Response to Ofcom's Preliminary Consultation on the Future Regulation of Wholesale Mobile Voice Call Termination

on behalf of Orange Personal Communications Services Ltd

29 July 2009

[Non confidential version]

Executive summary

In general, we agree with Ofcom's preliminary views on the options for future termination regimes. We do not believe that the time is yet right for a complete overhaul of the system and propose that Ofcom can minimise regulatory risk by continuing to apply a long run incremental cost (LRIC) methodology which incorporates a markup for fixed and common costs to calculate the appropriate charge for the mobile call termination service. In an economic climate where the returns on investment are low relative to the cost of capital for the mobile industry, the risks of switching to an alternative regime or adapting the current regime are high. Credit Suisse[1] report that the average European mobile industry return on capital employed (ROCE) has fallen from 8.1% in Q2 2007 to 6.3% in Q1 2009 well below the Ofcom reported weighted average cost of capital (WACC) of 11.5%[2] of 2007. Indeed, mobile industry returns first fell below the cost of capital in 2004 and have not recovered since. Falling revenues from termination rates will exacerbate this situation.

If the charge for the mobile termination service falls below cost then mobile network operators (MNOs) are forced to recover this cost from elsewhere and to reduce investment in termination related activities. This results in higher prices for customers and lower investment in the network. Termination rates are crucial to the business to ensure that customers enjoy a high quality of service and low retail prices. Operators must be unencumbered to provide the highest quality, best-in-class innovative services to their customers and in order to do this, investment incentives must be set right. The role of the Regulator is to ensure that mobile network operators have the correct incentives to invest in their networks and in the development of new technologies and they can do this by ensuring that costs are covered and that operators are able to charge for services offered. Mandating any operator to offer a service below cost risks contravening Article 13 of the Access Directive of the European Commission on price control and cost accounting obligations which states that "National Regulatory Authorities shall take into account the investment made by the operator and allow him a reasonable rate of return on adequate capital employed, taking into account the risks involved."

Furthermore, Orange believes there is no real evidence of new technologies (e.g. VoIP) changing the picture of significant market power in the provision of mobile termination services. The alternative options to charging for this termination service at cost would have a negative impact on consumers as operators would be forced to recover the costs of termination from other areas and to reduce investment both reducing quality of service and

[1] Credit Suisse, European Mobile Report 22 May 2009
[2] Ofcom Mobile Call Termination Final Statement March 2007

increasing price for the end consumer. The current mobile call termination charging system is consistent with the technology used in mobile call termination and there is no compelling case at the present time and for the foreseeable duration of the charge control to change this regime. We anticipate that the issues and options that Ofcom has raised may well be relevant for the period of the next charge control which we currently anticipate commencing in 2015[3] and at this point may require joint consideration of fixed and mobile technologies.

In summary, we support Ofcom's preliminary assessment and propose that Ofcom commence the process of calculating the long run incremental cost of mobile call termination in order to arrive at a regulated termination rate in advance of April 2011. Having a clearly set glidepath agreed by all parties in advance will help create certainty for the industry as a whole. We set out our response to Ofcom's specific questions in the remainder of this short document and welcome the opportunity to engage with Ofcom in more detail on the preferred option during the course of the consultation.

[3] Following Question 5.1, we assume the period of this charge control runs from 1 April 2011 to 31 March 2015.

Market Definition

Question 3.1: Do you agree with our preliminary view on market definition? Has anything changed, or is anything likely to change within the period of the next review, which would materially impact on the definition of the market(s)?

We agree that there is no compelling evidence at either the retail nor the wholesale level to suggest that Ofcom's market definition should be changed yet. Despite new offers which have emerged, such as Skype on H3G, the phonecalls to mobile phones made via these products must still be terminated to mobile numbers and so incur a termination charge. There is currently no method for a call terminating on a mobile network to bypass the termination charge and therefore MNO's continue to have a monopoly in the supply of termination services. There is no effective substitute for terminating a call to a mobile number on a mobile handset.

