

# MOBILE PHONES INQUIRY

## Remedies Statement

### Introduction

1. The Competition Commission (the Commission), as part of its inquiry into the termination charges made by mobile telephone operators, is now seeking comments on possible remedies, should it conclude that there are any matters which operate against the public interest.

2. The Commission is still pursuing its investigation and has as yet reached no final view on any of the matters set out in its issues letter sent to the main parties on 28 March. (The issues were also set out in the Commission's issues statement posted on the Commission's website on 2 April.). However, the Commission's current views on a number of these issues, based on the evidence received to date, are summarised in paragraph 11 below. Other public interest considerations are raised in paragraph 12.

3. In order to help the Commission assess the implications of any recommendations it might wish to make, were it to reach any adverse public interest finding, it is now inviting comments on the practicability and effectiveness of the possible remedies set out in paragraph 14 below. The Commission is not at this stage proposing one or more of the remedies set out below: they are offered for comment and to stimulate discussion. The Commission would also welcome proposals for alternative measures that might be more practical or effective in remedying any adverse effects than those set out in paragraph 14, or which might cost less to implement, were the Commission to make an adverse finding.

### Background

4. The Director General of Telecommunications (the Director General) made two references to the Commission on 7 January 2002, one relating to Vodafone and O2, the other to Orange and T-Mobile. In each case, our terms of reference require us to answer the following questions:

- (a) Whether, if unregulated, the call termination charges levied by Vodafone and O2 and by Orange and T-Mobile on operators of fixed or mobile public telecommunications systems for calls to telephone handsets connected to their respective mobile public telecommunications systems may be expected to operate against the public interest.
- (b) If so, whether the effects adverse to the public interest which these matters have, or may be expected to have, could be remedied or prevented by modifications of the conditions of the MNOs' licences.

A "call" is defined in the terms of reference as (in summary) a circuit-switched conveyance of a speech teleservice, originating in a system connected to any fixed or mobile telecommunication system, and intended to terminate on a GSM mobile handset using the GSM air interface for the conveyance of that speech call.

5. In making a report on these matters, the Commission (under the provisions of section 14 of the Telecommunications Act 1984 (the Act):

- (a) shall include in the report definite conclusions on the questions comprised in the reference together with such an account of its reasons for those conclusions as in its opinion is expedient for facilitating a proper understanding of those questions and of its conclusions;
- (b) where it concludes that any of the matters specified in the reference operate, or may be expected to operate, against the public interest, shall specify in the report the effects adverse to the public interest which those matters have or may be expected to have; and
- (c) where it concludes that any adverse effects so specified could be remedied or prevented by modifications of the conditions of the licence, shall specify in the report modifications by which those effects could be remedied or prevented.

6. In determining the public interest for the purposes of this reference, the Commission is required by section 13(8) of the Act to have regard to the matters as respects which duties are imposed on the Secretary of State by section 3 of the Act.

7. Section 3(1) provides that the Secretary of State and the Director General shall each have a duty to exercise his functions (under those parts of the Act governing the reference procedures) in the manner which he considers is best calculated -

- (a) to secure that there are provided throughout the United Kingdom ..... such telecommunication services as satisfy all reasonable demands for them including, in particular, emergency services...; and
- (b) without prejudice to the generality of paragraph (a) above, to secure that any person by whom any such services fall to be provided is able to finance the provision of those services.

8. Section 3(2) provides that the Secretary of State and the Director shall each have a duty to exercise the functions assigned or transferred to him in the manner which he considers is best calculated:

- (a) to promote the interests of consumers, purchasers and other users in the United Kingdom (including, in particular, those who are disabled or are of pensionable age) in respect of the prices charged for, and the quality and variety of, telecommunication apparatus supplied;
- (b) to maintain and promote effective competition between persons engaged in commercial activities connected with telecommunications in the United Kingdom;
- (c) to promote efficiency and economy on the part of such persons;
- (d) to promote research into the development and use of new techniques by such persons;
- (e) to encourage major users of telecommunication services whose places of business are outside the United Kingdom to establish places of business in the United Kingdom;
- (f) to promote the provision of international transit services by persons providing telecommunications services in the United Kingdom;
- (g) to enable persons providing telecommunications services in the United Kingdom to compete effectively in the provision of such services outside the United Kingdom;
- (h) to enable persons producing telecommunication apparatus in the United Kingdom to compete effectively in the supply of such apparatus both in and outside the United Kingdom.

