost when setting charges for mobile termination services… to ensure that MNOs account for the external benefits that callers to and from mobile telephones receive from the addition of new subscribers to the network, and the maintenance of existing subscribers on the network" [157]

"the purpose of the network externality surcharge is to correct for potential economic inefficiencies that may be created if the subscription charge levied by MNOs only reflected the costs of supply" [158]

"Ofcom's purpose in using the Rohlfs models is to inform the size of the externality surcharge, given that the EPMU approach is to be used for common cost recovery" [159]

"There is an underlying principle behind Ofcom's previous approach to separate common cost recovery from the appropriate externality mark-up." [160]

33. This indicates explicitly that the externality surcharge has no role to play in the recovery of common costs. Ofcom has previously stated that an externality is a "*cost (or benefit)* [that] *does not affect the party who makes the decision*"[161]. If CARS costs are common costs, they are clearly borne by and affect operators, and so they cannot be considered externalities.

34. It is therefore not clear to H3G why, if common, CARS costs should be recovered through the externality surcharge rather than through the EPMU over incremental costs. H3G requests that Ofcom clarify this issue. At this stage, H3G assumes that Ofcom's approach is based on an idea that there is some "efficient" level of "call termination only" CARS costs (less than the actual level of CARS costs) the amount of which is estimated through reference to the externality calculations. In the interests of furthering the discussions on this issue, H3G has the following early comments on such an approach:

a) As shown above, under Ofcom's definition of subscription, and even under most imaginable weaker definitions of subscription, it is not possible to have a termination only service provider, so the only CARS

157 Paragraph 6.20, Ofcom June 2004 statement
158 Paragraph D.4, Ofcom June 2004 statement
159 Paragraph D.39, Ofcom June 2004 statement
160 Paragraph 2.1, Memo to Stakeholders, Ofcom, 2 December 2005
161 Paragraph G.4, Oftel December 2003 statement

costs which are neither common nor incremental to termination would be those which are incremental to origination alone.

b) It seems unlikely that any significant CARS costs are incremental to origination alone, since it is far from clear that any significant CARS costs would be saved as a result of the cessation of origination services, assuming that the number of subscribers was to be held constant.

c) Thus assuming that all CARS costs are common would not lead to any material inappropriate recovery of these costs from termination services.

d) Even if there was reason to believe that the efficient level of common CARS costs was materially lower than total costs, there is no causal link between the efficient level of a set of costs necessary for a service and the benefits enjoyed by the users of the service[162], so H3G believes that significant further explanation is required to show why it is appropriate to estimate the former by reference to the latter.

35. Ofcom effectively appears to be suggesting that the appropriate treatment of different types of common costs (CARS costs versus other common costs) is different. However, this mixing of approaches potentially raises significant difficulties and may have differential effects in practice on different operators (most significantly in relation to H3G as a new entrant into a saturated market compared to the established mobile operators). As such, H3G requests greater clarity over how Ofcom would propose to apply any different approaches and the justifications for such different approaches (if there are any). H3G expects that this will also lead to a discussion about the practical implications on different types of operator and resulting effects on dynamic incentives if such different approaches are applied.

Inconsistency with Other Ofcom Decisions

36. Ofcom treats CARS costs as common costs in allocating costs between wholesale and retail services in a number of areas.

37. In its recent statement on the Number Translation Services Retail Uplift charge control, Ofcom clearly treats CARS costs as common costs to be recovered from different services:

> *"Ofcom considers that it is appropriate for the NTS retail uplift to include a contribution to the recovery of these costs because, in order for BT to retail NTS calls on behalf of TCPs* [Terminating Communication Providers] *it is necessary for BT to have a retail relationship with the end user. Customer acquisition and retention expenditures are therefore an inherent part of operating in a competitive market and result in more calls of all types, including NTS being made to other TCPs' services."* [163]

162 The benefits enjoyed by users of mains electricity far exceed the efficient costs of electricity supply; conversely the benefits enjoyed by users of tobacco are arguably lower than the efficient costs of tobacco production.

