



Annex 1

Paragraphs 16.8-16.20 of the CC's Determination

The 2010/11 TACs

- 16.8 Ofcom set TACs for 2010/11 of 5.1ppm for the 2G/3G operators and 5.9ppm for the 3G-only operator (in 2006/07 prices).
- 16.9 The consequence of our determination on Reference question 1(iii) is that no NES allowance should be made. The consequence of our determination on Reference question 1(i) is also clear for the 2G/3G operators' TACs. The 2G cap implies that the network and 3G spectrum cost element of the charge should be 3.7ppm.¹ Adding the administration costs allowance of 0.3ppm gives a final 2010/11 TAC of 4.0ppm.
- 16.10 The position is not so straightforward when it comes to the 3G-only operator. We noted (in Section 2 of this determination, paragraphs 2.9.153 and 2.9.158) that the application of the 2G cap to the 3G-only operator did not necessarily lead to the same charge control levels being set for all operators. This is because there are two competing considerations to balance:
- (a) On one hand, the 2G cap, which is based to an extent on an analogy with a competitive market, can be taken to imply that any MCT charge differentials between operators would not be sustainable, and that therefore an MNO would not be able to charge consumers more on the basis that its costs were higher than other MNOs (because of smaller economies of scale, for example).
 - (b) On the other hand, Ofcom allowed for certain differences in the level of efficient costs to be reflected in the final charge control levels. We note, similarly, that whilst we rejected H3G's argument for greater non-cost-based asymmetry, the materials discussed in Section 5 of this determination in relation to Reference question 2 demonstrate a widespread recognition at the European level of the legitimacy of reflecting differences in efficient costs in the case of later entrant operators, at least temporarily.
- 16.11 We asked for, and received, a number of submissions on this point. Ofcom recognized that there were three alternative possibilities for the final year TAC for the 3G-only MNO—higher charges reflecting higher administration and network costs, higher charges reflecting higher administration costs only, and the same charge applying to all MNOs—but did not urge us to adopt any particular one.² It did, however, note that from an economic perspective, there was only a single opportunity cost of 3G spectrum³ and that reflecting differentials in certain types of network costs, for example costs which are

¹We note that we would not have reached a different figure if we had adopted an amended scenario analysis, given our views on asymmetry of risk and the use of the medium-demand forecast (see Section 2 of this determination, subsection 2.8 and paragraphs 2.9.159–2.9.169).

²Ofcom presentation of 28 November 2008.

³Ofcom's plenary hearing of 28 November 2008, transcript, p29.

outside the control of the operator, was consistent with past regulatory policy.¹

- 16.12 H3G urged us to apply the 2G cap to the 3G-only operator (if at all) consistently with Ofcom's MCT cost model, with the result that network cost differentials and the extra administration costs allowance should be reflected in its TAC. H3G put forward two ways in which this could be done. First, one could take the ppm 3G spectrum allowance implied by the 2G cap and add that on to the 3G-only operator's modelled network unit costs for 2010/11, leading to a final TAC of 4.3ppm. Second, one could work out the total spectrum cost that would need to be inputted into the model to generate the 2G cap for the 2G/3G operators, and then input that total into the model to derive the 2010/11 TAC for the 3G-only operator. Such an approach would lead to a TAC of 4.4ppm. The first approach keeps the per unit 3G spectrum allowance uniform between all operators, whilst the second keeps the total (predicted) recovered 3G spectrum allowance the same.²
- 16.13 H3G submitted that applying the 2G/3G operators' 3G spectrum and network allowance implied by the 2G cap (3.7ppm) to the 3G-only operator would either result in its network allowance being constrained below the (modelled) efficient level, or would result in it recovering a smaller amount of total 3G spectrum costs from MCT than other operators, a result for which it could see no justification. Such an outcome, it said, would be inconsistent with a forward-looking opportunity cost approach, as the forward-looking value of equivalent spectrum must be the same for all operators.³
- 16.14 BT argued, conversely, that the 2G cap should lead to the same 3G spectrum and network cost allowance for each of the MNOs (3.7ppm), although it accepted that the 3G-only operator should continue to receive a higher administration costs allowance, so the final 2010/11 TACs would be 4.0ppm for the 2G/3G operators and 4.1ppm for the 3G-only operator.⁴ It said that there was no reason why there should be different prices for different competitors in a competitive market, that regulation should ensure that the same situation resulted in a regulated market, and that there was no reason why fixed customers should pay more for receiving the same service from H3G as from the other MNOs.⁵
- 16.15 T-Mobile submitted that our basis for endorsing the 2G cap was that it would send efficient price signals, that we had rejected cost recovery as a relevant objective, and that applying these principles leads to the conclusion that there should be no differences in rate between the 2G/3G and 3G-only operators.⁶ It said that the only legitimate basis for differentiating H3G—that because of its lower market share it had higher costs per unit of traffic—was irrelevant since we had placed no weight on cost recovery.⁷ It argued that the fact that H3G may be at a smaller and less efficient scale than other operators was not relevant to the price signals that would exist in a competitive market, which would be based not on the actual costs incurred by different operators, but on the forward-looking costs of the most efficient operator.⁸