The technology allowing VoIP on mobile phones is still relatively undeveloped and is very unlikely to develop to a point which affects market definition during the period of the next review and therefore we recommend that Ofcom retains its position. Recent research by Ofcom[4] suggests that network performance is an important factor when selecting a mobile service provider. VoIP is still not an effective substitute for the circuit switched voice service over mobile as the quality of service is lower. VoIP suffers from problems in cell handover when used as a mobile service so there will be a higher incidence of call interruption, delays and dropped calls. In this way, VoIP cannot offer a comparable voice product to mobile voice.

The emergence of convergence type products on the market combining fixed and mobile technologies has prompted some debate over which is the correct termination rate to apply for converged products. However, these products ultimately rely on terminating via the radio access network and thus require the application of a cost-based mobile termination rate. The product remains mobility as a customer could move between networks without cell handover problems. Therefore the market definition of mobile remains crucial and the development of convergence type products does not alter this.

[4] http://www.ofcom.org.uk/consult/condocs/qos08/provision_qos/qos.pdf

Assessment of Market Power

Question 4.1: Do you agree with our view? Or are there other developments, not considered elsewhere in this consultation document, for potentially removing the underlying causes of SMP?

We agree that MNO's continue to have a monopoly in the supply of termination services. There is currently no method for a call terminating on a mobile handset to bypass the termination charge and this is not likely to change during the period of the next review. The volume of calls made via VoIP is relatively low and we concur with the Ofcom view that developments in VoIP technology are unlikely to have a significant impact on the market prior to 2015. In the future, if it is possible to terminate VoIP calls to a mobile number without using the radio access network, then operators would no longer have significant market power over the termination of calls to mobile numbers but we do not envisage that this would be possible during the lifetime of this charge control. It is the radio access network which permits mobility and this will remain key. In addition, with the entry of other operators providing a mobile termination service through the release of dect guard band spectrum, we recommend that Ofcom review to whom the regulation applies.

Consumer Harm

Question 5.1: What are likely to be the main sources of detriment to consumers of excessive termination rates in the period 2011 to 2015?

Excessive termination rates, in our view, entail rates which are set above cost. Our definition of cost is consistent with Ofcom's definition of cost under the LRIC+ option and as explained at length in the Ofcom March 2007 final statement on call termination. This definition means that the long run incremental cost of termination is calculated and an allowance for fixed and common costs and for spectrum fees is also included in the resulting mobile termination rate. We note that it is the definition of cost that determines whether a rate is viewed as excessive or not. Therefore, our view is that termination rates are excessive if they are set above this definition of cost. If termination rates are set above cost then it is possible that operators will either retain this as profit and consequently set retail prices higher than the competitive level or in a highly competitive market would compete away this profit by lowering prices on the retail market – the waterbed effect. Evidence on the waterbed effect is as Ofcom notes, inconclusive, but the study by Valetti and Genakos[5] does provide evidence more in favour of a waterbed effect than against. In a highly competitive market the waterbed effect would be complete and in an unregulated monopoly there would be no waterbed effect. The empirical

[5] Valetti and Genakos, "Testing the Waterbed Effect in Mobile Telephony" CEP Discussion Paper No 827, 2007

situation in the UK is therefore somewhere between the two ends of the scale. Ofcom's recent review of the mobile market[6] states that the UK has the most competitive mobile market in the world, therefore we would expect the waterbed effect to be greatest in the UK. In this context it suggests, that if termination rates are set above cost then the risk of detriment to consumers is the lowest because any profit made is then competed away through lower prices. This element affords some flexibility to Ofcom, with regard to its comments on the risk of setting the wrong rate as it means that any excess is likely to be given back to consumers.