9. So far as regards the respective duties in section 3(1) and 3(2), the Commission proposes to consider whether in respect of each MNO it is the case that section 3(1) is in issue and, in particular, whether the imposition of price regulation pursuant to the references would prejudice its ability to finance the provision of its services. If the Commission found that the considerations in section 3(1) were not in issue, then it would consider the facts found in the light of the public interest considerations set out in section 3(2). In the light of its findings, the Commission would then decide whether the public interest was adversely affected. The Commission notes that the Director General specified as the adverse effect in his references the "harm likely to be caused to consumers".

10. The Commission has also to have regard to certain EC legislative provisions governing telecommunications networks and services and is currently considering submissions by the main parties in this connection. Now that the European Commission has published its draft Recommendation on relevant market definitions, the Commission will be in a position to formulate its views on those submissions. In doing so, the Commission will bear in mind that the regime under the Framework and Access Directives must be in force by no later than 24 July 2003. This is the last day

on which any licence condition arising out of our inquiry can have effect, although the Director General has power to impose a replacement condition to take effect from 25 July 2003.

### **The Commission's current views on the issues**

11. Summarised below are the Commission's current views on a number of the issues set out in the issues letter of 28 March. These views are based on the evidence submitted to it by the main parties to the inquiry and by third parties, including a number of FNOs.

#### ***A. The Market.***

***(i) Whether there is a separate market for the termination of voice calls on the network of each of the four mobile network operators (MNOs). In this connection, whether a call to a mobile network, originated either on a fixed or mobile network, may be terminated other than on the network of the MNO to which the called party subscribes.***

The Commission's current view is that there is a separate market for termination of calls on the network of each of the four MNOs; and that calls can be terminated only on the network of the MNO to which the called party subscribes. The evidence available to the Commission to date suggests that there are at best only rather weak demand- or supply-side substitutes for termination on the network of the operator to which the called party subscribes.

***(ii) Whether, alternatively, voice call termination on mobile networks is part of a wider market for telecommunication services and, if so, what services this wider market encompasses.***

The Commission's current view is that voice call termination is not part of a wider market for telecommunication services. In particular, MNOs do not sell termination, a wholesale activity, to the same group of customers to whom they supply other services, which are sold at the retail level. However, the setting of call termination charges by the MNOs has an impact both at the wholesale and retail levels. We accept that any regulatory action applied at the wholesale level may have an impact in the retail market.

***(iii) Whether the relevant market for the termination of calls to mobiles includes not only voice calls using current (2G and 2.5G technology) but also calls using 3G technology and, if the latter is included, whether the relevant market includes only voice and not other messages sent using 3G.***

The Commission's terms of reference define the relevant market as that for all voice calls using current technology. However, the evidence available to the Commission to date suggests that a combination of current and 3G technology may increasingly be used to convey voice calls and that users of mobile phones will not know whether the call is using current or 3G technology. So far as data transmission and text messaging are concerned, the Commission's current view is that neither of these forms part of the relevant market.

***(iv) Whether the definition of the market in which termination of calls on mobile networks belongs is likely to change in the foreseeable future as the result of technological developments (so that, for example, a call to a mobile network could be terminated other than on the network of the mobile operator to which the called party subscribes) and if so, which party or parties would have the incentive to promote or make commercial use of such technological developments.***

The Commission's current view is that the definition of the market in which termination of calls on mobile networks belongs is not likely to change in the foreseeable future as the result of technological developments.

