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O2

Michael Richardson
Ofcom
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22 November 2006

Dear Michael

Mobile Call Termination

O2 (UK) Ltd ("O2") welcomes the opportunity to respond to Ofcom's consultation document on mobile call termination[1]. The issue of mobile voice call termination is extremely important to O2. Ofcom has set out in the consultation document the scale of mobile voice call termination revenues in the UK (about £2.5 billion per annum). In part, these revenues support and recover the large scale investment carried out by O2 and other mobile operators. Furthermore, it is, of course, the case that, in addition to being a provider of mobile voice call termination services, O2 is also a large purchaser of similar services provided by the other mobile operators. Accordingly, O2 is extremely keen to see the issue dealt with in a manner that does not jeopardise investment in the UK mobile sector, and in such a way that mobile operators are treated even-handedly. For the reasons we describe in our response, we believe that this approach is the one that best serves consumers' interests.

We have answered, in the attached annex, the specific questions raised in the consultation document. In the remainder of this letter, we summarise certain key areas of importance to O2 that arising from the consultation document.

Relative costs of terminating mobile voice calls

O2 remains strongly of the view that there are no differences in the cost of terminating calls amongst the five mobile operators. Ofcom draws the opposite conclusion by reference to its LRIC model which is highly sensitive to variables that are simply not knowable. In O2's view, key assumptions that Ofcom makes in its LRIC model to determine costs are not sufficiently robust. For example, variables in the model, such as the extent and speed of 3G network roll out determine, to a large degree, the extent to which 1800 MHz and 900/1800 MHz operators' costs differ. Ofcom acknowledges that these variables are simply not knowable and accepts that it is quite conceivable that the 2G networks of 2G/3G operators could be "switched off" (resulting in cost convergence). However, Ofcom has selected another 3G network rollout scenario, seemingly arbitrarily, which results in Ofcom concluding that the cost of terminating voice calls for 1800MHz operators is higher than the equivalent service provided by 900/1800 MHz operators. To illustrate the arbitrary nature of Ofcom's 3G network rollout assumption, Ofcom also proposes that H3G's 3G rollout will be different to that of the 2G/3G operators, without justifying this difference.

O2 also believes there are other LRIC model errors. The model contains an important mistake in the network module (relating to the maximum number of TRXs in 1800 MHz sectors). Ofcom has neither made an appropriate amendment to the model, nor explained

[1] Mobile Call Termination, Proposals for consultation. Ofcom, 13 September 2006

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why it has rejected O2's previous representations on this issue. Ofcom has also changed, without justification or explanation, Ofcom's own previously held assumption that an efficient 3G only operator will attain an equal market share by 2010. The new assumption is that this will not now happen until 2019/20. Ofcom has also failed to take account of the beneficial effect (on H3G's costs) of national roaming.

Each of these factors has a significant impact on the conclusions that Ofcom draws about costs. It is O2's view, therefore, that it is not objectively justifiable to conclude that there are differences in the costs of terminating mobile voice calls amongst the UK mobile operators.

A single charge control

Although O2 disagrees with Ofcom's conclusions about costs, it does see merit in Ofcom's consideration of the benefits of standardised charge controls, in circumstances where costs are similar and converging (and assuming that Ofcom is able to satisfy the tests for imposing charge controls set out in section 47 of the Communications Act).

O2 agrees that standardised charge controls would have numerous benefits. They would facilitate simplified calls to mobile retail prices, provide undistorted valuations of spectrum to traders and deliver forward looking benefits, in that potential new mobile service providers would be subject to a more certain and efficient regulatory regime.

On this basis, O2 agrees with Ofcom's proposal that, if charge controls are shown to satisfy the relevant statutory tests, then standardised charge controls should be set, at least for the 2G/3G operators.

Relative risks of setting charges too high or too low

O2 also agrees that Ofcom is right to recognise the asymmetry in the risks of setting charges on the basis of costs generated by its LRIC model. As Ofcom acknowledges, there is a very wide range of possible cost estimates, depending on the assumption made about important variables. Setting a charge that is not sufficient will mean that mobile operators would not be able to recover their costs and this would lead to reduced investment, and slow the development of services, to the detriment of consumers.

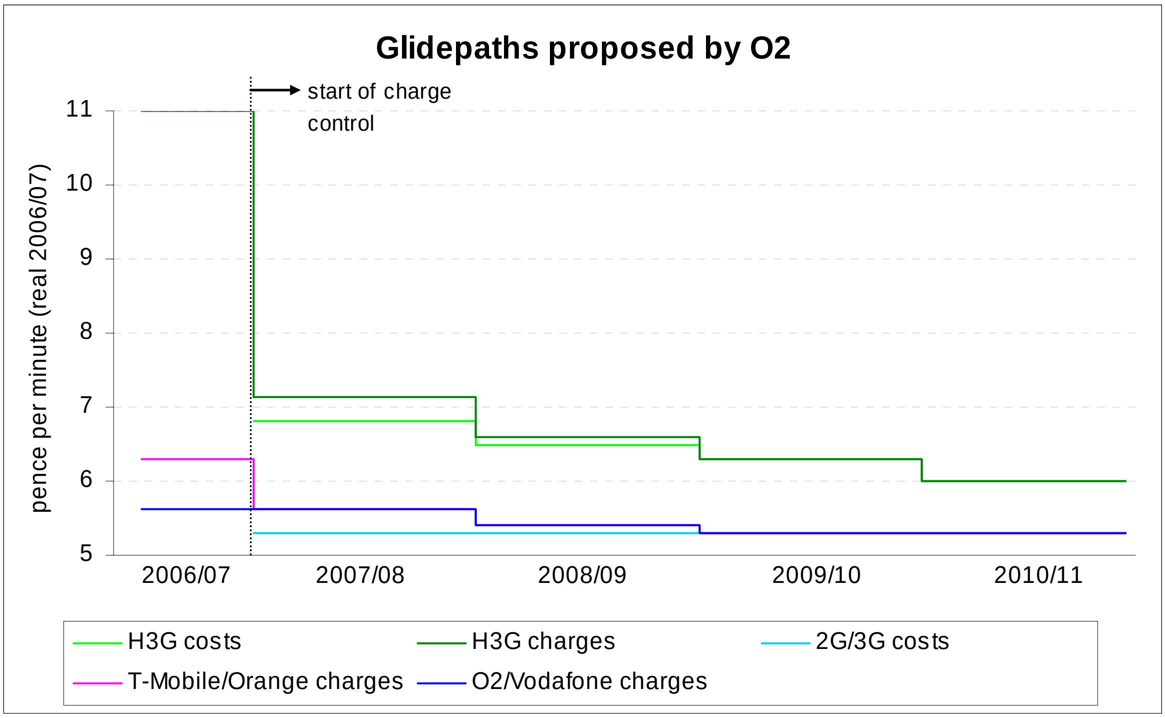
O2 remains of the view that there is no significant consumer detriment from establishing a higher charge control, within the acceptable range, given that 2G/3G operators' charges are already within that acceptable range. A higher charge control would permit greater investment in such infrastructure, services and products, to the benefit of consumers.

Glidepaths

As we have set out above, O2 disagrees with Ofcom's assessment that the cost to H3G of terminating mobile voice calls is higher than that of other mobile operators. However, H3G's current charge, uniquely amongst the mobile operators, is well in excess of the costs as determined by Ofcom's LRIC model. O2 believes that this is needs to be addressed when determining the path of reductions in charges to costs ("the glidepath").

O2 agrees with Ofcom that, when considering glidepaths, Ofcom should take into account, on the one hand, the short term benefits to consumers of reductions in charges and, on the other, the need for customers and providers to adjust to new prices and the desirability of efficient investment incentives. However, O2 proposes that Ofcom takes into account another criterion, namely: the extent to which unearned voice call termination revenues distort the otherwise competitive mobile access and call origination market, on the basis that it is desirable to eliminate such distortions, quickly.

O2 believes that, at present, mobile operators are able to make adjustments quickly to adjust to new prices and that glidepaths should, therefore be of short duration. O2 proposes eighteen months. We are also of the view that consumers' welfare (as described by Ofcom) and the desirability of eliminating distortions to the mobile access and call origination markets are best served by a steep initial reduction in H3G's charges (and more modest adjustments in respect of the 1800 MHz operators). O2's proposals for glidepaths (based on Ofcom's assessment of H3G's costs, with which O2 does not agree) are represented in the graph below:



O2 believes that this proposal would deliver more short term benefits to consumers (as defined by Ofcom) than under the majority of Ofcom's proposals. It eliminates the distortions to the mobile access and call origination market resulting from current charges, and provides operators with sufficient time to make adjustments to respond to new prices.

