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**WHOLESALE MOBILE VOICE CALL  
TERMINATION:**  
CONSULTATION RESPONSE BY COLT TO OFCOM

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29 July 2009

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## 1 EXECUTIVE SUMMARY

COLT welcomes this review of Mobile Call Termination (MCT) charges.

As a fixed line Communications Provider (CP) COLT is in favour of seeing MCT rates continuing to reduce on a Charge Controlled “glide path”.

COLT is strongly in favour of an approach which is consistent and predictable. Without stability in regulatory charge control, future investment in spectrum, infrastructure and new products will be diminished. COLT is therefore in favour of the LRIC+ approach with consideration of a possible move to LRMC in 2015.

In addition to MCT there are other areas of mobile network operation that require regulatory intervention. These include wholesale access to airtime by new entrants and, in particular, the current practice of MCT “seesawing”. Here, the time of day balance of the MCT rates are switched from a high daytime/low weekend rate to a low daytime /high weekend rate on a month by month basis. This exploits a regulatory loophole to artificially inflate the MCT rates to the detriment of customers and competition.

## **2 REGULATORY ENVIRONMENT**

### **2.1 Introduction**

COLT is pleased to participate in this consultation review on Mobile Call Termination (MCT) charges.

Whilst a review of charge controls for voice termination is welcome, Ofcom must accompany this with regulatory policy and remedies in other areas of mobile network operation. Without this, competition is impeded by making it more difficult for new entrants to enter the mobile services market.

### **2.2 Past Regulatory Shortcomings**

The past few years have seen areas of operation of the mobile networks where the absence of effective regulation has caused difficulties for consumers and new entrants:

- Difficult or impossible wholesale access by new entrants to incumbent network capacity (Mobile Virtual Network Operators (MVNOs), national roaming)
- Anti-competitive behaviour by incumbent network operators including:
  - Blocking of access to mobile number ranges belonging to new entrants
  - Excluding calls to mobile number ranges belonging to new entrants from retail price bundles
  - Inflation of termination rates (3G blending) without giving notice or issuing an OCCN
  - MCT seesawing - changing the time of day split of termination charges month by month to gain a termination charge advantage
  - Setting wholesale rates to new entrants higher than the equivalent retail rates
  - Refusing to enter into number portability arrangements with new entrants

Of these difficulties, fixed Communications Providers (CPs) have previously suffered from the inflated 3G blended termination costs and are presently still suffering from the practice of seesawing.

### **2.3 MCT Seesawing**

Two of the incumbent MNOs are altering their MCT rates every month. In months with four weekends the time-of-day split is conventional: higher in the daytime and lower at the weekends. In months with five weekends the profile is reversed with the weekend rate being the highest. This appears to be a means of taking advantage of a loophole in the way Target Average Charges (TACs) are verified under the present regulatory scheme.

It is impossible for most CPs to alter their retail pricing to reflect these changes. It is a regulatory requirement that customers are given a minimum of one month's notice for price changes. In the corporate market many large customers are on fixed price, fixed term contracts which makes price changes impossible. In any case such monthly price changes would be onerous and confusing for customers.

The practical effect of monthly rate swings is that originating CPs have to set retail rates to cover the highest expected charges. This is necessary to ensure that losses are not incurred through an adverse combination of traffic and MCT profile. Higher retail rates are a disadvantage to consumers and dampen competition and ultimately the purpose of charge control is diluted.

The energy industry has addressed the lack of transparency surrounding the levels of the electricity distributor charges by implementing a centralised and transparent system<sup>1</sup>. Electricity distributors provide information to retailers enabling them to forecast the likely direction and magnitude of distribution charges. A similar arrangement has been implemented in the gas sector. This information is stored on a single centralised publicly available website. Ofgem is also working on centralised governance. These principles enable transparency and certainty and could be adapted to the telecommunication sector.

COLT therefore urges Ofcom to mandate that the practice of rapidly fluctuating MCT rates ceases.

There are various options that could be considered:

- Setting a maximum number of times that prices can be changed within a 12 month period, for example two times only.
- Set a minimum period that must elapse after a price change before another change can be made, for example six months.

Ofcom should consider launching an own-initiative Competition Act investigation into this practice.