#### ***B. Competition***

***(v) Whether the charges for call termination on the networks of the four MNOs are, or are likely within the foreseeable future to become, subject to any competitive constraint. In this connection, we shall want to pursue the following matters in particular:***

***(a) whether, in the context of what Oftel terms the "calling party pays principle", there are any, or any sufficient, incentives for MNOs to reduce termination charges, or (in the absence of regulation) whether there would be any disincentives to increase them and if so, what these might be in each case;***

On the general question posed, the Commission's current view is that call termination charges are not subject to effective competitive constraint and are not likely to become so within the foreseeable future. This is because the MNOs are monopolists in relation to the supply of termination services on their own networks. On the question of incentives to increase or reduce termination charges, the Commission's current view is that there are insufficient incentives for the MNOs to reduce such charges and moreover that, in the absence of regulation, there would be incentives for MNOs to increase them: if any MNO unilaterally raises its termination charge, it increases both its own revenue and its rivals' costs.

***(b) whether the market or markets for services provided by the MNOs to retail customers (for example, call origination, text messaging, access to the network) is or are competitive and might be expected to be so in the future, having regard to any limit to the number of networks that can operate;***

The Commission's current view is that the MNOs' activities to sign up and retain customers are broadly competitive at the retail level, insofar as there appears to be active rivalry between the MNOs in this area of activity. This level of competitiveness may be expected to continue. The Commission's current view on competition in the market for call origination is that it is less strong than in the market for access to the network, and is likely to remain so. The Commission is considering whether, in competing to gain new subscribers to their networks through subsidised handset and subscription prices, the four MNOs are locked into a type of competition that brings about an undesirably high level of subscriber switching between networks ("churn"), while distorting the volume and direction of traffic on the network. If so, it is not obvious that this would be in consumers' interests.

***(c) whether the retail market is segmented (for example, by type of customer or usage patterns) and if so, whether that segmentation limits the degree to which price-conscious consumers can drive prices down towards the level of costs for the retail market as a whole.***

The Commission's current view is that, by offering a wide variety of tariffs, the MNOs segment the market by type of customer and usage pattern; as a consequence, price-conscious consumers cannot drive prices down to the level of costs for the retail market as a whole.

***(d) whether the number, variety and complexity of pricing packages available to consumers of mobile services make comparisons between the prices of one MNO and another more difficult for such consumers than they need to be;***

The Commission's current view is that the range of subscription and call origination tariffs set by the MNOs are sufficiently complex as to make price comparisons between the MNOs difficult. This means that price-conscious consumers cannot drive prices down to the level of costs for the retail market as a whole.

***(e) whether, if insufficient competitive constraints are currently exerted on the MNOs' call termination charges, the revenue from those charges is being used by the MNOs to reduce the level of prices charged by the MNOs to their customers for calls, or to subsidise handset prices or monthly subscriptions. Whether, as a result, the structure of prices offered by the MNOs to their customers has become distorted;***

The Commission's current view is that, by charging prices in the termination market which are in excess of the relevant costs of providing that service (see section C, issue vi), the MNOs are able to subsidise the prices of some products and services at the retail level. It appears to the Commission that revenue derived from call termination charges is being used by the MNOs to subsidise for example, subscription charges, on-net tariffs and handset prices, and to finance retailer incentives. This appears to the Commission to represent a distortion of the price structure from that which would occur if the wholesale market were competitive.

***(f) whether the current level of the call termination charges of the MNOs results in customers of the fixed network operators (FNOs) effectively subsidising customers of the MNOs.***

The Commission's current view is that customers of the FNOs are indirectly subsidising customers of the MNOs. This is brought about because the termination charges of the MNOs appear to be set well above the costs of providing termination services, whereas regulation of the FNOs has forced their termination charges closer to costs. Mobile networks benefit from the regulated termination charges of the FNOs, while FNOs incur above-cost termination charges levied by the MNOs, these charges being then passed through into the FNOs' retail prices for calls. Moreover, customers of the FNOs who are not themselves mobile phone subscribers (an estimated 3 million households) do not benefit from the incentives offered by the MNOs to their own retail customers (in the shape, for example, of subsidised handset or subscription prices), such incentives being funded by the above-cost termination charges.