¹ibid, p30.

²H3G's slide presentation for plenary session on 28 November 2008.

³H3G's plenary hearing of 28 November 2008, transcript, p10.

⁴BT's skeleton argument for plenary session of 21 October 2008, paragraph 42.

⁵BT's skeleton argument for plenary session of 28 November 2008, paragraph 18.

⁶Although it also submitted that 'the forward-looking value of equivalent spectrum must be the same for all operators as the value is determined by the opportunity cost of that spectrum in its next best use, i.e. a value which is not specific to any operator' (T-Mobile's skeleton argument for plenary session of 28 November 2008, paragraph 7).

⁷T-Mobile's skeleton argument for plenary session of 21 October 2008, paragraphs 23 & 24.

⁸T-Mobile's skeleton argument for plenary session of 28 November 2008, paragraph 9.

- 16.16 On the basis of that logic, T-Mobile also submitted that an increased allowance for administration costs for a 3G-only operator could not be justified (and could only be justified by a principle that was in some way related to cost recovery).¹ O2 and Orange adopted a similar position.²
- 16.17 Vodafone also took the view that since the 2G benchmark was not operator specific, but represented a benchmark as to what was the efficient price for the network and spectrum elements of MCT, it was equally applicable to H3G.³ Vodafone argued that the logic of the 2G cap implied that the network/spectrum element of all MNOs' MCT charges should be capped at the 2G cap. If a particular operator had higher network costs, this would imply that its implicit spectrum allowance would be lower than others. Vodafone said that this was entirely consistent with the fact that H3G paid less for its 3G spectrum than did other MNOs. It added that to allow any further asymmetry would risk distorting competition with no countervailing benefits.⁴
- 16.18 Vodafone initially also argued that no greater administration costs allowance should be given to the 3G-only operator either,⁵ but subsequently submitted that the extra 0.1ppm allowance could be reflected in the final year TACs.⁶
- 16.19 We have found this a difficult decision. We recognize that a strict application of the analogy with a competitive market, on which the 2G cap is based to an extent, could imply a single TAC for all MNOs. We also see the force in BT's point that it should not have to pay more for an identical service purely because the service is being provided by a later entrant with higher costs. However, on balance, we have decided that the position taken by H3G on this point should be adopted for the following reasons:

- (a) It is not the case (as argued by T-Mobile) that we have dismissed cost recovery as an objective or placed no weight on it. Rather, as set out in Section 2 of this determination on 3G spectrum costs, we decided that Ofcom did not err in focusing on providing appropriate price signals for efficient consumption as the main pricing objective in relation to 3G spectrum, implying that forward-looking values, rather than historic values, were relevant (see paragraphs 2.3.58 to 2.3.61 and 2.3.71). We explicitly did not reject the proposition that an appropriate proportion of 3G spectrum costs should be recovered through regulated MCT charges (see paragraph 2.3.19). As also set out in Section 2, we do not consider that the 2G cap approach denies MNOs the opportunity to recover their efficiently incurred costs of termination in this case (see paragraphs 2.3.12, 2.3.63 and 2.9.168(a)).
- (b) We think that a valid distinction can be drawn between the regulatory treatment of the introduction of a new and more efficient technology, and the regulatory treatment of (forward-looking) cost differentials that are outside the control of a particular operator. The 2G cap implies that prices should not increase for an identical service as a result of the introduction of a new technology. However, the 2G cap would not necessarily imply that, for example, a later entrant 2G operator's smaller initial scale and lower lifetime traffic should not be recognized. Late entry raises separate regulatory issues.

