[Name redacted]

Dear OFCOM,

My response to your queries.

1) Yes, by allowing greater competition, and more economically efficient pricing distribution. Do it by cutting termination pricing to incremental cost so operators are not economically required to charge RPP, and do this gradually so MNO's have no justification for raising tariffs (average equipment cost drops of 15%/annum support average per minute pricing drops of 15% per annum, supporting roughly 2pence per minute annual drops in termination charge without any need to raise prices on other calls). This will also allow time to introduce commercially desirable tariffs for groups that make more calls than they receive.

2) Without RPP or my suggestion in point 1, No. At least not before Mobile VoIP is possible at sufficient quality to be acceptable (I speculate 10yrs) and even this assumes data pricing so far beneath voice that consumers drop their mobile number in favour of a single (Skype etc.) number.

3) No. Quality of experience on mobile does not support uptake. Also many current mobile data tariffs are actually more expensive on a price per bit basis than circuit switched voice (economic incentive only starts at less than 50% of the cost).

4) Aside from the modification to RPP I suggest in point 1) , I do not believe so.

5) Retail minus is a sensible approach given the cost of equipment typically declines in the order of 15% per annum. However the starting cost point is incorrect. Nevertheless, a planned, gradual declining cost structure is sensible for planning purposes to minimise disruption in a switch to incremental cost termination charges.

6) The current asymmetric regulation is madness - 3G is a system designed to be more cost effective on a per minute cost basis, at the very least the costs should be as low as for 2G and if a correct incremental price analysis is done, lower.

7) Yes. MNOs will easily increase the proportion terminating on 3G by spending inefficient amounts on 3G handset subsides and network coverage.

8) Yes, this would be an appropriate step to move regulation towards future looking incremental cost regulation that is appropriate given the huge potential for traffic growth. There should be no problems applying this to a pure 3G operator, as if the costing analysis is correct, it should (at least on an incremental basis) be delivering lower numbers anyway.

9) On the basis of the lowest incremental cost of any network for calls to fixed. If other networks can't match that cost, they are free to invest in the efficient technology that allows the lowest cost operator to do so.

10) Absolutely not. if the idea is to match the charge with costs, the costs are irrelevant of the source of the call. This would just allow larger operators to use network effects to dominate the market.

11) Where such data services are not on a RPP basis, absolutely yes, they should be regulated the same way as voice.

My view points, biases and suggested policy

I am a global telecom equipment stock analyst for a bank. In general terms (not true for all stocks) I have a positive stance on those exposed to wireless infrastructure spending. Thus, even though the UK market is small in a global sense, I could be accused of bias in that any regulation that promotes mobile call volumes could aid my stance. However I affirm that these

are my genuinely held personal views and not related to my occupation beyond the knowledgebase it has given me.

Viewpoint: I am constantly bemused that UK MNO's are allowed/able to charge such high termination/general call rates relative to prices in other countries (outside Europe) or to wireline operators.

The very simple example of developing markets demonstrates the situation. In markets such as India, call charges are as low as US$2-3c/minute, and Wireless service is seen as cheaper to deploy than Wireline, which is often being skipped over. Given that the exact same GSM equipment being used in the UK generates such pricing, there are two seemingly inexplicable issues.
1) Why is pricing allowed to remain an order of magnitude higher than the demonstrable cost of provision? Your cost analysis fails to match my understanding of reality. Even if we ignore incremental cost and look at all in costs including OPEX and spectrum costs, in the US operators are cash generative despite revenues per minute in the order of US$8c.
2) How can a cost analysis give higher results for terminating on mobile than on Fixed, when the developing market strongly indicates the economics have shifted to become the other way around?

Suggested policy

1) Rather than calculating an all in cost per minute of provision whether incoming or outgoing, incoming should be treated as a separate cost category. The cost of an provision of an incremental voice minute is essentially = to the electronics cost, with no need for any OPEX or customer acquisition costs to be bundled in (I am not more inclined to call someone on another network because they were subsided a flashy phone rather than a dull one). If any provision for the cost of spectrum is made, it should be done on the basis of theoretical maximum usage of the spectrum (very, very, very high) rather than current minutes of use. The aim being to determine the cost of an incremental minute, and hence achieve economic efficiency for UK wide usage of calls to mobiles. This should be at most US$2-3c as described above, if it is not, something is going wrong in the math.

2) As per point 4.11 of the consultation, I believe the best compromise to avoid complex regulation might be to set the interconnect rate for all calls to be the cost/minute of the cheapest (so as to generate incremental cost) bundle of calls to fixed on any UK network (this would allow the smallest networks to set interconnect pricing so as to minimise their interconnect bill, but still at an economic rate for actually providing the network resources). Note this should be the mobile to fixed cost (less any fixed interconnect bill), not the on-net mobile to mobile described in 4.11, as mobile to mobile uses twice the network resources. It is also important that the price is not set by the individual operators themselves, but rather by the lowest priced operator overall, as otherwise such an approach merely dilutes rather than eliminates the monopoly on call termination. This is not at all unfair, as the operators share the same technology type/cost base.

3) If pricing is set as Per point 1/2, then operators MNO's would have no economic justification for introducing RPP as receiving (or losing) an incremental call would be a P&L neutral event. They would then be in a position to make a purely commercial decision as to whether to best recover their OPEX and customer acquisition costs through charging for incoming or outgoing calls, and optimise their network cost via charging to receive calls at different times.

4) This might best be achieved by a continuation of the termination cost cuts regime to move the cost to incremental cost over a period (say 3yrs) that would minimise disruption and allow MNO's time to make the purely commercial decisions described in point 2. There is no reason to believe consumers will not accept paying for incoming calls, if it is simultaneously mixed with lower costs for outgoing calls. It presumes an unrealistic degree of consumer ignorance to presume consumers do not know if they make or receive more calls on average. Indeed there should be many users for whom this is the most economically desirable plan. That

operators are not offering such plans (at least not a pricing that generates uptake) is a clear indication that current interconnect pricing is incorrectly set vs. costs.

5) In the long term a move to RPP for all calls whether wireline or wireless is the only sustainable solution that removes monopoly power without t introducing undue technical complexities. Also, regulation of based on historic cost creates significant inefficiencies in an industry that has so consistently generated both massive reductions in incremental cost of provision and massive increases in usage. Forward looking cost regulation is more economically efficient, but is only practically possible by self regulation via competition. I agree with your view that Data is the best hope of achieving this in the long run. Regulation now banning MNOs and FNOs from discriminating data charges based on content type, or restricting certain Quality of service settings to themselves, may be the most effective method of achieving this (note this should still allow for discriminating charges based on Quality of service provided, as this relates to the cost of provision, just that any data QoS provided by the MNO should be available as an interconnect option to third parties).

Best Regards.