### 3 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)?*

COLT agrees with Ofcom's market definition

### 4 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?*

COLT agrees with Ofcom's assessment of Market Power.

### 5 MCT OPTIONS

*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 in deciding on the best future policy to regulating MCT?*

<sup>1</sup> Refer to the Change Proposals DCP030 which describes the changes requiring distributor companies to centrally publish their forecast cost - <http://www.dcusa.co.uk/Public/CP.aspx?id=36>, which came into effect during 2009.

COLT fully supports a policy of reducing MCT using sound economic analysis. However, for reasons of stability and predictability this should be achieved by using a glide path supported by a LRIC+ analysis.

### 5.1 Lower MCT

In the long run, lower MCT rates will benefit both fixed and mobile consumers. Lower MCT rates give CPs greater flexibility in offering a variety of retail packages and tariff structures.

Lower MCT rates would ameliorate possible competition concerns over on and off-net price differentials. Lower MCT will also lessen concerns over the differential between fixed and mobile termination rates.

Lower MCT will also reduce the commercial justification and incentive for arbitrage and work-around market “solutions” (which often generate their own inefficiencies and unwelcome side effects) such as:

- H3G’s “We Pay” offer where H3G’s prepay customers’ credit was credited with 5ppm when receiving inbound calls. This credit was funded by H3G’s (then unregulated) MCT receipts.
- The fact that GSM Gateway (or SIM box) operators are able to terminate calls more cheaply using airtime than is possible through the interconnect routes where the MCT rates apply

### 5.2 Stability and Predictability

COLT is opposed to a rapid decrease in MCT as this will create instability and uncertainty. It could damage the sustainability of fixed line competition by pushing traffic from fixed to mobile at a greater rate than at present.

Uncertainty will affect future investment by new entrants in spectrum, infrastructure and new products and services.

COLT therefore favours maintaining the LRIC+ approach in the new charge control period of 2011-2015 with consideration given to other methodologies thereafter.

### 5.3 Future MCT Regimes

Ofcom has proposed six policy options for MCT regimes.

- Deregulation
- LRIC+
- LRMC
- Capacity based
- Reciprocity
- Bill and Keep

Of these, two can be discounted immediately, and two merit detailed consideration.

*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?*

*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?*

COLT has no suggestions for additional MCT options.

However, COLT believes that Ofcom should give consideration to a supplementary remedy to deal with mobile on-net and off-net pricing differentials. At paragraph 5.16 the consultation acknowledges that MCT rates create a “floor” for calls passing between mobile networks. On retail pricing plans where there is a differential between the cost of calling on-net and off-net numbers there is the potential for distortion in consumer choice between the two call types. Since an MNO’s MCT is cost-orientated, Ofcom should give consider restricting the MNO’s ability to set retail prices for on-net calls below their level of MCT.

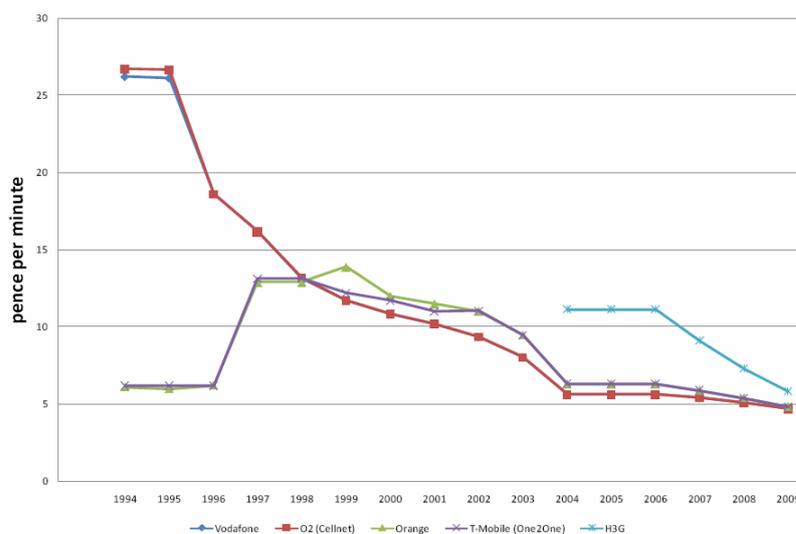
### 5.3.1 Deregulation

*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?*

MNOs in the UK have a history of seeking to keep MCT as high as possible.