¹T-Mobile's skeleton argument for plenary session of 28 November 2008, paragraph 10—although we note that T-Mobile appeared to take the opposite view at times—see T-Mobile's skeleton argument for plenary session of 21 October 2008, Annex A.

²O2's plenary hearing of 21 October 2008, transcript, pp47&48; O2's letter of 27 November 2008; Orange's skeleton argument for plenary session of 21 October 2008, paragraph 18; Orange's letter of 27 November 2008, paragraph 4.

³Vodafone's skeleton argument for plenary session of 21 October 2008, paragraph 14.

⁴Vodafone's skeleton argument for plenary session of 28 November 2008, paragraph 7.

⁵Vodafone's plenary hearing of 21 October 2008, transcript, p70.

⁶Vodafone's skeleton argument for plenary session of 28 November 2008, paragraph 3.

- (c) As stated above, Ofcom's modelling approach recognized differences in costs that were outside an operator's control such as initial smaller scale due to late entry. Recognizing such differences is, as Ofcom points out, consistent with previous regulatory practice. Such an approach is also consistent with positions taken by the ERG, other NRAs and the European Commission. We do not think it could be said that Ofcom's decision to recognize those cost differentials was wrong.
- (d) We think that there is force in the point that it would be inconsistent to build into the assessment a smaller allowance for 3G spectrum costs for one MNO than for others as it would imply that there is more than one opportunity cost for 3G spectrum.

16.20 Therefore we have determined that the TAC for the 3G-only operator in 2010/11 should recognize its higher (modelled) network costs and its higher administration costs. We have also determined that its TAC should be 4.4ppm, as the methodology from which this result is derived¹ seems to us to be more consistent with Ofcom's overall modelling approach than the methodology which leads to a TAC of 4.3ppm.²

¹Taking an implied total 3G spectrum value and allocating it across services and spreading it across lifetime traffic volumes.

²Taking the ppm 3G spectrum allowance of the 2G/3G operators and adding it on to the 3G-only operator's network costs.

Annex 2

Chronology of consultations

Part A. Consultation on asymmetric regulation of H3G

1. In September 2008 the CC issued a number of provisional determinations on the different questions referred to them by the Tribunal. These indicated that the CC had provisionally concluded (a) that OFCOM had erred in not applying the 2G cap and (b) that the methodology could be applied to the 3G only operator. The CC noted that application of the 2G cap to the 3G only operator “would not necessarily lead to the same ppm rate as for the 2G/3G MNOs.” The CC then commented that the question whether “any greater asymmetry is justified is an open one to be dealt with in H3G’s own appeal”. This latter comment referred to the various grounds of H3G’s own appeal which was that there should be a greater differential between its own and the 2G/3G MNOs’ MCT charges.
2. T-Mobile at least picked up on this comment. In its Response to the provisional determination it pointed out that the CC had specifically rejected cost recovery as an objective on which it places any weight and that the implication of the 2G cap methodology was clear – “the implication is that the 3G only operator will receive the precisely same [sic] termination rate as the other operators, in the way it would in a hypothetically competitive termination market”.
3. A plenary hearing was held on 21 October 2008. The letter notifying the parties of the hearing invited their views on the application of the 2G cap to the 3G only MNO. In its skeleton argument for that hearing, T-Mobile expanded on the arguments it had raised in its earlier Response. Vodafone also mentioned the issue briefly in its skeleton stating that the 2G benchmark was equally applicable to H3G because it is not operator-specific. At the hearing the issue was covered briefly by the parties’ submissions concerning whether there should be any difference in H3G’s final year TAC in 2010/11, given the logic of the 2G cap.
4. Towards the end of that plenary hearing there was an exchange between the CC chairman and counsel for T-Mobile in which the point was raised that the CC had not concluded that one should disregard cost recovery when considering what would be efficient price signals (see p 85 of transcript lines 19 – 25) This appears to be the first time that the CC raises the question whether it makes any difference to the application of the 2G price cap that the market is one in which there are economies of scale in provision and the MNOs may have very different market shares. H3G’s response (page 87 of the transcript) was that they regarded the adoption of the 2G cap as “perfectly compatible” with the idea that unavoidable forward looking costs disadvantages would be allowed for a 3G-only operator.
5. When inviting the parties to a further plenary hearing to take place on 28 November 2008, the CC again highlighted that the key issue was the effect of the outcome of the BT appeal on H3G.
6. On 20 November was the first indication from the CC that it proposed to reject all the grounds in H3G’s appeal. In view of that, the CC said “we propose to focus on the effect of the consequential adjustments arising from the BT appeal on H3G. The effect of our provisional determination on 3G spectrum costs, should it hold,

will have a greater effect on H3G's charge controls than on those of the 2G/3G MNOs." They invited submissions on this point.