***(g) whether the current level of call termination charges of the MNOs allows them, through their on-net charges or otherwise, to compete unfairly against the FNOs;***

The Commission has yet to reach a view on whether fixed and mobile calls form part of the same retail market or could do so if the termination charges of the MNOs were at the competitive level. To the extent that MNOs and FNOs compete in the same retail market, the Commission is considering whether regulatory asymmetries distort competition between them. Termination charges levied by the MNOs appear currently to be well in excess of cost (see C (vi) below) and the MNOs are able to use the revenue they generate from termination to offer incentives (for example, in the form of handset subsidies and favourable outgoing call packages) to their subscribers at the retail level. As a consequence, they appear to enjoy a competitive advantage over the FNOs, whose termination charges to MNOs and retention on calls from mobiles are effectively regulated to levels at or near cost.

***(h) whether excessive profits are being earned by any of the MNOs either overall or in respect of any part of their business and if so, whether this is indicative of insufficient competitive pressure being exerted on one or more of the services offered by the MNOs.***

The Commission has looked at the profitability of each MNO at the overall level. From the accounting evidence available to the Commission to date, it appears that one of the four MNOs has been making profits in the UK in excess of its cost of capital. However, we note the high levels of marketing expenditure in its broadest sense incurred by all four MNOs and the effect this has had on profits. It seems that the MNOs are able to use excess profits derived from above-cost call termination charges to incur additional costs by, for example, subsidising other mobile services such as outgoing calls and subscription, or funding other discretionary expenditure such as marketing. The Commission's current view is that the overall profitability of each MNO is not critical as an indicator of competition in any particular part or parts of the wholesale or retail market. The Commission's current preferred approach to termination charges is to compare them with cost, rather than to consider profitability.

### ***C. Pricing and cost issues***

***(vi) Whether or not the MNOs' call termination charges are closely related to the true costs of call termination (including the cost of capital).***

The Commission's current view, from the evidence available to date, is that the MNOs' call termination charges are well above the efficient network costs of call termination, including the cost of capital. However, we are still considering to what extent non-network costs may be considered as part of the costs of call termination.

***(vii) Whether competitive constraints would be sufficient to ensure that the MNOs' call termination charges were set at or near the level of the true costs of call termination over the next four years or whether, alternatively, these charges would rise above cost in the absence of regulation.***

The Commission's current view is that, over the next four years, competitive constraints will be insufficient to ensure that the MNOs' call termination charges are set at or near the level of their true costs. It considers that, in the absence of regulation, termination charges would continue to be set well above cost.

***(viii) Whether, in assessing the MNO's respective termination costs, the basic cost allocation should be some form of long-run incremental cost, fully allocated cost or some other method. Whether the costs of an efficient operator should be used as a benchmark.***

The Commission's current view is that the most appropriate and economically efficient measure of costs is a form of long-run incremental costing, since this corresponds most closely to the outcome in a fully competitive market, where prices are driven down to marginal cost plus an allowance for common costs (if any) and any relevant non-network costs. Pricing based on long-run incremental costing also provides incentives to drive costs to efficient levels: that is, those which would be incurred by a reasonably efficient operator.