O2's assessment of the most appropriate path to costs, above, is based on Ofcom's views on costs in 2010/11. As explained above, O2 does not believe that there any differences in the cost of terminating voice calls amongst the UK mobile operators. Using that as a basis for determining glidepaths would result in:

- the adoption by each of the five mobile operators, of standardised mobile voice call termination charges, from 2007/08, with all the benefits that Ofcom acknowledges such standardised charging would deliver;
- a reduction in average UK mobile voice call termination charges; and

- even greater short term welfare benefits for consumers (as defined by Ofcom), appropriate investment incentives and less distortion in the access and origination market, through the waterbed effect

We would welcome the opportunity to discuss our response to the consultation document. I will call you shortly to arrange a meeting.

Yours sincerely

Lawrence Wardle
Regulatory Manager
O2 (UK) Limited

ANNEX

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

O2 continues to take the view that the relevant market is the one for a cluster of mobile services, for the reasons given in previous submissions.

We note the arguments presented by H3G, that a higher proportion of its customers have multiple SIM cards or multiple devices, that these subscribers are able to decide which mobile number to issue to calling parties and, therefore, which operator will provide voice call termination services. H3G appears to contend that this constrains its voice call termination charges because these subscribers are sensitive to the charges that calling parties pay.

O2 disagrees with this analysis. Indeed, there are very good reasons for assuming that the subscribers would, other things being equal, prefer to issue the H3G number to calling parties. This is because H3G's only available prepay tariff, "WePay", gives customers a 5 pence credit for each minute that they receive a call[1]. Customers are thus provided with an incentive to issue their H3G number to calling parties, as opposed to any other mobile number. Accordingly, rather than constraining H3G's voice call termination prices, WePay would actually seem to have the opposite effect of supporting H3G's voice call termination charges well in excess of cost, to the detriment of those consumers who are customers of networks other than H3G.

[1] http://www.three.co.uk/priceplans/PAYGwepay.omp

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?

Subject to our response to question 1, above, O2 believes that each operator's position in the markets defined by Ofcom in this question is identical. That is, there is nothing to distinguish the market power of any one operator in its market (as defined by Ofcom), from any other operator in its respective market.

O2 agrees with Ofcom's analysis on countervailing buyer power (CBP) again, given Ofcom's market definition.

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**

Charge controls

In O2's view, H3G's charges, which uniquely amongst the five UK mobile operators, continue to be well in excess of costs, result in consumer detriment by reason of the resulting movement of unearned revenue from (the customers of) the purchasers of H3G's voice call termination services – including the other mobile operators - to (the customers of) H3G. This distorts the outgoing mobile market.

O2 does not believe that, in the absence of further voice call termination regulation, mobile operators would be able to increase, significantly, their charges. However, in the light of the current regulatory regime, whereby H3G has not been constrained by charge controls, and where it is continuing to derive advantages from charges well in excess of cost to the detriment of customers of other networks, H3G can be incentivised to decrease wholesale termination rates only through the imposition of a charge control. To that extent, and assuming that Ofcom is able to demonstrate that the tests in section 47 of the Communications Act are met, we do not oppose the imposition of charge controls[2].

If charge controls can be shown to be efficient and proportionate remedies, O2 also supports the use of traffic weights based on the sum of fixed to mobile and mobile to mobile traffic.

Undue discrimination

In O2's view, a regulatory prohibition on undue discrimination would be otiose, since mobile operators have neither the ability nor the desire to discriminate between purchasers.

In particular, the scenario that Ofcom describes, where mobile operators with SMP might charge new entrants in the mobile market higher prices to distort competition in the mobile retail market, is, in our view, fanciful. Ofcom has not provided any evidence that this has occurred or is likely to occur and, furthermore, even if mobile operators wished to do this, they do not have the ability to do so, since their plans could be easily frustrated by the use of BT as a transit operator.

In any event, an operator with SMP would need to be mindful of the effect of general competition law. Behaviour of the type that Ofcom describes is likely to constitute a breach of the prohibition of an abuse of a dominant position on Ofcom's own market definition. An operator found to be in breach would face stiff penalties under the Competition Act 1998.

[2] Although we note later on that circumstances are likely to change and that, even if the tests are met now, they may not be in the future

In summary, Ofcom has failed to explain why an *ex ante* prohibition of undue discrimination is proportionate or justified and O2 believes that this is because such a prohibition is simply unnecessary, and therefore can be neither proportionate nor justified.

Publish access contracts

O2 has very serious concerns about this proposed obligation.

The condition would require each mobile operator to forward to Ofcom and to "every person who reasonably requests" a copy of all its existing Access Contracts. Ofcom argues that this is necessary to enable purchasers to assure themselves that mobile operators are complying with their obligations not to unduly discriminate.

O2 notes that such a condition would be new; the analogous provision in the existing SMP conditions requires each mobile operator to submit contracts to Ofcom only. In the May consultation, Ofcom suggested that a duty to publish a reference offer might be appropriate[3]. O2 would not oppose such a duty. However, unfortunately, this more nuanced obligation has been replaced, without justification, by a broad-brush requirement to essentially provide public access to what would otherwise be commercially confidential network access contracts.

Obligations imposed by Ofcom following a finding of SMP must be based on the nature of problems identified, proportionate and justified in the light of section 47 of the Communications Act 2004. However, in proposing this new condition, Ofcom has offered no evidence of a problem related to monitoring or detection of non-compliance with non-discrimination obligations. No purchasers have expressed such concerns to O2. In any event, we would have assumed that Ofcom would be in a position to investigate should a purchaser raise any such concerns as it would have access to the operator's network access contracts. Ofcom has failed to explain why the existing provision is inadequate and/or why it has changed its mind about a duty to publish a reference offer.

Furthermore, such a condition would, we believe, be harmful and disproportionate. O2's Access Contracts are confidential. [✂]

Accordingly, we cannot see how imposing a condition like the one in MA5 could be regarded as proportionate or justified, objectively.

Publish charges and notify call volumes

We assume that the part of the question relating to notification of call volumes is erroneous – there is no proposed obligation to notify call volumes. We do have concerns about the proposal for the publication of charges, however, and the reference to them in the charge control conditions themselves.

Under the present regulatory regime, the charge control is defined in terms of "the published charge". O2 reasonably assumed that this meant that published charges only (and not unpublished charges), would be considered when determining whether or not mobile operators had complied with the charge control.

[3] Paragraph 7.109 refers

However, as Ofcom is aware, it transpired some way through the charge control period, that Vodafone had been blending 2G and 3G charges from the beginning of the charge control period, but without publishing the constituent 2G charges (in breach of the existing transparency provisions). Vodafone had published *only* the (higher) blended charges. As the charge control clearly refers to "published" charges, O2's view is that it is the published charges that should be used to determine whether or not Vodafone had complied with the charge control. In the event, Ofcom disagreed with this interpretation of the charge control regime but only because this might have the effect of extending the 2G charge control to unregulated 3G charges.

It seems clear to O2, that Ofcom had actually intended that the published charges, and only published charges, ought to be used for evaluating whether or not mobile operators had complied with the charge control[4]. However, it would seem that Ofcom may not have taken account of the possibility of the impact of blended charges, when drafting the charge control, and then did not feel that it was in a position, later, to take action against Vodafone.

O2 is concerned that, given the likelihood of further spectrum release within the charge control period, we might once again see operators clandestinely “blending in”, 4G or WiMax call termination charges over and above the charge control levels proposed by Ofcom.

Ofcom appears to be mindful of this, as well, since it is now seeking to correct the wording in the current condition. The new charge control defines the charge to be used to determine whether mobile operators are complying with the charge control in terms of “the charge published *in accordance with SMP condition MA6*” (our emphasis). We note the new reference to the price publication condition.

Although this wording suggests that it would be the published rate only that is the one that must be put through the charge control mechanism, Ofcom’s current charge control also refers to "published" charges, albeit without referring to the condition under which the charge is required to be published. And, as we note, above, despite the present, clear wording, Ofcom considered that an unpublished charge could, in fact, be put through the current charge control mechanism.

While the new wording clarifies, to some extent, the condition under which the relevant charges must be published, it is inadequate. It does not remedy the weakness of the current obligation and may again permit the spirit and the letter of the control to be circumvented by not making clear that *only* the charges published in accordance with and under MA6 will be taken into account, and no other. O2 therefore suggests that Ofcom might like to insert the following additional wording (in capitals for emphasis) to MA3.2 (and similarly to MA4.2), which, we believe, makes the matter sufficiently clear:

> *MA3.2 In this Condition, the Average Interconnection Charge means the average of the Fixed-to-Mobile Interconnection Charges AND, FOR THE AVOIDANCE OF DOUBT, NOT THE AVERAGE OF ANY UNPUBLISHED CHARGES OR OTHER CHARGES NOT PUBLISHED IN ACCORDANCE WITH OR UNDER MA6, during the Relevant Year in question, which …*

[4] This is clear from the consultation documents and the final statement

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)?

In proposing the charge controls, Ofcom has had to consider a number of complex issues. We provide our views on these below (which are subject to our answers to other questions, above).

Duration of charge controls

We support the approach that Ofcom is proposing to take on the duration of the charge controls, for the reasons provided by Ofcom.