7. In a later letter of 26 November the CC first mentioned "indicative" figures. The letter said that although the CC had not yet taken any view as to how the final year MCT rates should exactly be calculated, they considered that the reasoning set out in the provisional determinations could lead to a figure of 4.0 ppm for the 2G/3G MNOs and 4.3 ppm for H3G.
8. In its skeleton argument for the 28 November hearing, T-Mobile dealt with the question whether the 2G cap meant that there was no justification for differentiating between H3G and other MNOs in relation to any other category of costs whether they be administration costs or non-spectrum network costs. T-Mobile submitted that an increased allowance for other costs on the basis of higher average costs faced by a 3G-only operator would only be justified on a principle related to cost recovery. But no reason had been advanced why it was appropriate to apply a cost recovery principle to other costs when it was not found to be appropriate for spectrum costs. T-Mobile argued that H3G's TAC should be the same as the other MNOs' – this is the only conclusion that was consistent with the acceptance of the 2G cap, the rejection of cost recovery as a relevant objective, the paramount emphasis placed on efficient forward looking pricing signals and the rejection of H3G's appeal on asymmetry.
9. With regard to Question 8, Vodafone also submitted in paragraph 7 of its written submission of 27 November 2008 that there was no good reason to allow asymmetry in relation to spectrum and network costs. Vodafone put forward the argument that if H3G has higher network costs, that simply means that it should be limited to recovering a lesser amount in respect of the value of 3G spectrum.
10. At the hearing on 28 November 2008 H3G made a presentation (accompanied by slides) in which it set out the two alternative ways of arriving at a common value for spectrum as between the 2G/3G MNOs and H3G (see pages 8-9 and 35-37 of the transcript). They said that both approaches recognise that the 3G only operator has a higher network costs. H3G argued that applying the 2G cap at the later stage in the calculation so as to constrain both network costs and spectrum value would result in a 3G-only rate below H3G's efficient cost benchmark. This would mean disallowing unavoidable cost disadvantages of the 3G-only operator in its network costs.
11. At that hearing BT and the other MNOs made clear that they disagreed with any asymmetric treatment beyond the 0.1 ppm allowance for administration costs. BT said that they did not understand what reasoned justification was being put forward in favour of allowing an extra 0.2 ppm for network costs. OFCOM noted that the 0.2 ppm difference reflected lower economies of scale driven by assumptions on market share and resulting traffic volumes and to a lesser degree other issues such as differences in coverage assumptions, given the 3G-only operator's unique position in the market. OFCOM then posed the rhetorical question: is it appropriate to reflect the higher administrative and network costs of a newer 3G-only entrant? OFCOM rehearsed the arguments on both sides – the CC could adhere to the "strict conceptual model of a hypothetical competitive market for mobile termination" and apply the 2G cap without reflecting higher network costs. However, a new entrant 3G-only operator might have anticipated efficiently incurred cost-based asymmetries in termination rates to allow for time

to get to scale, and to gain market share and may have taken account of this in its bid for 3G spectrum. If that is the case, then failure to reflect these higher costs may risk undermining incentives for efficient investment and entry. OFCOM also noted that reflecting differentials in certain types of network costs, for example costs which are outside the control of the operator is consistent with past regulatory policy. Vodafone put forward similar arguments to those it now relies on before the Tribunal.