***(ix) Whether the call termination charges of the MNOs should be cost-reflective (with equal proportionate mark-up), should reflect the principles of Ramsey pricing or should be set in some other way.***

The Commission's current view is that call termination charges should be cost-reflective with equal proportionate mark-ups to allow for the recovery of relevant long-run common costs. A further mark-up, to cover the network externality, might also be allowed. The Commission is currently considering whether pricing according to Ramsey principles might be an inappropriate basis for setting the level of termination charges in the mobiles market, for any one or more of the following reasons:

- (i) it would be inequitable, as those fixed line users who do not pay for a mobile phone would face higher prices for calls to mobiles without receiving any benefit from the lower prices at which mobile phone services could then be offered to mobile customers;
- (ii) there would be no guarantee that the MNOs would set their many different retail prices at the Ramsey levels even if termination charges were set at the Ramsey levels;
- (iii) it would not represent the outcome of a competitive market;
- (iv) it could reduce competitive pressure between FNOs and MNOs, by widening or maintaining the differences between the retail prices of on-net and fixed-to-mobile calls;

- (v) the elasticity estimates which are necessary to calculate Ramsey prices are too uncertain; and
- (vi) the uncertainties referred to in (v) above are likely to give rise to considerable debate, thus increasing the regulatory burdens or the cost of regulation.

***(x) Whether the fact that fixed line termination charges are regulated means that, in the interests of fairness and efficiency, the charges for call termination on mobile phones must also be regulated.***

The Commission's current view is that, if regulation were deemed appropriate in respect of both fixed and mobile termination charges, a consistent approach would be desirable, so far as that was possible. However, the question of whether mobile call termination charges should be regulated is a matter to be decided on its own merits.

***(xi) Whether the differences between on-net and off-net charges for call termination reflect the cost differences between them and, if not, whether they should do so.***

The Commission's current view is that the differences between on-net and off-net charges for call termination do not reflect the cost differences between them. The Commission has formed no view as yet whether this is against the public interest.

#### ***D. The public interest***

***(xii) Whether the absence of a control mechanism on call termination charges operates or might be expected to operate against the public interest. In this connection, we shall want to pursue the following matters in particular:***

***(a) whether, in the absence of competition in call termination, the four MNOs are able to keep termination charges at higher levels than would otherwise be the case and whether this produces effects adverse to the public interest in the form of higher charges for consumers, an inappropriate price structure across mobile phone services offered by the MNOs, or in some other way;***

The Commission's current view is that, because of the absence of competition in call termination, the MNOs are able to keep termination charges at higher levels than would otherwise be the case. Without regulation of termination charges, the following additional adverse effects would, in the Commission's current view, follow. The MNOs would either maintain termination charges at or near their current levels or increase them further above cost. To the extent that this resulted in increased subsidy of handset or subscription prices, the resulting price structure would intensify the current distortion in the mobiles and fixed markets by encouraging switching or churn by mobile phone subscribers and distorting the direction of traffic (that is, the relative numbers of incoming and outgoing calls) or the overall volume of traffic, or both. Moreover, competition between FNOs and MNOs would be further distorted in the ways already set out above and this would operate to the detriment of fixed and mobile users.

***(b) whether, in assessing the public interest in relation to call termination services offered by the MNOs, we should take account of distributional considerations. For example, whether, and if so to what extent, the class of users receiving incoming calls to mobiles coincides with the class of callers to mobiles, so that those bearing the cost of any cross-subsidisation are the same as those benefiting from such subsidisation; or, again whether, and if so to what extent, the users of fixed lines (including payphones) who do not own a mobile phone subsidise users of mobile phones;***

The Commission's current view is that distributional considerations in this context are still of some significance. There is a proportion of customers of fixed lines that does not own a mobile phone, so that the populations of fixed line customers and mobile phone owners by no means coincide. This segment of fixed line customers is

subsidising users of mobile phones with few corresponding benefits. The same distributional considerations apply to users of payphones.

***(c) whether, if termination charges were further reduced as a result of regulatory action, the MNOs would be likely to increase their prices for other services and whether this would operate against the public interest;***

The Commission's current view is that if termination charges were reduced as the result of regulatory action, the MNOs might (i) increase call origination or subscription charges and/or (ii) reduce marketing, handset and subscription subsidies, and possibly the commissions offered to retailers. The Commission is still considering what the consequences of the imposition of a price cap would be at the retail level. However, the Commission's current view is that, to the extent that any of these courses of action brought about an increase in network usage and a reduction in "churn", they would not be likely to operate against the public interest.