Technological neutrality

We agree with Ofcom that a technologically neutral approach is the right one, again, for the reasons cited by Ofcom. Permitting operators to "blend" separate 2G and 3G charges would potentially distort their incentives and, in any event, has been shown to be vulnerable to exploitation: under the current regime, Vodafone blended its charges without notifying the purchasers of its voice call termination services, for over a year, in breach of its SMP transparency obligations.

Benchmarks

We agree with Ofcom's proposal that the level of the charge controls should be determined with reference to an average of 2G and 3G benchmarks for 2G/3G operators. There is a very strong risk that setting charge controls with reference only to 2G costs would result in an under recovery of costs because 2G/3G operators will be running two networks in parallel for the period covered by the charge control. We also agree with Ofcom that charge controls should not be set in order to promote investment, specifically, in 3G infrastructure (and, therefore, with reference to 3G costs), as an explicit objective. Rather, the right level of 3G investment is properly determined within the context of a competitive market.

Approach to identifying the efficient charge level

Ofcom has considered four main components in determining the efficient charge level. Our views on these are as follows:

Network costs

Cost differences between 900/800 and 1800-only operators

O2 remains of the view that there is no difference between the cost of providing voice call termination services on 900/1800 MHz networks, and 1800MHz only networks.

Corrections to the LRIC model

In our response to the March consultation, we explained that the LRIC model assumed that there could be a maximum 4.5 TRXs per sector in 1800 MHz networks, whereas O2 believes that, in fact, 6 TRX sectors can be used in 1800 MHz operators. Ofcom has not made an appropriate adjustment to the LRIC model, but equally, has not explained why it disagrees with O2 on this point or why it believes that its original assumption is justified. We continue to believe that correcting the LRIC model to eliminate this false assumption is necessary: Ofcom's incorrect assumption has the effect of increasing drastically the alleged cost differential.

Removal of exogenous differences in the charge control period

It has been a well established principle in previous market reviews and enquiries, that differences in target charges are permitted only for those cost differences that are absolutely outside the companies' control (that is, differences due to the allocation of spectrum). Ofcom has said that, subject to the resolution of liberalisation issues, it will seek to extend spectrum trading to existing 2G licences in 2007. Accordingly, mobile operators' spectrum holdings will not be determined exogenously during the charge control period, removing the justification for any differences in charge controls.

Coverage assumptions

We also note that differences in Ofcom's cost forecasts are a function of assumptions about coverage scenarios. O2 believes that assumptions about coverage are too uncertain to justify a conclusion that unit costs are likely to be higher for 1800 MHz operators, compared to 900/1800 MHz operators.

O2 notes Ofcom's assertion, in paragraph 9.59 of the consultation document, that differences in the computed LRIC of 2G/3G operators *"arise predominantly due to the costs resulting historically from deploying coverage networks"*. Ofcom then notes at paragraph 9.59 that *"1800MHz operators will face a continuing need to repair, maintain and replace a greater number of cells to the extent that coverage requirements persist"* (emphasis added).

However, O2 believes that *"coverage requirements"*, as Ofcom puts it at in paragraph 9.59, are unlikely to persist in the medium term.

First, the 2G licences of the MNOs no longer contain any obligation to maintain coverage to any geographical extent in the UK. Therefore, operators are free to adjust their coverage to manage their cost base whilst maintaining adequate coverage to serve their customers and provide a competitive offering in the market. The number of sites deployed and to be maintained by the 2G operators may, to some extent relate to these historical obligations, but operators are no longer constrained in their ability to manage their operating costs going forward. That operators have the costs and coverage they do is endogenous rather than exogenous.

Second, looking forwards, economic incentives to optimise an operator's coverage will becoming ever more pressing with current and prospective increasing capital constraints.[5] Operators will need to ensure that their costs fall into line with those of an efficient entrant or the cost leader in the market. One way to achieve this would be to de-commission barely used parts of the network or to seek network sharing deals in rural areas. [✂]

Third, Ofcom is intending to auction new 3G licences which, O2 believes, will not set a minimum coverage requirement on operators. The networks developed using these licences might demonstrate an optimum coverage trade-off between unit costs and customer experience. It is quite conceivable that this coverage will be less than that provided presently by the 2G/3G operators. To the extent that providing coverage in rural areas may be less profitable, the introduction of new players with lower coverage may have the effect of incentivising existing 2G/3G operators similarly to reduce coverage.

In respect of 3G coverage, we note the discussion in Annex 5 about coverage scenarios and, in particular, the "switch off" scenario whereby all operators run only 3G networks. Ofcom acknowledges that an efficient 2G/3G operator might rollout a 3G network to the same extent as existing 2G networks. As Ofcom notes it is unlikely that the cost of providing voice call termination services on the 3G networks of 2G/3G operators will be different.

Furthermore, Ofcom's LRIC model assumes that H3G's 3G network rollout is to be greater than that of 2G/3G operators, but Ofcom neglects to explain properly why this should be the case. O2 does not believe that different 3G rollout strategies are exogenous (in the sense used by Ofcom in its LRIC analysis). We see no reason why the assumed 3G rollout of 2G/3G operators should necessarily be any different to H3G's.

To the extent that a greater or complete 3G network rollout by 2G/3G operators is possible, O2 contends that this reduces or eliminates the cost difference between 900/1800 MHz and 1800 MHz only operators. Accordingly, O2 believes that Ofcom cannot rely on using a 90% 3G rollout assumption to justify cost differences between 900/1800 MHz and 1800 MHz operators.

<u>Conclusions on cost differences between 900/800 and 1800-only operators</u>

O2 remains of the view that it is not reasonable to conclude that there are differences in the cost of terminating voice calls on 2G/3G operators.

Cost differences between 3G-only and combined 2G/3G operators

We note that Ofcom forecasts that the unit costs of a 3G-only operator are to converge with those of a 2G/3G operator by 2015.

However, this is due, in part, to the assumption that H3G will not attain an equal market share until 2019/20. If the assumption is altered such that H3G attains an equal market share earlier, then H3G's costs converge with the costs of 2G/3G operators earlier. Indeed, O2 also notes that in the previous LRIC model, published in February 2006, H3G was

[5] It will be recalled that effective prices in the origination market are falling faster than costs. [✂] This will lead to a number of unpalatable choices for operators with a declining pool of resource.

assumed to reach an equal market share by 2009/10. That approach, where the efficient new entrant is assumed to attain an equivalent market share by 2010, was consistent with previous enquiries and market reviews[6].

Ofcom has provided no justification for its decision to depart from this earlier assumption and we believe Ofcom must do so, and explain why or how such an assumption is consistent with impairment reviews carried out by HWL, or any of its subsidiary companies, including H3G.

In addition, Ofcom's analysis of H3G's costs of terminating voice calls excludes the beneficial effects to H3G (in terms of costs) of relying on national roaming from its competitors. At paragraph 9.25 of the consultation document, Ofcom highlights that it has undertaken only an assessment of the cost of termination on H3G's 3G network. However, at paragraph 5.19 of its recent consultation on H3G's SMP[7], Ofcom reveals that *"O2 charges H3G its regulated termination rate"*[8] for the provision of national roaming services.

It would seem, then, that Ofcom is aware that that a proportion of calls to H3G's subscribers (for which H3G would receive its higher regulated rate) will, in fact, be terminated on the 2G network of H3G's national roaming partner (at a cost to H3G of the relevant network's lower regulated termination rate). However, it is not clear that Ofcom has evaluated the impact of this in determining H3G's costs.

Information on the split between traffic terminating on H3G's network and via 2G national roaming will be available to Ofcom as a result of the numerous and voluminous information requests associated with the LRIC modelling. For reasons of commercial confidentiality O2 is unable to discuss its estimates of the actual traffic mix to date (2G on O2 and 3G on H3G). However, O2 has estimated the impact of this on costs, based on what it sees as the proportion of traffic terminating with its subscribers within an area accounting for 88% population coverage[9]. [✂]

Ofcom will be in a position to estimate the true impact of these blended costs based on its data. O2's estimate must represent the minimum reduction in costs because of the principal assumption that H3G's network suffers no leakage.

For these reasons, O2 does not believe that the cost to H3G of terminating voice calls is any different to the analogous cost of the other mobile operators.

3G Spectrum costs

Ofcom has identified three potential objectives in the treatment of the licence fees. Our comments on these, and on the issues in assessing the costs of spectrum, are set out below.

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[6] See, for example, paragraph 2.275 of the Competition Commission enquiry into calls to mobiles, December 2002, http://www.ofcom.org.uk/static/archive/oftel/publications/mobile/ctm_2003/ctm1.pdf

[7] Assessment of whether H3G holds a position of SMP in the market for wholesale mobile voice call termination on its network, Ofcom, 13 September 2006.

[8] H3G might suggest that the true cost of national roaming includes a number of factors internal to H3G, administrative, network and capital costs, for example. We note Annex 6 of the consultation; H3G's total costs from its statutory accounts have been included in the calculation of its 3G LRIC. Consequently, this is an issue of allocation of costs between 2G national roaming and 3G LRIC, not the addition of fantasy costs into H3G's cost base.