**Part B. Consultation on determination of TACs
for all four years of the price control.**

12. The issue of whether TACs should be adjusted for the expired period of the price control was raised by the CC prior to the plenary hearing of 21 October 2008. In its skeleton argument for the hearing, BT expressly submitted that changes should be made to all four years. The point was addressed by Vodafone at the hearing and by T-Mobile: see respectively pages 66-69 and 71-76 of transcript.
13. On 3 December 2008 (that is the day before the opening of the December hearing before the Tribunal), the CC wrote to the parties inviting submissions on Question 8 by 16 December. The CC noted that the hearing before the Tribunal may necessitate further submissions. They said that “if following our consideration of the Tribunal’s decision we consider that further submissions are indeed necessary we will invite them and provide an appropriate timetable”.
14. On 15 December Vodafone replied stating that at this stage it was unable to comment on how the CC should address Question 8 because such comments must necessarily take account (a) of the Tribunal’s pending ruling on the issues covered in the December hearing and (b) of the CC’s provisional determination of reference question 8. The letter concluded by saying that Vodafone “reserves the right to make such additional submissions as it may judge appropriate ... in respect of question 8 at a later stage in the proceedings”.
15. Orange also wrote to the CC on 16 December stating simply that for the reasons given in Vodafone’s letter of 15 December “Orange is unable to comment on reference question 8 at this stage of the proceedings and therefore reserves its position”.
16. The CC responded to these letters on 16 December. In their response the CC made clear that they did not intend to issue a provisional determination on reference question 8. They also said “if following our consideration of the Tribunal’s ruling we consider that further submissions are indeed necessary we will invite them and provide an appropriate timetable. It is not evident to us that the Tribunal’s ruling will necessarily give rise to points that require further submissions”.
17. On 17 December the CC wrote again to the parties setting out its calculations of the TACs for the four years of the price control. The CC said as follows:

“Arguments currently being considered by the Tribunal could be relevant to [the calculation of the final year TAC and the glidepath for the first three years]. However, whatever the outcome of the [December hearing] we may need to set out as part of our reasoning (or as part of our determination) what the charge controls would have been for the duration of the charge control

period assuming the 2010/11 TACs that we have provisionally determined should have been set had in fact been set in March 2007. Therefore, whilst awaiting the Tribunal's judgement in relation to these arguments we have decided that it would be prudent to work on the calculation of the glide paths set on that basis.

This is of course without prejudice to the outcome of the [December hearing]. Depending on the Tribunal's ruling, it may be necessary to perform additional calculations, and if so, we will do so and put back to the parties our results."

18. Orange replied to this letter on 19 December saying that given that the Tribunal's ruling was still awaited "it would be premature" for Orange to comment on the calculation. Orange "reserve[d] its right to make further submissions on these matters in due course". Orange also stated that the question whether the power to direct a replacement price control should be exercised "is a matter on which Orange and the other parties would expect to be given the opportunity to make further submissions in due course".
19. Vodafone also replied on 22 December saying that it had made no submissions to the CC on how the CC should exercise its powers, should the Tribunal find that such powers exist "and cannot usefully do so until the Tribunal's ruling is available". Vodafone noted that the CC had suggested that it would be useful for Vodafone to comments on the calculation of the TACs for years 1 to 3 before the Tribunal's ruling was available. The rest of Vodafone's letter on the CC's calculations was devoted to arguing that any such calculations were premature because it was unclear what would be needed once the Tribunal had issued its judgment. At the end of the letter Vodafone reserved its position to make further and alternative submissions in the light of the Tribunal's ruling.
20. T-Mobile responded to the CC's 17 December letter on 22 December. They did give a substantive response, stated to be without prejudice to their submissions before the Tribunal and to their contention that even if the CC has power to determine the price control for the expired period it should not do so in the present case. The substantive points T-Mobile went on to make in the letter did not deal with the issues covered by the Disposal Powers Judgment.
21. Vodafone wrote to the CC on 6 January 2009 reiterating the point that it made in its letter of 22 December that it would be premature for the CC to discuss what should be the final year TACs before the handing down of the Disposal Powers Judgment. At the end of the letter Vodafone once again reserved its position to "comment more fully" in the light of that Judgment.
22. The CC wrote to the parties on 9 January and acknowledged the fact that all parties had reserved their position pending the handing down of the Disposal Powers Judgment. The CC nonetheless considered that it would be helpful to let the parties see the tables of figures (comprising core benchmarks and sensitivities) it intended to use for calculating 3G spectrum costs.
23. Vodafone wrote to the CC again on 13 January, having received the embargoed copy of the Disposal Powers Judgment the previous day. In that letter Vodafone stated that it remained of the view that the only fair course of action was for the CC to issue a provisional determination of reference question 8 and consult the parties on that reasoning before adopting any final determination. However, they

went on to make some “initial submissions” as to why it was not appropriate for the CC to determine the TACs for years 1 and 2.

24. T-Mobile and Orange both wrote on 14 January stating only that they agreed that a provisional determination should be issued so that the parties can make submissions before the CC takes its final determination. The letter from Orange closed with the statement that “Orange’s position is reserved generally”.
25. On 14 January BT wrote to the CC urging them to reject Vodafone’s submissions and make adjustments for all four years of the price control.