163 Paragraph 3.6, *Charges between Communications Providers: Number Translation Services Retail Uplift charge control and Premium Rate Services bad debt surcharge: A Statement and Notification of an SMP Condition and modification of an SMP Condition*, Ofcom, 28 September 2005 (hereafter referred to as "Ofcom 2005 NTS statement")

> *"Ofcom has stated that its view is that it is reasonable to allow BT to recover costs of customer acquisition and retention, since it is necessary for BT to have a retail relationship with the customer for it to retail calls on behalf of TCPs and these are costs which are incurred in establishing and maintaining that relationship. In addition it may also be the case that any agreements which TCPs are able to negotiate with other OCPs* [Originating Communication Providers] *may very well include an allowance to recover the OCP's customer acquisition and marketing costs."* [164]

38. Ofcom has suggested in discussions that this is not an appropriate comparison because NTS services are origination services. However, the logic employed in the NTS statement does not appear to rest on the classification of NTS services between origination and termination. It rests on the question of whether, to provide the service in question to the party paying for that service, "*it is necessary for BT to have a retail relationship with the customer*". If so, "*it is reasonable to allow BT to recover costs… which are incurred in establishing and maintaining that relationship*". H3G suggests that in order to provide a call termination service to callers, it is necessary for a mobile operator to have a retail relationship with call recipients.

39. In its recent consultation on Sky's provision of Technical Platform Services, Ofcom identifies that the principal customer acquisition costs are the subsidised consumer equipment costs, and, when considering the allocation of costs between pay-TV and free-to-air service providers, states:

> *"common costs such as consumer equipment costs can be allocated in proportion to… LRIC costs"*[165]

40. H3G is unclear as to the difference between the customer acquisition costs (considered to be common to non-retail customer services in this case) and mobile call termination (where they are not). There are strong similarities between these two cases, such as the existence of user equipment subsidies and the fact that the customer purchasing the relevant services (i.e. call termination or Technical Platform Services) is another company which recovers its own costs from a potentially different customer base (albeit in the television case this may be through advertising revenues).

Conclusion

41. H3G believes that the treatment of CARS costs in estimating its 3G costs of voice call termination is an important issue. The way in which CARS costs are taken into account in the setting of any 3G voice call termination price control (if such price control is deemed to be necessary as part of the current market review) will have major incentive effects on 3G operators and H3G in particular. H3G's current view, for the reasons set out above, is that CARS costs are an important common cost of call termination. *A priori*, H3G has not yet seen any justification for treating CARS costs any differently from other common costs.

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164 Paragraph 3.55, Ofcom 2005 NTS statement

165 Paragraph 6.38, *Provision of Technical Platform Services: A consultation on proposed guidance as to how Ofcom may interpret the meaning of "fair, reasonable and non-discriminatory" and other regulatory conditions when assessing charges and terms offered by regulated providers of Technical Platform Services*, Ofcom, 2 November 2005

Annex 8: Comments on proposed SMP condition

The main body of this response has set out H3G's views on Ofcom's overall approach and policy aims in the Market Review Consultation. This annex provides comments specifically on the detailed drafting of the proposed SMP condition (set out in Annex 21 of the Market Review Consultation) and for these purposes takes Ofcom's overall policy as given. H3G would be happy to discuss these items in more detail with Ofcom as appropriate, including an potential drafting changes which may be required following such further discussion.

H3G's understanding of Ofcom's proposed policy intentions

H3G's understanding is that Ofcom intends the proposed SMP condition to:

- apply to mobile wholesale voice call termination traffic (the relevant market defined in Section 3 of the Market Review Consultation), delivered by circuit switched networks (paragraphs 3.89 to 3.95 exclude VoIP calls from the relevant market);
- set two separate price caps for mobile to mobile off net calls and fixed to mobile calls, but for practical purposes the total volume of minutes (for both mobile to mobile and fixed to mobile calls) can be used to calculate the actual average charges (given that distinguishing between these types of calls is not possible given current billing systems);
- for the purposes of assessing the price control, exclude minutes terminated to ported in numbers;
- other than this, apply to a weighted average of all minutes terminated to a particular operator regardless of whether terminated on a 2G or 3G network (in H3G's case, that is, regardless of whether the call is terminated to a customer who is roaming or connected to H3G's network); and
- require a weighted average of actual call termination charges to comply with the "Target Average Charge", such weighted average to be calculated with reference to the actual volume of minutes by different time of day charging bands and the actual volume of minutes relating to those period in which different charges apply.