- Figure 7 in the Consultation (reproduced below) illustrates that in 1994 Vodafone and Cellnet (O2) had MCT rates of 27ppm.
- Orange and One2One (T-Mobile) launched with lower termination rates but these quickly rose to 13ppm in 1998 when these two networks realized that MCTs were “hidden” from consumers

Figure 7: Changes in the termination charges payable by BT



Source: competition Appeal Tribunal, Competition Commission and Ofcom

- H3G launched in 2003 with a termination rate of 11ppm which was considerably higher than the Ofcom Charge Control rates applied to the incumbent 2G operators.
- H3G successfully fought against Ofcom’s Significant Market Power (SMP) determination in order that it could maintain high termination rates. This it did for a further period
- In 2004 Vodafone began inflating its MCT by blending notional 3G termination rates and applied these charges without informing any of its interconnection partners nor issuing any Operator Charge Notices (OCNs).

A high MCT provides mobile operators with a valuable source of “hidden” revenue which enables them to cross-subsidise their retail prices. However, a true cost-orientated approach to setting MCT means that the mobile networks are forced to apportion the true cost of mobile ownership to their customers.

Each MNO has a 100% market share of termination to their customers.

It is clear that deregulation would result in an immediate increase in MCT from all MNOs. COLT is therefore strongly opposed to the deregulation of MCT.

### 5.3.2 Long Run Incremental Cost (LRIC+)

*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?*

LRIC+ is the methodology that is presently used for charge control in the fixed and mobile markets.

As volumes have grown and investment amortised LRIC+ has provided a continuous year on year reduction in termination rates which has been of benefit to consumers and CPs alike.

On behalf of its retail customers, COLT wishes to see a continuing reduction in MCTs. However, to achieve this COLT is strongly in favour of an approach which is consistent and predictable. Without stability in regulatory charge control, future investment in spectrum, infrastructure and new products will be diminished.

In the present uncertain economic times, COLT believes that the best interests of consumers are served with a stable and predictable regulatory environment. Without this, inward investment in future consumer products and services using mobile technologies is unattractive.

COLT therefore favours maintaining LRIC+ as the regulatory remedy for MCT.

### 5.3.3 Long Run Marginal Cost (LRMC)

*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?*

Of the five alternatives the Long Run Marginal Cost methodology is the closest option to LRIC+. However in practical terms (i.e. the level of the MCT rate) it is likely to be similar to Mandated Reciprocity. The exclusion of “common costs” means that the calculated termination costs will be close to those of the fixed networks.

COLT notes that LRMC is a recommendation from the European Commission but does not believe it is in the best interests of UK consumers at this stage. The LRMC approach would result in a decrease in MCT rates that would be too rapid, and as discussed in section 5.2 COLT believes that a glide path is necessary to maintain stability.

LRIC+, with a continuing glide path, will provide the consistency and predictability required for the present but will enable a possible move to LRMC in 2015.

### 5.3.4 Capacity Based Charges

*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?*

COLT cannot see how capacity based charging would be a practical solution. Capacity based charging does not appear to offer any advantages over per minute charging.

The consultation document is not clear about which system of capacity based charging is being considered. One system would involve the originating CPs purchasing volumes of minutes in advance. Under utilising the pre-purchased capacity would not result in a refund, but exceeding the capacity would result in further payments being required for the excess minutes in the period.

A second system would involve originating CPs and transit providers pre-purchasing physical capacity (presumably in units of 30 circuits) according to their predicted traffic volumes and time of day minute profile.

Presently most CPs send minutes destined for the mobile networks over interconnect links which share other types of traffic. Most CPs do not have direct interconnection with the mobile networks and therefore use transit networks.

Capacity based charging for MCT would alter these arrangements. If mobile traffic was separated and used separate interconnect links there would be inefficiencies through loss of the benefits of scale.

- A larger volume of traffic using a larger capacity interconnect link requires less “headroom” in the trunk sizing. “Headroom” is required to allow for traffic peaks and less headroom is required in larger capacity trunks because of the “smoothing” effect of large volumes of traffic.
- The time of day profile of mobile traffic is different from that of fixed or NTS traffic. There are benefits in using combined routes for all traffic types since the time of day peaks do not coincide.