[9] An area equivalent to that claimed by H3G for its 3G network.

Price Signals

We do not agree with the idea, expressed in paragraph A14.6, that the licence cost should not be reflected in regulated prices. O2 appreciates that economic theory suggests that prices should be based on forward-looking marginal costs. However, it is also the case that the price of services provided with the use of fixed assets must reflect, in addition, an allocation of the cost of those fixed assets. We regard the 3G spectrum costs as a fixed asset, the cost of which ought to be reflected in any regulated price for voice call termination.

In O2's view, if a fixed asset were used to provide a number of services in a range of competitive, separate markets, the cost of the asset would be spread across all of the services (on the basis of relative elasticities of demand). Charge controls, which seek to mimic competitive prices, should reflect this fact.

Cost recovery

Contrary to paragraph A14.9, we do not agree that, in considering how to allocate 3G spectrum costs in order to determine a charge control for mobile voice call termination services, Ofcom should be concerned about any future spectrum auction. It should be remembered that the imposition of obligations must be based on the nature of the problem identified, and it is unclear how future spectrum auctions relate to the nature of the problem Ofcom is attempting to remedy by means of the charge control.

Ofcom need not worry about this issue if, as it suggests and O2 agrees, a common charge control is envisaged for the medium term. Bidders at auctions will know that they can expect to be able to reasonably charge the common charge for the long run. It may be that in the short term their costs and prices might be higher, but over the life of their plan (used to determine their bid) the common charge would provide an adequate proxy for the revenues accruable from wholesale voice call termination services.

Incentives to use spectrum efficiently

Ofcom is aware of O2's view that the waterbed effect is complete. We do not, therefore, agree that the licence fees might reflect profits associated with imperfect competition.

Unlike 2G spectrum which, subject to regulatory approval and availability, would be relatively easy to trade, in principle, 3G spectrum, in contrast, is subject to a number of differences. In particular the licences of the 3G operators are fixed in term and subject to an obligation to build <u>and maintain</u> coverage to 80% of the UK population. It is very unclear, in light of this, how and whether trades can take place in relation to 3G spectrum. Fixed life licences will rapidly lose their tradable value towards the end of the charge control, as their future life will be less than typical asset lives. It remains far from clear how compliance with the coverage obligation will be ensured post-trade. O2 has no expectation that Ofcom will dispense with this obligation, given Ofcom's clear statements on ensuring operators comply with such obligations.

O2 believes, therefore, that in light of the *sui generis* issues around 3G spectrum licences, these licences should be considered a fixed cost and taken into account when setting charge controls for voice call termination.

Assessment of the costs of spectrum

O2 agrees that attempting to estimate the marginal opportunity cost of 3G spectrum would be complex and not necessarily conclusive. In the absence of such an exercise, Ofcom considers the extent to which the licence fees reflect opportunity cost. Ofcom speculates that operators might have overpaid for the 3G spectrum and notes that, uniquely amongst the mobile operators, O2 has impaired its 3G licence.

Elsewhere in the consultation document, in Annex 5, Ofcom notes the uncertainty in forecasting future demand for calls (voice and video) and data. O2 agrees and notes that estimates for data usage are wildly divergent[10]. O2 considers that this is the context in which operators must undertake impairment reviews. Estimating the value of data services is subject to greater uncertainty, relatively, than voice services. It follows that any impairments reflect this. Accordingly, for the purpose of deciding whether the fees paid by operators for 3G licences might be a good proxy for the marginal cost of 3G spectrum, in the context of determining a charge control for *voice call* termination, O2 believes that rather than having regard to the impairment of O2's licence, Ofcom should instead place greater weight on the full cost of the spectrum licences rather than an average, reduced to reflect O2's impairment.

In terms of the allocation approach, O2 regards the "total traffic" methodology as unrealistic. As Ofcom notes in paragraph A14.16, voice traffic is inherently less spectrally efficient (than data), and the "radio traffic" methodology is therefore to be preferred.

Conclusions on 3G spectrum costs

We agree broadly with the approach that Ofcom has adopted with respect to 3G spectrum costs, and, in particular, that there sound are reasons to use the values of 3G spectrum costs at the higher end of Ofcom's range of scenarios.

Non network costs

O2 notes that Ofcom's proposal not to recover customer acquisition, retention and service costs from voice call termination charges is entirely consistent with the approach taken by Ofcom, Oftel and the Competition Commission in the past.

Network externalities

We note Ofcom's thorough review of the network externality surcharge, which we generally support. We do, however, have some observations.

Although Ofcom dismisses the approach, we see merit in adopting a Ramsey-type methodology to determine the optimal externality surcharge. We are not persuaded of the practical difficulties that Ofcom cite in developing Ramsey prices.

At paragraph A16.49, Ofcom assumes that there will be a deadweight loss associated with an externality surcharge, resulting from a reduced number of terminated minutes. The extent of any deadweight loss is a function of price elasticity. O2 submits that, for the proposed level of the externality surcharge, demand is likely to be very inelastic[11], suggesting that the deadweight loss is likely to be extremely low.

[10] Figure A5.7 refers
[11] assuming that the surcharge is passed through

O2 remains of the view that mobile operators cannot discriminate between marginal and non-marginal customers, suggesting that "leakage" (as defined by Ofcom) is high and the ability for mobile operators to engage in price discrimination, non existent. Accordingly, we agree with Ofcom's proposal to set a surcharge at the higher end of Ofcom's range of estimates.

Conclusions about the approach to identifying the efficient charge level

O2 supports some aspects of the approach that Ofcom has taken in analysing the cost of voice call termination. We believe that there are sound reasons for allocating a relatively high level of 3G spectrum costs to voice call termination. We also support the approach that Ofcom has taken to network externalities and on common costs.

However, as mentioned above, we do not believe that there are differences in costs in terminating voice calls, between the mobile operators. In the case of 900/1800 MHz and 1800 MHz operators, modelling assumptions, including those about sector TRX capacity and 3G coverage, are, we submit, wrong or insufficiently robust to justify a conclusion that costs are different. In respect of H3G, Ofcom has effectively inflated its costs by failing to consider the effect of national roaming and by changing its assumption, without justification, to the effect that H3G, as an efficient operator, is not now expected to attain an equivalent market share until 2019/20. O2 does not believe that Ofcom has provided sufficient evidence that the cost to H3G of terminating voice calls is clearly and unambiguously higher than the equivalent cost to 2G/3G operators.

Cost differences between operators

Ofcom discusses the extent to which charge controls on mobile operators ought to be similar, notwithstanding the differences in costs. For the reasons set out above, O2 does not believe that there are differences in the costs of terminating voice calls between the five mobile operators subject of the review. Our comments on Ofcom's analysis are therefore without prejudice to our view that there are, in fact, no differences in the cost of terminating calls on the networks of UK mobile operators.

Adverse impact of differentiated charge controls

O2 supports Ofcom's approach in this area.

Simplified retail prices

We agree that a simplified wholesale voice call termination charging structure is more likely to result in simplified retail calls to mobile prices. Where the costs of services are broadly the same, competition may lead to more homogeneity in some retail tariff packages and all inclusive retail call bundling retail charges, since there is less exposure to the possibility that costs are greater than revenues.

Furthermore, O2 believes that some standardisation of retail prices is more likely to result in a better understanding, amongst consumers, of retail mobile charges (because there is one set of prices, rather than up to five). An improvement of consumers' understanding of mobile retail prices is desirable in its own right (since consumers are better able to make rational purchasing decisions). In addition, we note that, at paragraph 3.53, Ofcom sets out three characteristics of calling parties that must be met to constrain mobile operators' voice call termination services. One of these is that calling parties must be sufficiently aware of the price of calling mobiles. It follows that one benefit of standard wholesale charges, is that they go some way to correct the market failure (as Ofcom sees it) that has necessitated intervention in the first place.

Spectrum trading

O2 agrees that establishing standardised voice call termination rates will ensure that those seeking to buy or sell spectrum have appropriate and efficient incentives to trade spectrum based on undistorted valuations of spectrum. The establishment of such voice call termination rates would remove a degree of uncertainty which would provide benefits to spectrum traders and, ultimately, to consumers.

Forward looking benefits

O2 agrees with Ofcom's prediction (in paragraph 9.66) that any future charge control based on a LRIC model is likely to be fraught with difficulty. The current (September 2004 to date) charge control was determined with reference to a LRIC model developed under the following conditions:

- the market was relatively evenly split between four mobile operators, each of which had ultimately constructed networks with similar geographic coverage – facilitating the development of an "average operator" cost base;
- the model drew upon extensive empirical data about market growth and costs;
- the asset base was being used in large part for voice services alone so it did not present the cost allocation problems we may experience with the development of more services mobile networks may provide; and
- all operators paid similar spectrum fees, meaning that there were not large disparities in the costs incurred by those operators in setting up their networks to deliver a wide range of services, including wholesale mobile voice call termination.