Comments on the proposed SMP condition

- The definition of fixed to mobile and mobile to mobile calls should specify that the charges referred to are wholesale charges.
- Further, the terms "fixed" and "mobile" Public Electronic Communications providers in those same annexes are not defined. In the context of changes to the communications sector and the emergence of more "convergence" style services, this could therefore become ambiguous.
- The references in these conditions to calls terminated on the dominant provider's network are potentially ambiguous with respect to national roaming calls in the case of H3G.
- In condition MA1.1, there is a requirements to provide Network Access on reasonable request. Network Access, as defined, relates to markets other than those in which Ofcom proposes to find SMP and this SMP requirement

should be restricted only to those markets in which Ofcom finds SMP i.e. in relation to incoming circuit switch voice traffic.

- Conditions MA3.1 and MA4.1 are not clear on whether the requirement to meet the price control condition is continuous or is only to be assessed on the basis of the relevant charging period.
- Conditions MA3.2 and MA4.2 are ambiguous as to whether the two weighted average calculations referred to should be undertaken in the order in which they are set out in the conditions.
- Where Conditions MA3.2, 3.3, 4.2 and 4.3 refer to "corresponding volumes by month or part-month" it is not clear whether this means that compliance with the price control is assessed on the basis of the relevant month's volumes or the minutes over the whole relevant charging period.
- H3G understands that the references to "profile" in these same conditions relates to the time of day traffic weightings between different rates actually charged (currently set out by day, evening and weekend).
- Finally, H3G suggests that some of these ambiguities could be addressed by setting out the price control in algebraic terms, which would also be consistent with regulatory best practice and price control conditions in other regulated sectors.
- H3G does not currently have the billing capability from a practical point of view to differentiate between calls from fixed and mobile calls (which would require additional billing development and therefore cost). H3G understands this is similar to the position of the other mobile operators. As such, H3G welcomes Ofcom's recognition of this and proposal to set the price cap using total traffic weights which take account of this fact. [●]
- H3G is unclear as to how incoming calls to international roamers using its network are excluded from the price cap. Given the separate regulation being proposed for internationally roamed calls, it would seem appropriate so to do.

Annex 9: Operators charging for 07 number ranges

Section 4.4 of this response notes and welcomes Ofcom's commitment to review the position of Communications Providers who have mobile number ranges (i.e. 077, 078 and 079 numbers) allocated for their use and therefore who could control termination rates to those number ranges. If Ofcom confirms its current approach to SMP and charge controls as set out in the Market Review Consultation, then consistency will require that Ofcom undertake such a review. H3G notes that there are a number of operators with such number ranges who have already set termination rates, which are currently effective in the BT carrier price list ("CPL"). Table 12 lists such operators and identifies the current charges set out in the CPL (as at 9 November 2006). H3G is not aware that such rates have been set or justified in relation to the costs of such providers.

Table 12: Other Communications Providers currently setting termination rates for mobile number ranges

	Current termination rates in CPL (ppm)			
Communications Provider	*Day*	*Evening*	*Week-end*	*Effective From*
Inquam Telecom (Holdings) Limited	13.48	9.96	2.51	01/12/06
Inquam Telecom (Holdings) Limited	13.48	9.96	2.51	01/12/06
BT Fusion	7.6010	5.3790	4.3540	13/02/06
Opal Telecom Limited (Carphone Warehouse)	9.092	4	4	13/07/06
24 Seven Telecom Ltd (Mobiboo)	7.6	5.54	4.01	28/04/06
Routo Telecommunications Limited	8.31	8.31	5.14	26/04/06
Citrus Telecommunications Ltd	8.5	3.45	2.83	08/06/06
Hotchilli Communications Ltd	7.601	5.379	4.354	01/09/06
FleXtel Limited	9.08	8.204	2.51	13/07/06
Magrathea Telecommunications Limited	8.9	6.3	4.3	23/05/06
Wire9 Telecom PLC	15.62	10.78	2.51	11/08/2006
Cheers International Telecom Ltd	7.601	5.379	4.354	08/12/2006