***(d) whether externalities should be taken into account in assessing the public interest and if so, in what way and with what effect;***

The Commission's current view is that network externalities may in principle be taken into account in assessing the public interest, with a view to providing a subsidy, funded through a surcharge on termination charges, to be used in bringing marginal subscribers onto the MNOs' networks or retaining existing subscribers who may be at risk of leaving those networks. However, to meet this objective, any subsidy might be limited to the amount necessary to reflect the benefits that existing telephone users derive from contacting people who are thereby induced to join, or remain on, the network. The correct level of subsidy measured according to these criteria might be paid out through some kind of targeted scheme.

***(e) whether there would be any justification for imposing different charge control mechanisms on different MNOs.***

The Commission's current view is that, as each of the four MNOs enjoys the same kind of monopoly on the termination of calls on its network and as each sets these charges well above cost, there should in principle be no justification for employing different charge control mechanisms to impose price controls on the different MNOs. However, the application of the same price mechanism might result in different price caps for different MNOs. It may be that differences between the MNOs, for example, in the types of network they use (for example, 900MHz or 1800MHz) or in their cost of capital, would justify different prices even if the charge control mechanism were much the same.

### **Other public interest considerations**

12. The Commission is also considering whether the regulation of termination charges as the result of its investigation would itself bring about adverse effects. In particular, the Commission is considering:

- (a) whether, and if so how, the regulation of termination charges might affect the financial viability of one or more the MNOs; and
- (b) whether, and if so why, the regulation of termination charges might retard the roll-out of 3G voice and data services.

The Commission invites comments on the matters in (a) and (b) above, and any other impact adverse to the public interest that might be brought about by the regulation of termination charges.

## **Possible remedies**

13. In the following paragraph we consider possible remedies. Such remedies would be designed to address the hypothetical adverse public interest finding that, in the absence of controls on their termination charges, the MNOs would use the monopoly power that each has over the termination of calls on its network to maintain termination charges at levels well above costs. This would enable the MNOs (i) to subsidise handset and subscription prices, increasing switching or “churn” and distorting the balance of incoming and outgoing calls, or the overall volume of traffic, or both, while at the same time forcing rivals to raise the call charges they levy on their customers; and (ii) to maintain the distorted structure of prices that currently prevails, which leads to an unfair allocation of costs and benefits between those who call mobiles and those who own them, and between fixed and mobile operators.

14. Our current view is that the first possible remedy set out below, namely the setting of charge caps, is likely most effectively to address such an adverse finding, because it bears directly on the level of termination charges that we see as the root of the distorted price structure. However, we set out (under sub-paragraphs (b) to (h) below) other possible remedies that might wholly or partially, singly or jointly, address such a finding, and invite comment on them as well.

### **(a) The setting of charge caps**

The Commission’s current view is that, were it to make an adverse public interest finding in respect of the level of termination charges in the absence of regulation, the most effective remedy would be a price charge cap of the kind proposed by Oftel—that is, an RPI-X formula applied to the average termination charge. This remedy would address the adverse effect directly by capping the level of termination charges and forcing the MNOs to re-structure their prices as between different services, namely subscription, outgoing calls and termination. It would, however, allow them flexibility to vary pricing by time of day or year (possibly in accordance with Ramsey principles). In this connection, our current thinking is that:

- (i) termination charges should be cost-reflective, with equal proportionate mark-up to allow recovery of relevant long-run common costs;
- (ii) costs would be estimated on the basis of an appropriately formulated LRIC model (the bottom-up approach) described more fully in Annex 1. In order to ensure that the model is robust, it should be cross-checked against the data provided to the Commission by the MNOs (the top-down approach);
- (iii) non-network costs may well be a small component of relevant long-run common costs;
- (iv) externalities should in principle be taken into account with a view to inducing marginal subscribers to join, or stay on, the mobile network by means of a subsidy of network joining fees to be funded by a surcharge on call termination. The total amount of subsidy should, in principle, not exceed the value of the benefits existing telephone users derive from contacting those marginal subscribers who are thereby induced to join or stay on the network;
- (v) the Commission is considering whether there should be a one-off adjustment of the initial price to which the RPI-X formula would be applied, or whether there should be a “glide path” to the desired level, starting with the current level of charges (we summarise different views we have received on this matter in Annex 2);

- (vi) the Commission is considering whether it should recommend to OfTel that voice calls made on 3G technology should be brought within any price controls the Commission might recommend;
- (vii) the Commission is considering the impact on any price controls it might recommend of the fact that any such price control must fall away before 25 July 2003.

**(b) Technological solutions**

The Commission consulted the main and third parties to find out whether there were any feasible technological solutions to the problem that calls can only be terminated on the network to which the called party subscribes. The evidence suggests that there are few if any such solutions which are likely to be capable of implementation within the foreseeable future and which would be attractive commercial propositions for the MNOs. The Commission is currently consulting on whether any of these solutions is likely to be practicable for consumers and generate real benefits for them. (See also paragraph (d)(ii) below.)

**(c) Tying call termination charges to (retail) competitive services**

This possibility was discussed by OfTel in its 26 September 2001 Statement (see paragraphs 6.13-6.17). The Commission has considered two possible versions. Under the first, the year-on-year changes in termination charges would be tied to the average change in the prices for retail mobile services (as implemented by the Australian Consumer and Competition Commission). Under the second, termination charges would be tied to a change in the prices of a player operating in a competitive market, for example, BT or another FNO. Among possible objections to these proposals are that they would be inappropriate, because they would cause distortions in the more competitive retail market to which termination would be tied, or reduce the competitive pressures in that market. The Commission's current view is that this kind of regulatory intervention would be inappropriate because of the risk of distorting a more competitive market.

**(d) Increasing competitive constraints on call termination**

Again, OfTel discussed this proposal in its 26 September Statement (paragraph 6.3). OfTel considered three ways in which competitive pressures on call termination might be increased:

- (i) by encouraging developments such as some kinds of mobile virtual network operators (MVNOs), that would allow a party other than the mobile subscriber's network operator to offer call termination. OfTel considers that mandating MVNOs is not justified considering the state of competition in the broad mobile sector;
- (ii) by encouraging the development of mobile phones with more than one SIM card (or that operate with the network of more than one MNO). OfTel however considers that there are practical problems with this proposal and that in addition it is not clear that significant competitive pressure would be brought to bear on termination charges, because each SIM card provider would face the same incentives as the MNOs currently face, namely to set relatively high termination charges in order to have relatively lower prices for other services which mobile users value more highly; and
- (iii) by improving consumer information and price transparency. The purpose of this remedy would be to bring more pressure to bear on the termination charges of the MNOs by making consumers more aware of the costs of calling mobiles when first deciding which MNO to subscribe to, and of the prices of calling different mobile networks at different times. However, the Commission currently shares OfTel's view that, while improved transparency is desirable in bringing about increased

consumer awareness, it would be insufficient by itself to remedy the adverse effects set out above.

**(e) Receiving party pays**

The Commission is considering whether a system under which the receiving party pays (RPP) might be considered as an alternative to the regulation of termination charges. In this form of RPP, the billing systems of the MNOs would be modified so that called parties incurred the costs of the termination leg (but not the outbound leg) of an inbound call. This would bring about a greater concern on the part of mobile customers about the cost of call termination and encourage competition between the MNOs in order to gain customers. An additional incentive to the MNOs to keep termination charges low under an RPP system would be the desirability of encouraging customers to keep their mobiles switched on, so that they did not lose termination business.