The current LRIC assessment has had to grapple with auctioned spectrum, networks in the early years of rollout and use, the migration of customers between different asset types and wildly divergent forecasts about the future demand for various services. This has led to a range of cost estimates, across the four 2G/3G mobile operators, of 3.2ppm - 7.2ppm.

As Ofcom highlights, in its next market review on mobile voice call termination services post-April 2011, Ofcom is going to have to deal with:

- spectrum trading, liberalisation, new spectrum assets purchased by the existing mobile operators;
- large investments by existing 900MHz operators as their GSM networks reach the end of their service lives;
- new entrants with technologies other than GSM or UMTS;
- hybrid termination models, such as BT Fusion;
- [✂]

That market review is likely to have to start in 2009 and there will be little empirical data to analyse.

This means that a regime which establishes a standardised, accepted charge, around which relative cost differences may be justified or negotiated will, in O2's view, provide a more efficient, lower cost, regulatory regime going forwards. This will provide for greater certainty (lowering costs) amongst spectrum traders, operators, new entrants and Ofcom. Lowering costs would also ultimately benefit consumers.

Mobile number portability

O2 agrees with Ofcom that the current mobile number portability arrangements have the effect of narrowing the existing differential charges and that establishing standardised voice call termination rates should be considered in this context.

We note H3G's assertion that mobile number portability arrangements should be reformed so that operators receive their voice call termination charges for all voice call minutes (including those ported in). However, the effect of this would be that H3G would receive revenues vastly in excess of cost for *all* the traffic it terminates (as opposed to the majority of its traffic, as now) which would only make worse any situation where its charges were in excess of costs. In any event, any method to include ported minutes in the charge controls must be robust and workable. Oftel's previous proposal in this area was shown to result in perverse outcomes (like infinite, zero or negative charging) for certain, perfectly conceivable levels of porting.

We agree with the approach that Ofcom has adopted, which is to review the arrangements for mobile number portability, separately.

Narrowing cost differentials

As we have set out above, O2 does not agree that there are voice call termination cost differentials between mobile operators. However, without prejudice to that, we note that Ofcom's LRIC model forecasts costs to converge to within just 1% by 2010/11 for 2G/3G operators, under accounting depreciation. This is the form of depreciation mobile operators use to prepare their accounts and to fund their activities. O2 submits that Ofcom should have regard to cost differentials under accounting depreciation when considering the adverse impact of differentiated charge controls, since this is the basis on which operators run their businesses in practice.

Ofcom's preferred approach to differentiation between charge controls for mobile operators

O2 agrees that, given the beneficial impacts of setting standard rates, and that Ofcom's model forecasts costs to converge so closely, a single charge control should be applied to all four 2G/3G operators and that this charge should be set with reference to the "medium" cost range for 1800 MHz operators. As we have set out earlier, we believe that there are good reasons (relating to the recovery of 3G spectrum charges) for adopting a value at the high end of the range (though within both the ranges for 900/1800 MHz and 1800 MHz operators).

O2 agrees with Ofcom that any possible adverse impact on competition between mobile operators relating to the imposition of a single charge control would be negligible (on the basis that the charge control is set by reference to the high end of the "medium" cost range for 1800 MHz operators and that 2G/3G operators will therefore be permitted to recover their costs), given that 900/1800 MHz and 1800 MHz cost differentials amount to less than 1% of T Mobile's and Orange's revenues. We are also firmly of the view that the advantages of a single charge control (transparency and predictability, as described above) are significant and far outweigh any detrimental effects on competition.

Relative risks in setting charges too high or too low

O2 also agrees that Ofcom is right to recognise the asymmetry in the risks of setting charges on the basis of costs generated by its LRIC model. As Ofcom acknowledges, there is a very wide range of possible cost estimates, depending on the assumption made about important variables. Setting a charge that is not sufficient will mean that mobile operators would not be able to recover their costs and this would lead to reduced investment, and slow the development of services, to the detriment of consumers.

O2 remains of the view that there is no significant consumer detriment from establishing a higher charge control, within the acceptable range, given that 2G/3G operators' charges are already within that acceptable range. A higher charge control would permit greater investment in such infrastructure, services and products, to the benefit of consumers.

Finally, O2 notes that BT Wholesale, in its recent exchange of letters with Ofcom about future broadband pricing, says

> *"..regulatory mechanisms for price control can be inflexible and imprecise, in an environment of rapid change."*[12]

We would concur with BT's views on this, and suggest that Ofcom needs to adopt a cautious approach to its assessments of reasonable costs.

[12] http://www.ofcom.org.uk/telecoms/ioi/bbpricing/ceilings.pdf

Conclusions about charge controls

In summary, O2 does not believe that it is objectively justifiable to determine that there will be any differential in the cost of voice call termination amongst mobile operators in the period under review.

We agree that there are very real benefits to be realised by establishing a single charge control. Even if cost differentials between operators can be shown to exist, unless they are significant, clear and unambiguous, a single charge control should be applied to all mobile operators.

Finally, we support Ofcom’s approach, should it be demonstrated that charge controls are necessary, that given the uncertainty, conservative assumptions should be used to identify the appropriate level so as to minimise any chance that mobile operators fail to recover costs.

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 (2006/7 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**

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?

We note what Ofcom has said about the path of reductions in charges, at paragraphs 9.81–9.85 of the consultation document. O2 recognises the balance that has to be struck between, on the one hand, (i) serving the short term welfare of consumers (through lower prices) and, on the other, (ii) the need for efficient investment incentives and (iii) allowing a sufficient period of time for adjustment to new levels and structures of mobile charges.

However, there is another factor that Ofcom needs to address, namely: the extent to which different operators' charges may be in excess of Ofcom's view of their costs during the charge control period and the consequential cross subsidy of other activities that this would permit. Ofcom is well aware of the "waterbed effect", whereby revenues obtained for call termination in excess of cost are ploughed into, and distort, the otherwise competitive outgoing market. This factor needs to be addressed explicitly, in considering the path of charge reductions. Accordingly, O2 submits that Ofcom should take account of a fourth factor, the extent to which competition in other markets is distorted due to continuing differences between charges and costs.

In relation to these four criteria, there are two key variables that need to be set (by reference to the above criteria) when establishing the path of reductions in charges, namely:

- The duration of the period for which charges are in excess of cost; and
- The charges at the start of the period (and whether "P0" adjustments are needed)

O2 has the following comments on these four criteria and their application to the two variables. Please note that since H3G's current charges, uniquely, have been deemed to be well in excess of cost, and, consequently, it is H3G that is affected most by a reduction of charges to cost, much of the narrative focuses on the position of H3G.

Short term welfare of consumers

O2 notes what Ofcom has said about the benefits to fixed line customers that would arise from a reduction in mobile voice call termination charges. However, when thinking about the welfare of consumers, Ofcom needs to consider not simply the transfer of revenues from the (customers of) fixed operators to (those of) mobile operators. A better approach would be to consider the transfer from, on the one hand, those operators whose charges are at, or near to, costs, to, on the other hand, the sole operator whose charges are well in excess of costs (H3G). In other words, given that four of the five mobile operators' voice call termination charges are broadly at cost, there is presently a transfer, as well, from (effectively) their customers, to (effectively) the customers of H3G, due to H3G's excessive voice call termination charges.

Ofcom maintains that a reduction in mobile voice call termination charges (to cost) will ensure that consumers will be able to benefit from lower priced fixed network services. However, if this is true, such a reduction would also benefit the customers of H3G's other purchasers of its voice call termination services, namely: O2, Orange, T-Mobile and Vodafone. Indeed, after BT, O2 believes that the other mobile operators are likely to be H3G's largest customers. Furthermore, as more mobile terminated calls are originated on mobile networks, the other mobile operators will account for an increasing share of H3G's voice call termination services. Ofcom should recognise the additional benefit, resulting from a cut in H3G's charges, to the customers of other mobile operators.

Efficient Investment incentives and adjustments to new prices

In O2's view, an operator needs time to adjust to new prices only to the extent that:

- it couldn't have reasonably foreseen such new prices; and
- such adjustments need time to be implemented and their effects realised.

H3G's expectations of voice call termination revenues

An efficient operator should be expected to take reasonable steps to make plans based on different permutations of possible costs and revenues, including revenues attributable to voice call termination. In the case of H3G, O2 submits that it is inconceivable that it has not made plans to take into account possible reductions in voice call termination revenues. There are a number of reasons for this assertion:

1. *H3G's parent is familiar with regulation of voice call termination services*

   H3G's parent company, Hutchison Whampoa Ltd (HWL), owned Orange at the time when Oftel first sought to regulate the voice call termination rates of O2 (then Cellnet) and Vodafone in 1997. This culminated in a lengthy Monopolies and Mergers Commission (MMC) enquiry in 1998 (to which Orange gave evidence) and resulted in the imposition of licence amendments that regulated such charges. Furthermore, a discussion of the MMC enquiry was included in the 3G spectrum auction information memorandum[13].

   Accordingly, HWL would have been well aware of the possibility that (future) regulation might have constrained the ability of H3G to earn voice call termination revenues, when it was bidding for a 3G licence.