Annex 10: Margins for Fixed to Mobile Calls by destination network

The Market Review Consultation notes that not all of the MCT rate reductions are passed through to consumers in terms of lower retail prices. Further, at paragraph 7.19, Ofcom suggests that this is "not a significant concern" as the competitive nature of the fixed market suggests that fixed operators will have an incentive to set an efficient structure of prices. The Market Review Consultation uses a fixed to mobile margin (retention) figure of 3.51ppm (in relation to calculations on the network externality and overall welfare analysis).[166] Ofcom's own recently published research[167] (discussed further below) demonstrates that fixed retentions have been increasing: in 2005 the average wholesale mobile termination charge fell from 7.85ppm in 2004 to 5.94ppm, (a reduction of 24.3%), the average fixed-to-mobile termination revenue per call minute only fell from 12.46ppm to 11.49ppm, (a reduction of 7.8 %).

Section 7 of the Market Review Consultation outlines a number of ways which Ofcom believes MCT charges create inefficiencies and negatively impact on consumers. Broadly, these reasons split into "excessive" call termination charges and, in various different ways, an inefficient structure of charges. In relation to the latter, Ofcom concludes (at paragraph 7.41):

> *"In summary it is Ofcom's view that, while the waterbed effect is likely to operate to a material extent, some excessive profits generated by MCT charges may be retained by MNOs at the expense of consumers paying excessive prices, since the mobile retail market may not be sufficiently competitive for all excess profits to be competed away".* (Emphasis added)

This rather conditional conclusion is therefore based on assumption rather than evidence. It is unclear on what basis Ofcom assumes that the mobile market is anything but competitive. Further, in assuming that the "competitive" fixed market will set efficient price structures whereas the mobile market will not, Ofcom appears to be assuming that a market where the major player was until recently regulated at the retail level (and where that player, BT, still has 81.4% market share of exchange lines) must be more competitive than the five player mobile retail market. This is inexplicable.

Ofcom's assessment of "excessive" MCT rates is addressed above at Section 2.3 of this response.

There is a further effect, however, which Ofcom fails to take into account in the Market Review Consultation. Broadly, this document fails to take into account the competitive interactions between mobile operators caused by regulated MCT rates. Ofcom's consideration of the alleged distortions and impact on consumers of inefficient prices is another instance of this factor being ignored. Ofcom's analysis is essentially repeating the relevant points from previous considerations of MCT rates, without due consideration for the changes in market structure which have occurred since, for example, the last Competition Commission Inquiry in 2002.

As set out in the main body of this response, H3G believes that the main focus in considering MCT charges should now be in relation to considerations of promoting

166 See paragraphs A16.61 and A19.12 respectively.
167 Ofcom's consumer experience research report, published on 16th November 2006, figure 93.

competition and appropriate dynamic investment and innovation incentives. This can be seen in the fact that the main residential fixed tariff bundles mean that a range of margins are made on different fixed to mobile calls. If a “competitive” fixed line market is leading to an efficient structure of prices, it is not clear to H3G why significant differences in margins on fixed to mobile calls are considered efficient. In particular, it is generally the case that the principle fixed operators make more margin on calls to H3G number ranges than to any of the other mobile operators.

Table 13 shows this, comparing the overall retention made on the main BT and cable retail tariffs across calls to different mobile number ranges. The margin figures in this table represent weighted average gross margin (difference between the retail price and the relevant wholesale price), weighted across time of day using H3G’s traffic profile for incoming traffic from BT.