In our view, the detriment to setting the termination rate too low is likely to be greater. If termination rates are set below cost, MNOs will be forced to recover costs from other more elastic services, contrary to Ramsey pricing[7] principles. This means increasing the price of other services, for example, data. If competition in the market dictates that is not possible to increase the price of other services, for example data pricing is extremely competitive in the UK, then MNOs would be forced to restructure the pricing of voice services to rebalance revenues to ensure that network investment can continue. Prepaid customers would be the hardest hit as they generate the highest amount of termination traffic relative to the revenue they generate for MNOs. Low-value prepaid customers generally receive more calls than they make and so a below-cost termination rate would not cover the cost of servicing these customers. If these customers are to remain on the network it may be necessary to charge them a minimum monthly fee or a higher per minute fee or a fee to receive calls. In the end, it is these customers who would have to pay more for the same service, whilst other, higher end customers may pay less.

In our view, this culminates in a policy decision. The choice is effectively between a policy of high penetration from minimum monthly access fees (postpaid only) with cost-related usage pricing and an efficient level of usage **and** a policy of low penetration and below-cost pricing and low penetration from the application of monthly access fees for all customers with below-cost usage pricing and a level of usage above the efficient level per person. Total traffic under the latter may not vary much from the former – as it would be fewer customers making more calls. The Analysys Mason report for Ofcom "Case studies of mobile termination regimes in Canada, Hong Kong, Singapore and the USA" clearly sets out on p11 that minutes of use are higher under bill and keep regimes (and may be overstated in some cases) but penetration is lower.

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[6] http://www.ofcom.org.uk/consult/condocs/msa/msa.pdf

[7] Ramsey pricing shows that it is more efficient to recover common costs from the least elastic services where demand is least sensitive as recovering cost from elastic services where demand is highly sensitive to price will have a distortionary effect on this demand.

Therefore a policy of setting MTRs below cost is in line with a policy of low penetration with high usage per customer and a policy of setting MTRs at or around cost is consistent with a policy of high penetration with an efficient level of usage per customer.

Policy Approach

Question 6.1: Should our policy approach to regulating MCT change? For example, given the possible benefits, should we adopt a policy of reducing termination rates as far and fast as we reasonably can, within the boundaries of sound economic policy, and whilst recognising underlying cost differences? If our policy approach did change, what do you think are the relevant factors for us to consider deciding on the best future policy to regulating MCT?

In our view, the policy of Ofcom should not change. The policy should continue to set cost-based termination rates which as stated above is consistent with the policy of high mobile penetration, cost-reflective usage prices and an efficient level of usage per customer. As efficiencies are being achieved across the industry it is appropriate that MTRs should continue on a downward trend to capture these increases in efficiency and to further incentivise industry to create further efficiencies. However, the level of MTRs should not jump to a level which is below cost as this will have negative effects on industry, consumers and investment.

It is one matter to allow termination rates to persist above cost but it is another more serious matter to set termination rates below cost in a competitive market structure such as the UK. If MTRs are set above cost in a competitive market like the UK, then any profit will be competed away on the retail market as explained by the waterbed effect. In this case, any immediate jump to a significantly lower MTR would negatively impact retail pricing. Operators would either have to increase prices quickly as a knee-jerk reaction or would have to slowly increase prices over time. A gradual move to lower MTRs (to reflect efficiency gains and lower costs) in a highly competitive market would also entail a gradual decline in retail prices, rather than the waterbed effect.

Whilst the risk of regulatory failure is high with below cost MTRs, the risk of corporate failure is also high with serious consequences for the UK mobile market structure. The combination of returns on investment falling below the cost of capital and below cost MTRs could accelerate corporate failure in the UK mobile industry thereby reducing the competitive intensity of the market and ultimately reducing benefits to consumers.

In our view, Ofcom has selected the appropriate criteria – economic efficiency, consumer welfare, competitive impacts and commercial and regulatory consequences to assess the possible options.

Other options

Question 6.2: Are there additional options (other than the six set out in this consultation) that we should consider? If so what are they and what advantages/disadvantages do they offer?

In our current opinion, there are no further options that Ofcom should be considering at this stage.