[13] Published by the Radiocommunications Agency and NM Rothschild & Sons on 1 November 1999. Paragraph 3.1.3 refers.

2. *H3G has, in fact, properly planned for reductions in its voice call termination prices*

   At least as early as 2002, H3G recognised the implications of the 2002 Competition Commission enquiry in to the proposed licence modifications, to regulate the voice call termination charges of Vodafone, O2, Orange and T Mobile. As Ofcom noted in a recent consultation document[14], an H3G internal note read:

   > *"Subsequent to BT and H3G reaching an agreement on interconnect the Competition Commission has initiated an inquiry into the price of calling to mobiles, which is concerned primarily with mobile network termination charges. In the UK and across Europe, <u>there is considerable regulatory pressure for mobile termination charges to fall</u>."[15] (our emphasis)*

   In the same consultation document, Ofcom also recorded that H3G's business plan for a period including 2002 had assumed that its termination revenue per minute would be subject to an annual decrease[16]. It is true that, later in the consultation document, Ofcom also notes that a subsequent H3G business plan removes this assumption. However, it is clear that H3G was fully aware of the prospect of possible future regulation, including in relation to its own charges.

3. *H3G has anticipated that its charges would fall if the analogous charges of other operators were subject to regulation.*

   At a hearing of the 2002 Competition Commission enquiry, H3G expressed the view that:

   > *"It is very unlikely that we would be able to sustain termination charges and hence calls to our network which are substantially different from the other networks.*
   >
   > *Now, I understand you have some misgivings over the transparency of that, but just in terms of the market that I am in, I cannot see that we would be able to get away with termination charges significantly above where the others were."* [17]

   Such a view is again consistent with H3G being fully aware of the prospect of possible future regulation.

4. *H3G is familiar with the effects of the regulatory regime from 2003*

   H3G's parent company, HWL, has interests in, or wholly owns, mobile operators in Ireland, Italy, Austria, Sweden and Denmark. These operators are similar to H3G in many respects: they are all 3G only operators, having entered their respective markets relatively recently.

   Since all EU Member States' domestic electronic communications regulation implement the same relevant EU Directives, it follows that, like H3G in the UK, HWL's other mobile operations are subject to materially the same regulatory regime and

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[14] Assessment of whether H3G holds a position of SMP in the market for wholesale voice call termination on its network, Ofcom, 13 September 2006
[15] H3G internal draft paper circulated 18 April 2002
[16] Paragraph 4.68 of H3G refers.
[17] Transcript of H3G's hearing at the Competition Commission in the context of the 'Mobile Phone Inquiry', 8 October 2002, page 9 and 10.

risks. Specifically, HWL's mobile operations in Sweden, Denmark, Austria, Ireland and Italy have each been subject to a market review for wholesale voice call termination services.

This is important because the experience of HWL's other mobile operations must have informed H3G's expectations of the prospect of regulation in the UK.

In summary, the regulation of wholesale mobile voice call termination in the relevant countries is as follows[18]:

- In Italy, the Autorità per le garanzie nelle comunicazioni has determined that 3 Italia has SMP in the relevant market, and is currently considering whether to impose a charge control;
- In Sweden, the Post- och Telestyrelsen ("PTS") has determined that Hi3G Access AB ("Hi3G AB") has SMP in the relevant market. One of the remedies imposed by PTS on Hi3G AB is a requirement to charge fair and reasonable prices, defined by reference to one of its competitor's LRIC. By July 2007, Hi3G will be required to charge no more than this rate;
- In Denmark, Telestyrelsen determined that Hi3G Denmark has SMP in the relevant market. It imposed a "reasonable terms" remedy and has undertaken to impose charge controls if Hi3G Denmark's prices do not fall as the regulated prices of other operators decline;
- In Austria, the Rundfunk und Telekom Regulierungs-GmbH found that all operators, including H3G Austria, had SMP and were required to bring charges down to a common, regulated rate by the end of 2008.

It is acknowledged that some of these decisions have been the subject of an appeal. Nevertheless, the experience of HWL's other mobile operators is that they have each been found to have SMP in their relevant markets. In two cases they are subject to a charge control. This will not have escaped H3G's notice.

O2 believes that it is reasonable to suppose that H3G's expectations of prospective regulation in the UK will have been informed by the experience of HWL's other European mobile operators. This experience reinforces the view that such regulation has always been likely and something for which H3G should reasonably have planned for.

5. *H3G might reasonably have expected its voice call termination charges to have been subject to regulation before now.*

In its statement on wholesale mobile voice call termination of June 2004[19], Ofcom reiterated the view expressed by H3G at the Competition Commission enquiry, that H3G's termination rates would fall following the regulation of other mobile operators:

> *"5.65 Ofcom notes that in light of any control to reduce the charges for 2G termination provided by O2, Orange, T-Mobile and Vodafone, it would expect a consequent reduction in charges set by '3'…"*

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[18] ComReg's finding of H3G Ireland's SMP was annulled by the ECAP in Ireland
[19] Statement on Wholesale Mobile Voice Call Termination, Ofcom, 1 June 2004

In the same document, defending its decision not to regulate voice call termination on 3G networks, Ofcom stated that it would keep the matter under review and intervene if necessary:

> *"5.31 Ofcom also considers that any adverse effects to consumers associated with charges for 3G voice call termination are likely to be small, given the very limited size of '3"s mobile subscriber base relative to the wider mobile sector. In Ofcom's view, the lack of evidence of excessive charging, combined with the modest effect any charges have on consumers as a whole, mean that it would be disproportionate to impose ex ante obligations on 3G voice call termination at this time. Ofcom does, however, intend to keep this position under review, and will retain the ability to bring forward proposals for regulation if warranted."*

It is, of course, the case that while H3G's subscriber base rose dramatically, its termination rates never fell, and, unfortunately, Ofcom failed to *"bring forward proposals for regulation"*. Nevertheless, the point to note here is that, even as late as June 2004, H3G should reasonably have expected its termination rates to be under constant review and, possibly, subject to regulation. It ought, therefore, to have planned for this eventuality.

Furthermore, the charge controls imposed in June 2004 were set to expire in April 2006. Again, H3G should reasonably have expected that a subsequent market review might wee re-open the issue of regulation of voice call termination services, including those provided by 3G networks, from April 2006. In the event, this didn't happen, but it would have been irresponsible for H3G not to have planned for this possibility.

6. *The implications for H3G's business plan are broadly understood by the investment community, and therefore H3G must be well aware of them*

Finally, Merrill Lynch's recent report clearly demonstrates that the financial markets are fully aware of the implications of termination rate regulation on H3G. However, O2 is unaware of any suggestion from HWL that H3G is overly reliant on its call termination revenues. Consequently we believe that Ofcom must assume that H3G is perfectly able to cope with a correction in the prevailing market distortion of asymmetric termination rates:

> *"Even with the headline disappointments for H3G, its results have been flattered by asymmetric termination rates relative to the Incumbents….. Asymmetric termination rates: Given its market entry status, regulators have allowed H3G to charge termination rates as high as twice that of the Incumbents. This has been effectively a subsidy from the mobile operators and fixed to H3G. It has also meant that H3G has used aggressive voice pricing as its market entry tool, rather than data or mobile TV. Packages paying H3G subscribers for incoming calls has flattered H3G's numbers. This asymmetry is now unwinding……".*[20]

In conclusion, it is clear that H3G should have foreseen and, indeed, did foresee the likelihood of the imposition of a charge control its voice call termination rates. It is therefore

[20] Page 3, European Wireless Industry Overview, Merrill Lynch 11 October 2006

to be expected that it has planned properly for this eventuality and is in a position to make the necessary adjustments, quickly, as soon as such regulation is imposed.

H3G can change its business plan, rapidly

In addition to H3G being fully aware of the prospect of possible future regulation, including in relation to H3G's own charges, O2 believes that H3G is well able to absorb significant reductions in its call termination charges for the following reasons:

1. *H3G has reduced its costs and these remain to be passed through in its call termination market*

   H3G's website contains a series of press releases highlighting how H3G has reduced its costs, including:

   a. Negotiation of a lower cost national roaming agreement with Orange in May 2006.[21]
   b. An outsourcing contract with Ericsson agreed in December 2005.[22]

   O2 would expect that such cost reductions would provide headroom for a reduction in the prices charged for H3G's call termination services especially in light of H3G's apparent ability to reward its customers simply for receiving calls, under its sole current pre-pay tariff, WePay[23].

   In addition, and as noted above, H3G's cost of providing voice call termination services is lower than Ofcom's LRIC model suggests, because of the effects of national roaming.

   A significant proportion of H3G's voice call termination services will be provided on its behalf at lower cost. This is further evidence that H3G has the capability to absorb a reduction in its voice call termination revenue.

2. *For the purpose of determining the charge control, it must be assumed that H3G is an efficient operator, that is well run and sufficiently agile to adapt rapidly and absorb exogenous changes in its market environment*

   At this stage, O2 is unaware of any statement by HWL that H3G is constrained in its ability to manage actively its cost base and to respond to changes in the market. Given the materiality of such a statement to the public investors in HWL, and the strict rules on disclosure in financial markets, O2 assumes that H3G is, in fact, a well managed and agile business which would be able to respond to the removal of unearned income from its revenue streams.