Table 13: Spread of gross margins on fixed to mobile calls (expressed in weighted average pence per minute

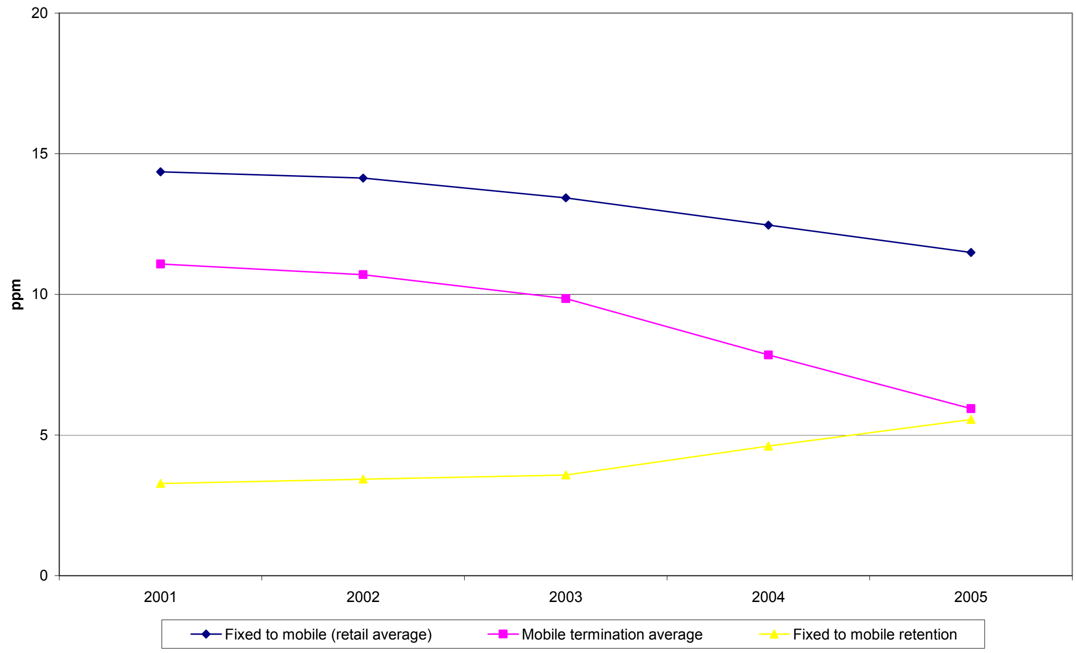
	Fixed tariff				
Fixed calls to number ranges allocated to	*BT Together tariffs*	*BT LUS*	*ntl mobile calling plan*	*ntl Week-end and Telewest plans*	*ntl 3-2-1*[168]
O2	[●]	[●]	[●]	[●]	[●]
T-Mobile	[●]	[●]	[●]	[●]	[●]
Orange UK	[●]	[●]	[●]	[●]	[●]
Vodafone	[●]	[●]	[●]	[●]	[●]
H3G	[●]	[●]	[●]	[●]	[●]

Sources: H3G calculations using data from fixed operator websites in November and the CPL

Ofcom’s own recent research also suggests that Fixed to mobile retentions are increasing. Figure 12 is derived from Figure 93 of Ofcom’s recent publication ”Consumer Experience Research Report”, dated 16 November 2006, with the addition of the difference between the retail and wholesale prices for fixed to mobile calls to the graph. This makes clear that the fixed retention has been increasing significantly over time as all mobile wholesale termination rates have been reduced on average in real terms. According to Ofcom’s figures, the fixed to mobile retention as a percentage of retail rates has increased from 23% in 2001 to 48% in 2005.

[168] No longer available to new customers.

Figure 12: Ofcom's presentation of average retail and wholesale fixed to mobile rates, including fixed to mobile retention (ppm in 2005 prices)



The ability of the fixed operators to maintain this margin (at the same time that BT is seeking a wholesale MCT rate reductions from H3G, further indicating CBP) means:

- Ofcom assumption that fixed retail tariff structures are likely to be efficient whereas mobile tariff structures are not is not based on evidence; and
- overall, fixed operators achieve higher margins on average from calls to H3G number ranges than to other mobile number ranges: the ability to do this suggests that Ofcom's proposals, as a measure to reduce charges paid by consumers, will be even further diluted.