**(f) Bilateral agreements**

One of the MNOs has suggested to the Commission that a better solution than price regulation would be for the MNOs to be subject to an obligation to negotiate and enter into bilateral interconnection agreements, where each MNO would set its termination charge simultaneously with the other MNO setting its charge, and with a further obligation to revert to Oftel if agreement could not be reached. It is asserted that such an obligation would result in termination charges being set at or around the efficient level, at least for mobile to mobile calls. The Commission is also considering whether this proposal should be coupled with a price cap on termination charges for fixed to mobile calls.

**(g) Non-discrimination**

It has been put to the Commission by one of the FNOs that a non-discrimination provision is required in order to prevent the competitive distortions brought about by the above-cost termination charges of the MNOs. This non-discrimination condition would require the MNOs to make an implicit charge to themselves of the same amount for termination that they charge other operators, in all circumstances where they provide termination services to themselves (that is, for on-net calls). This should apply in particular in cases where the MNOs provide retail fixed-to-mobile services using Mobile Virtual Private Networks (MVPNs). It has further been put to us that the non-discrimination provision would need to be supplemented by a price squeeze test (see (h) below).

**(h) Price squeeze test for fixed to mobile services**

It has been put to us by one of the FNOs that, where a service provided by an MNO is in direct competition with a service provided by an FNO, the MNOs should be required to pass a price squeeze test. The purpose of the test would be to discourage the MNO from rebalancing its tariff structure to earn low (possibly negative) retail margins and charging high wholesale prices and relatively low retail prices, effectively circumventing the non-discrimination provision. The test would involve comparing the relevant retail price with the price arrived at by combining the mobile termination rate, relevant retail costs and a normal rate of return. It would be necessary to ensure that the retail price chosen was the price of calls to mobiles over MNOs' MVPNs, since this was the key product on which the MNOs competed with the FNOs, and that the test was applied on a quarterly basis, in order to derive a cost floor for peak and off-peak, below which MNOs would not be permitted to price for MVPN services. The MNOs would be required to file their lowest prices charged for fixed-to-mobile services over MVPNs.

**ANNEX 1—(see paragraph 14(a)(ii))**

The Commission's current view is that the relevant period over which costs should be considered is the long run, that is, the period over which all costs can be varied, and that the relevant incremental cost is the average unit cost of providing the service. The Commission's current view is that the most appropriate increment is total voice traffic, with the cost of this increment then being allocated to individual services on a cost causation basis. As this is the basis of Oftel's April 2002 model, the Commission believes that it is the appropriate starting point, but some amendments may be required to meet valid objections by MNOs.

**ANNEX 2—(see paragraph 14(a)(v))**

The Commission has noted Oftel's view that a glide path provides greater incentives to the MNOs to reduce costs (since the regulated company is able to keep the benefits of efficiency gains for a period before consumers capture these gains through lower prices), and would produce less disruption in the markets. The Commission has also noted the views of some of the FNOs that there should be a one-off adjustment, on the grounds that (a) the MNOs have been setting call termination charges above cost for some time and it is therefore appropriate that price distortions in call termination should be corrected with immediate effect; (b) any market disruption would be minimal: any increase in the retail price that was justified as a result of the loss of revenue from termination charges should not be significant, even on a highly conservative estimate; (c) fixed network users and mobile network users are by no means identical and it is inequitable that the former should continue to subsidise the latter; (d) there is no argument for a glide path on the grounds that mobile termination needs to be above cost in order to drive penetration; and (e) the MNOs should be given no incentive for delay in implementing charge cuts. One third party has proposed a middle course. This party acknowledges the view that regulation should not undermine incentives for operators, and believes that incentives would be diminished following a one-off reduction down to cost. At the same time, it believes that the MNOs are earning well in excess of costs, brought about by efficiency gains but also by the generosity of the price cap. This party therefore proposes an initial reduction to a level which is 50 per cent between current charges and cost of termination, followed by a glide path.