Other factors to take into account

Question 6.3 Do you agree with our preliminary views set out for each of the options? If not, what are the additional factors that we should take into consideration, and why are they relevant to our analysis?

On the whole, we agree with the Ofcom analysis for the six options. However, we feel that further investigation and analysis could provide greater insight into the impact of each option. For example we think it would be worthwhile to undertake market surveys on receiving party pays options to examine the willingness of customers to pay to receive calls under the Bill and Keep option. In addition, we have provided further papers on bill and keep from the technical and economic perspectives and hope that Ofcom will take these papers into account. It would also be helpful if Ofcom were to fully examine the potential rise in spam voice calls as a result of bill and keep and the effect on consumer welfare and consumer attitudes towards mobile telephony. We envisage that any further research on the waterbed effect in the UK would also be useful.

Deregulatory Option

Question 6.4 Do you agree with our preliminary view of the De-regulatory option? If not what are the additional factors that we should take into consideration, and why are they relevant to our analysis?

We agree that this is not a viable option at the present time. H3G has only just been regulated, and prior to regulation, it charged rates in excess of cost so there are still incentives in the market for some operators to charge above cost therefore it is appropriate to retain regulation of all operators set at symmetric levels.

However, we acknowledge that the deregulatory option may be a possibility in the future if it is possible to terminate VoIP calls and offer mobility without using the radio access network and should be considered further in the next review period.

LRIC+ Option

Question 6.5 Do you agree with our preliminary view of the LRIC+ option? If not what are the additional factors that we should take into consideration, and why are they relevant to our analysis?

Ofcom has consistently applied LRIC+ over the years and in our view there is not enough evidence to support any departure from this methodology.

We support the Ofcom view that LRIC+ has been applied effectively in the past and has been upheld on appeal. We would like to point out that the recent enquiry by the Competition Commission[8] into the price control matters concerning the appeals of BT and H3G validated Ofcom's LRIC methodology. The areas where the Competition Commission disagreed with Ofcom's approach were outside the LRIC methodology eg externalities and the calculation of the contribution of the 3G licence fee to the MTR. In particular, the Competition Commission supported Ofcom's approach to calculating common costs and the principle of including a 3G licence fee contribution to the termination rate.

In our opinion, any departure from the LRIC+ methodology would require proof that retail price flexibility were constrained.

[8] Competition Commission Final Determination January 16 2009

__Long Run Marginal Cost (LRMC) Option__

Question 6.6 Do you agree with our preliminary view of the LRMC option? If not what are the additional factors that we should take into consideration, and why are they relevant to our analysis? In addition what do you expect the costs of a move to this option to be?

We agree with Ofcom that the risk of regulatory failure in the UK is higher under the LRMC option than under the LRIC+ option. In addition, it is important to factor in the potential losses from setting MTRs below cost. As explained above in the the UK market, any profits generated from an MTR above cost will be competed away on the retail market but any losses from an MTR below cost would either result in higher prices for other services or would result in the introduction of minimum montly charges or charges to receive calls, all of which would have a distortionary effect on the UK mobile market. Therefore we expect the costs of moving to this option to be fairly significant in terms of costs to the operators and the loss to consumer welfare.

We would also like to make the following points about the LRMC methodology:

- Cost calculation should include all traffic terminated not just third party termination.
- Cost calculation should include common costs as it is inefficient to recover all costs from other retail services eg data. Data is priced extremely competitively in the UK and a shift in the cost burden will negatively impact pricing and will damage takeup at this crucial point. For example, offers such as £15 for 3 GB for both postpaid and prepaid have become commonplace in the market whilst operators encourage takeup of mobile broadband. If the relevant common costs cannot be recovered from voice termination then the structure of data pricing may have to change to recover these costs.
- Common costs: The LRMC methodology does not allow for the appropriate recovery of common costs. The recent final determination from the Competition Commission endorses Ofcom's approach to calculating and allocating common costs and does not find that competitive distortions between fixed and mobile operations will arise as a result.
- The current LRIC+ methodology does not create any on/off-net pricing differential which causes competitive distortions between the mobile operators as all 5 MNOs offer inclusive minutes which cover any network.
- Fixed termination rates should also be set at cost but different costs are relevant for the calculation. Ofcom need to see this consultation in the context of the Fixed Network Charge Control Consulation but to also recognise that technologies differ,

timescales are different and there may be scope for bringing fixed and mobile termination charges together at the next review in 2015 or earlier if necessary.