3. *Evidence that mobile operators can adapt rapidly to deliver savings in costs and have a number of tools at their disposal to achieve this*

[21] http://www.three.co.uk/news/h3gnews/pressnewsview.omp?collcid=1019745742912&cid=1147184210927&index=26
[22] http://www.three.co.uk/news/h3gnews/searchresultsnewsview.omp?cid=1133257332032
[23] 5ppm of H3G's estimated 11ppm is shared with its customers for every inbound minute they receive.

In O2’s view, there is considerable evidence that mobile operators have, in the past, been able to make changes to improve quickly their performance and financial position. Changes may be made to staffing levels, which affects a company’s operating costs. Recent examples of such changes include:

- Vodafone Group (May 2006): 400 redundancies in Vodafone Group Marketing to reduce costs within a six month window;
- T-Mobile UK (Feb 2005): 800 job cuts (500 redundancies and 300 outsourced) as part of “Save for Growth”. Benefits to be realised within 24 months.
- Orange UK (May 2006): 2,000 job cuts following the integration of Orange PCS and Wanadoo. Completion by September 2006.
- O2 UK (March 2005): 500 back office / non-customer facing jobs cut, with creation of 2,000 more customer facing positions. Job cuts by end 2005, job creation over a longer period.

Operators may adjust their operating costs, revisit capital expenditure plans or outsource certain functions. Indeed Vodafone has recently announced a number of initiatives to this effect[24].

An operator’s capital expenditure programmes are also subject to considerable fluctuation and, O2 believes, can be adjusted on an annual basis in order to respond to periodic budgeting changes.

An analysis of operators’ capital expenditure reveals large cyclical patterns[25]. These data show an average maximum quarter-on-quarter variance across the three operators of [✂], or, to put it another way, [✂] of average quarterly CAPEX. The cyclical nature of investment, in part, reflects operators’ responses to their changing fortunes in the market and their networks’ abilities to absorb growing numbers of customers and volumes of traffic to/from those customers.

At the very least, this analysis suggests that capital expenditure is subject to variation and does not need, necessarily, to be maintained at a constant level. Within this context, O2 believes that operators would be able to absorb, smoothly, changes in available capital caused by any reduction in unearned call termination revenues. Such a change would not be a one-time shock, but should have been planned for and accommodated over an annual budgeting cycle.

In light of the multiple levers at an operator’s disposal, historical improvements in performance have been realised between six months and two years, depending on the lever used. There is no reason to suppose that H3G would not similarly be able to implement changes that would enable it to adjust to a change in voice call termination revenues brought about by regulation. Ofcom (or H3G to O2's knowledge) has not provided justification or evidence demonstrating otherwise (eg, that H3G’s business model was in some way constrained in its ability to respond to the removal of a substantial portion of its unearned voice call termination income (through cost cutting, usage stimulation or price rises in the origination market).

[24]http://www.vodafone.com/article_with_thumbnail/0,3038,OPCO%253D40000%2526CATEGORY_ID%253D210%2526MT_ID%253Dpr%2526LANGUAGE_ID%253D0%2526CONTENT_ID%253D291633,00.html
[25] O2, Orange and T-Mobile publish data. Historically Vodafone has not reported this number for the UK. 3UK’s accounts are not sufficiently transparent to determine its CAPEX.

Conclusions on adjusting to lower prices

As a consequence of H3G's prior knowledge of the likelihood of a downward movement in its call termination prices, a knowledge in the investment community of the implications on H3G of a decline in its call termination prices and the lack of any guidance from HWL to the contrary, O2 assumes that H3G is able to institute changes in its cost base along the lines of the examples highlighted at (3) above, in order to realise quickly savings in costs.

Effects on other markets

Ofcom is familiar with the concept of the "waterbed effect", the idea that revenues earned from one market may be used to subsidise activities in another. This is highly relevant to the consideration of the path of reductions in voice call termination charges, in circumstances where H3G's present charge is over four pence higher than Ofcom's view of its cost in 2007/08 (the comparative figures for the 2G/3G operators are a penny or less). O2 believes that the waterbed is fully effective in the UK and that unearned call termination revenue can be invested in, and distort the otherwise competitive, mobile access and call origination market. These effects should be considered when determining glidepaths.

Scale of the waterbed effect

It is not possible for O2 to quantify exactly the net benefit to H3G of this type of differential in voice call termination rates above costs, because we do not have access to comprehensive traffic data. However, we are able to make some "order of magnitude" calculations that demonstrate net revenue flows and the scale of the potential distortion to the mobile access and call origination market, based on O2's traffic to H3G.

In the consultation document, Ofcom sets out three glide path options for H3G[26]. We have analysed the effect on revenue flows between H3G and O2 in 2007/08 of options 1 and 2, (where H3G is afforded a price in excess of cost), relative to option 3 (where price equals cost.

We have also estimated the net additional revenue to H3G of options 1 and 2, relative to option 3. These are summarised in the table below, based on a nine month period in 2007/8:

	Additional cost to O2 in 2007/08 (relative to option 3)	Estimated additional revenue for H3G in 2007/08 (relative to option 3)
Option 1	[✂]	[✂]
Option 2	[✂]	[✂]

HWL has estimated its group subscriber acquisition costs as €262, or about £180[27]. Therefore, Option 1 would provide H3G with sufficient net revenues to acquire around [✂] customers, and option 2, [✂]customers (while O2 would have [✂] or [✂], respectively, less to invest in the access and call origination market). Clearly this would have a highly distorting effect on the outgoing market.

[26] Figure 9.4 on page 115 refers.
[27] Page 7 of http://www.hutchison-whampoa.com/upload_docs/2006/08/Corporate/1802/1802_eng.pdf refers

The table above illustrates the effect of permitting an average charge in excess of cost. The relative differences in costs and revenues are a function of this variable. It is illustrative to note that even allowing a charge of one penny above its costs nets H3G about [✂] per annum in revenue, and costs O2 [✂].

There is a similar effect with the proposed glidepath for the 1800 MHz operators. Ofcom favours a regime whereby they will be permitted to charge 6ppm in 2007/08, whereas the 900/1800 MHz operators are to be permitted to charge 5.5ppm (all 2G/3G operators are to reduce prices over time to 5.3ppm). The additional half a penny above costs that the 900/1800 MHz operators are to receive equates to additional costs to O2 of [✂] in 2007/08, and would net Orange and T-Mobile approximately [✂], each. This would have a similarly distorting effect in the mobile access and call origination market.

In the first eight months of 2006, O2 UK reported its EBITDA as £768m or 27.6% margin on sales. Based on Ofcom's Option 1, in 2007/8 O2 would be paying H3G, T-Mobile and Orange nearly [✂] more than the reasonable costs of the termination services it would receive from these operators. If O2 were not subject to these unjustified charges then O2's EBITDA margin (on an annualised basis) would be improved to [✂].

[✂] Consequently O2 would take any unjustified enhancements of the positions of T-Mobile, Orange and H3G (ie higher costs to O2) as a matter of the utmost seriousness.

O2 draws two main conclusions form this analysis. Firstly the scale of additional revenues and costs resulting from charges in excess of costs is significant, and, because of the waterbed effect, such additional revenues and costs are bound to distort hugely the access and call origination market.

Secondly, in view of the waterbed effect, when considering the extent to which operators are to be allowed to levy charges in excess of cost, Ofcom should consider the relative difference between all operators' charges and costs. This is a different approach to the one that Ofcom takes, where it considers first the current charge for a particular operator, or groups of operators, the desired final charge(s) and then, the best way to get from the former to the latter. In O2's view, if one considers properly the waterbed effect, the current charge is less of a concern. Of more importance is the relative difference of each operator's permitted charge and its cost.

Application of criteria to the consideration of the path of reductions of charges

As noted above, there are two key variables that need to be set (by reference to the above criteria) when establishing the path of reductions in charges, namely:

- The duration of the period for which charges are in excess of cost; and
- The charges at the start of the period (and whether "P0" adjustments are needed).

The duration of the period for which charges are in excess of cost

The short term welfare of consumers is best served by a quick reduction in prices. O2 recognises the need for operators to adjust to new prices but, as we have set out above, in practice, operators are able to realise the benefits of changes to their businesses in as little as six months and, in all cases, less than two years. It is acknowledged that of the operators, H3G's charges are to fall the most. However, as we have also explained, it is quite inconceivable that an efficient operator in H3G's position has not made plans for such a reduction. In the absence of statements to investors to the contrary, O2 and Ofcom must assume that H3G is an agile well managed business.

In light of this evidence, or lack of justification, we do not agree with Ofcom's approach, to set the glidepath over four years, apparently simply because this is the length of the charge control. Ofcom will be aware that SMP obligations must be proportionate, justified and based on the nature of the problem identified. No justification has been provided for setting a glidepath over four years, and it would therefore be arbitrary.