Capacity Based Charging Option

Question 6.7 Do you agree with our preliminary view of the CBC option? If not what are the additional factors that we should take into consideration, and why are they relevant to our analysis? In addition what do you expect the costs of a move to this option to be?

In general, we agree with Ofcom's analysis of CBC. CBC may be theoretically appealing but in practice we envisage that it will be difficult to implement and does not reflect the true value of mobile capacity relative to fixed capacity and the true value of voice relative to data. The use of network capacity for either voice or data is still at the developmental stage and it is too early to be able to accurately forecast changes in demand for capacity. For example, the recent rise in dongle usage has created unexpected capacity constraints. The creation of secondary markets in capacity would add an unnecessary layer of complexity and inefficiency at this point to a model which is simply about allocating a scarce resource (capacity) to it highest value usage.

A capacity based charging model may be relevant in the future when known capacity availability and usage can be more clearly forecast. However, the costs of moving to a capacity based charging system would be high as all traffic would need to be measured and monitored by operators and Ofcom alike.

Mandated Reciprocity Option

Question 6.5 Do you agree with our preliminary view on mandated Reciprocity? If not what are the additional factors that we should take into consideration, and why are they relevant to our analysis? In addition what do you expect the costs of a move to this option to be?

We agree with Ofcom's view and would like to point out that the costs of terminating traffic on the mobile network are far higher than the costs of terminating traffic on the fixed network in the UK. We understand that fixed termination charges are being set separately under the Network Charge Control Consultation and in our view, this is the appropriate way to proceed for the time being. We note that the timing of the two charge control periods (fixed: 2010 –

2013 and mobile 2011-2015) does not coincide and we propose that Ofcom could review the relative charge controls for both fixed and mobile at the expiration of the fixed charge control to take account of any unforeseen technological developments which take place between now and 2013. In our view, cost based termination charges remains the most efficient way to proceed and this should apply to all technologies, whether fixed or mobile.

The costs of a move to mandated reciprocity would be significant for mobile operators. If fixed termination charges are increased to the level of mobile termination charges we would suffer a huge increase in interconnection costs which would have to be passed on in retail pricing. If mobile termination charges were reduced below cost to the level of the fixed termination charge we would suffer a huge loss and would be forced to recoup this elsewhere.

Bill and Keep Option

Question 6.5 Do you agree with our preliminary view of the B&K option? If not what are the additional factors that we should take into consideration, and why are they relevant to our analysis? In addition what do you expect the costs of a move to this option to be?

Bill and keep, in our view, offers the worst of all worlds. It would require us to offer a service below cost for which there is no return at all and so would require further regulatory intervention to mandate interconnection, otherwise some operators may refuse to interconnect. The attached papers explain why bill and keep is economically inefficient and technically difficult to implement. Professor Robin Mason demonstrates that there is insufficient evidence to support the argument that call externalities could justify bill and keep. Furthermore, we believe that regulatory intervention to mandate bill and keep would be contrary to Article 13 of the Access Directive as it would require an operator to provide a service below cost.

The appeal of bill and keep is apparently its simplicity however the need to mandate interconnection and to install traffic monitoring systems, not to mention the cost of spam phone calls would render the costs of moving to bill and keep high.

Bill and Keep Annexes:

1. Robin Mason Paper: The Economics of Bill and Keep
2. France Telecom Orange Discussion Papers on Bill and Keep – Economic Summary
3. France Telecom Orange Discussion Papers on Bill and Keep – Technical Impact