In O2's view, the balance of interests and, in particular, remedying the problem identified by Ofcom, would be best served by reductions in prices to costs, for all MNOs, over a period of eighteen months. There is no reason to believe that in the current market environment, UK operators require a period longer than this to make adjustments to their businesses, and realise the benefits.

The charge at the start of the period

The above criteria need to be balanced when considering the charge at the start of the period. Consumers' short term interests may be best served by a straight cut to costs. Investment considerations and the need to allow a sufficient period of time for adjustments to new prices suggest a charge control in excess of cost, for a limited period, whereas a consideration of the effect on the mobile access and call origination market suggests that the relative charges in excess of costs for all operators ought to be broadly similar.

Essentially, Ofcom should seek to minimise differences between prices and costs, taking into account the four factors .The appropriate benchmark (ie the lowest difference between 2006/7 prices and 2010/11 costs) is provided by Ofcom's own analysis, using as a reference the current charge control on Vodafone and O2. At 5.63ppm, this is 0.33ppm higher than the proposed charge for 2G/3G operators in 2010/11.

In order to eliminate the distortions to the mobile access and call origination markets, there should be a similar difference in between the charges and costs of other mobile operators. As noted above, O2 does not believe that it is objectively justifiable to conclude that the costs to mobile operators of terminating voice calls are different. However, and without prejudice to that, the difference between charges and costs of 0.33ppm should be applied, also, to T-Mobile, Orange and H3G.

On the basis of the costs proposed by Ofcom, the charge control for T-Mobile and Orange should also be 5.63ppm in 2007/08. The reduction in the charges levied by the 1800 MHz operators would provide substantial short term welfare gains (as defined by Ofcom) and realise the benefits of standardised charge controls earlier than under Ofcom's scheme. It follows that in order to maintain equality, the charge control for O2 and Vodafone should remain at 5.63ppm for 2007/08.

Under an eighteen month glidepath, the charge for 2G/3G operators in 2008/09 would be in the order of 5.4ppm, and 5.3ppm (that is, no more than cost) for 2009/10 and 20010/11.

In respect of H3G, we believe that Ofcom ought to be very concerned about the short term welfare of consumers, including customers of the other mobile operators, and the existing and continued distortion to the access and call origination market attributable to prices well in excess of costs. A "smooth" glidepath would not be enough to deal adequately with these problems (even one over eighteen months) and would merely reward H3G, inappropriately, for maintaining such high voice call termination rates to date.

On this basis, it would seem that a significant P0 adjustment would be appropriate. There a range of such adjustments that Ofcom might consider and we set out some of these below

Adjustment	Rationale
Reduction of 5ppm, to around 6ppm	WePay customers are credited with 5 pence simply for receiving a call, suggesting that H3G's current charges are similarly in excess of costs
Reduction to 6.8ppm	Reduction to Ofcom's assessment of H3G's cost in 2007/08
Reduction of 33% to 7.3ppm	Identical to the reduction imposed on 1800MHz operators in September 2004
Reduction of 30% to 7.7ppm	Identical to the reduction imposed on 900/1800 MHz operators in September 2004
Reduction of 24% to 8.4ppm	Identical to the effective annual reduction proposed by the Competition Commission in 2002.

It is possible that H3G might argue that its future viability would be compromised by a significant P0 adjustment. O2 does not believe that such an argument is credible for the reasons we outline above and especially when one considers the sizeable resources of its parent, HWL. Furthermore, Ofcom (and H3G, to O2's knowledge) has provided no justification or evidence to suggest that H3G's future viability might be at risk.

If the survival of H3G were in question, the shareholders of HWL and the relevant stock market regulator(s) might have expected a corresponding transparent statement to have been made to them. O2 is not aware of any such statement by HWL and, consequently, can only assume that, in fact, the survival of H3G is not imperilled by any of Ofcom's proposals in the consultation document or any variation of them (such as a significant P0 adjustment which would, however, still leave H3G's charges in excess of cost).

O2 believes that the balance of interests is best served by a significant reduction in charges at P0 (2007/08), to 7.13ppm, for the following reasons:

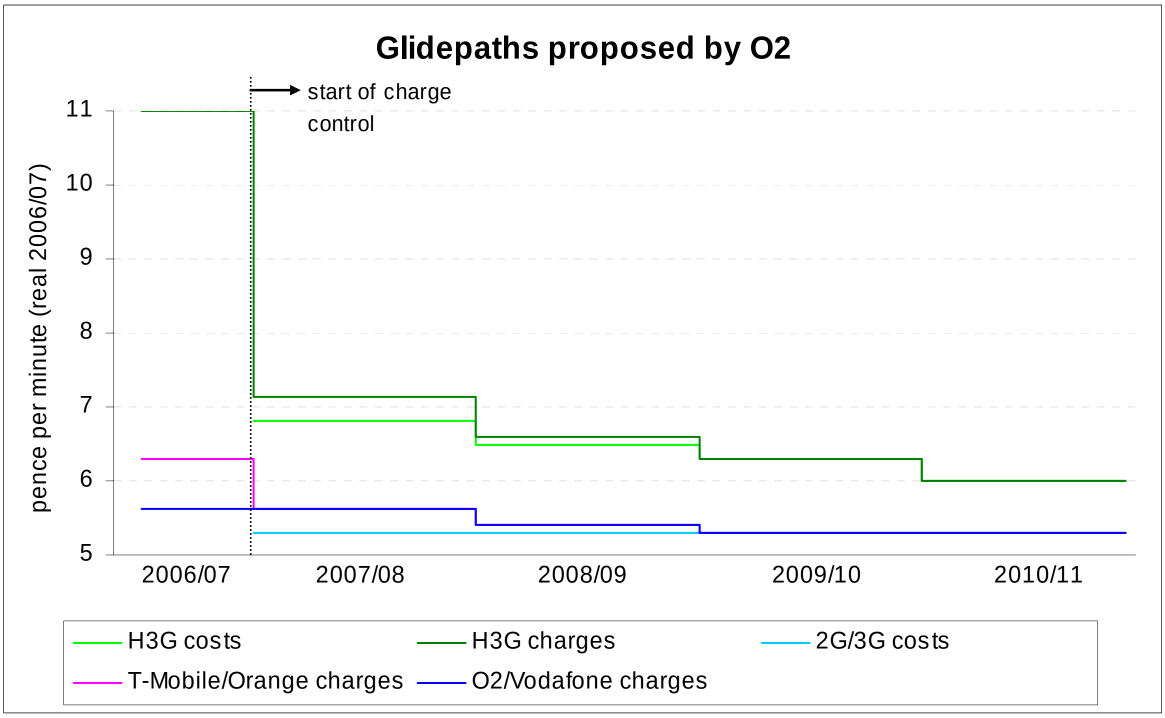
- such a reduction provides consumers with fair short term welfare gains (as defined by Ofocm);
- this rate allows H3G to charge a third of a penny in excess of costs[28]. This would be identical to the excess in costs that 2G/3G operators would be permitted to charge, thus eliminating the distortion to the mobile access and call origination market
- steep reductions are the norm, not the exception, in circumstances where charges are found to be well in excess of costs. In September 2004, 900/1800 MHz operators were required to bring down charges by 30%, while 1800 MHz operators were required to reduce charges by 33%. In 2002, the Competition Commission proposed two 15% cuts within four months, amounting to an annual cut of 24%. A cut in H3G's charges to 7.13ppm from its current charge is of the same order; and
- H3G's WePay prepay tariff gives customers 5 pence credit for every call minute that they receive. In O2's view, this is nothing more than a revenue sharing arrangement funded by excessive voice call termination charges. A reduction in H3G's voice call

[28] [✂]

termination charge of under than 4ppm is less than the 5 pence credit WePay customers receive, a credit that suggests that H3G is well able to absorb such a cut.

Under our proposals, in 2008/09, the 2G/3G operators would be permitted to charge 0.1ppm above costs, as part of the eighteen month glidepath. H3G would similarly be afforded such an opportunity, providing it with a charge of 6.6ppm. From 2009/10, H3G would be required to charge no more than cost.

We illustrate our proposals in the graph below.



O2 believes that this proposal would deliver more short term benefits to consumers (as defined by Ofcom) than under the majority of Ofcom's proposals. It eliminates distortions to the mobile access and call origination market resulting form current charges, and provides operators with sufficient time to make adjustments to respond to new prices.

O2's assessment of the most appropriate path to costs, above, is based on Ofcom's views on costs in 2010/11. As explained previously, O2 does not believe that there any differences in the cost of terminating voice calls amongst the UK mobile operators. Using that as a basis for determining glidepaths would result in:

- the adoption by each of the five mobile operators, of standardised mobile voice call termination charges, from 2007/08, with all the benefits that Ofcom acknowledges such standardised charging would deliver;
- a reduction in average UK mobile voice call termination charges; and
- even greater short term welfare benefits for consumers (as defined by Ofcom), appropriate investment incentives and less distortion in the access and origination market, through the waterbed effect