A consequence of capacity based charging is that CPs would need to constantly monitor traffic levels and adjust their capacity, perhaps as often as weekly; this would be cost prohibitive. With long lead times for interconnection routes this would be a near impossible task. In the case of smaller CPs it would be disproportionately onerous and therefore detrimental to new entrants and competition.

A capacity based charging system of any type will inevitably benefit CPs with larger volumes and more stable traffic flows.

In the consultation Ofcom has not offered any suggestions about what levels of payment would be associated with capacity based charging. Neither has it described how a capacity based system would work in conjunction with transit providers. If an originating CP interconnected with a transit provider instead of directly with the MNOs would it be on a capacity basis or would the charges still be made on a per minute basis?

If it remained as a per minute system of charging it is likely that either service levels would degenerate or costs would increase:

- If the transit provider maintained lower termination and transit costs they would be incentivised to maintain lower capacity between their network and the mobile networks. This would result in more frequent network congestion.
- If the transit provider maintained higher capacity routes to the mobile operators they would be forced to charge higher termination and transit costs to insure themselves against low levels of traffic and under recovery of their capacity based costs.

Smaller originating CPs would be reliant on the rates provided by the transit providers. If these were “per minute” based it would be impossible to tell whether the rate offered was inflated or not. If the interconnection was based on physical capacity the costs will be high because of the small volumes and greater difficulty in forecasting volumes.

Whilst interconnect is still on a circuit switched basis (TDM) CBC would be complex to implement, more costly to operate and would represent a high risk in terms of the long term market effect.

In the UK Capacity based charging has so far only been used for FRIACO traffic. This is very different to using capacity based charging for circuit switched traffic. Internet traffic is “bursty” in nature and with under capacity the worst effect perceived by users is a sluggish response time. In the case of circuit switched services, under-capacity means total call failure.

COLT is therefore opposed to Capacity Based Charging and believes that this approach need not be considered again until the transit providers and mobile networks can offer full IP interconnect.

### 5.3.5 Mandated Reciprocity

*Question 6.8: 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?*

In principle COLT is not opposed to the idea of moving the burden of radio and handsets costs from mobile callers to the mobile handset owners.

The way reciprocity was mandated would be crucial since it could be open to abuse by the MNOs. Where large MNOs have similar levels of traffic flowing between them they could set high reciprocal MCTs. This would benefit them unfairly since they are better able to bear the higher costs because of their scale and because of their high volume of on-net traffic giving them a lower proportion of originating traffic bearing the high costs. If reciprocity were to be implemented with a price cap, it would be important to assess how the price cap would be set and what the regulatory basis for setting this price cap would be since this would clearly have a significant impact on the effectiveness and outcome of the proposed approach.

As stated under sections 5.2 & 5.3.2 COLT is strongly of the view that consistency and predictability are the most important considerations. In the US, where mandated reciprocity has always operated, minutes of usage for mobiles are several times higher than in the UK. This would suggest that a move to mandated reciprocity would cause a rapid shift in

traffic from fixed to mobile and this would have very damaging results for fixed CPs and competition in the fixed market.

### 5.3.6 Mandated “bill and keep” (B&K)

*Question 6.9: 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?*

As stated in section 5.3.5 COLT is not opposed to the principle of redressing the burden of radio and handset costs.

COLT’s concerns about consistency and predictability particularly apply to the Bill and Keep option. Potential investors in new services using mobile spectrum are likely to be disadvantaged by the lack of termination revenue and competition will therefore be affected.

COLT notes that net originators of mobile traffic, which includes almost all fixed networks and one of the mobile networks, would benefit from Bill and Keep. Net terminators of mobile traffic would immediately lose in terms of the flow of cash.

COLT would be concerned about the lack of incentive for the mobile networks to invest in inbound capacity. Such investment would be pure cost and not result in any corresponding revenue.

Since it is not proposed that transit will also be zero rated, the transit costs will become 100% of the cost borne by originating CPs to deliver mobile calls. Originating CPs will therefore want direct interconnection with the mobile operators to control costs. This will be particularly true if Ofcom makes the mistake of deregulating Single Tandem transit as part of the present Narrowband review.

Ofcom would therefore need to mandate that the MNOs must offer direct interconnection at regulated connection charges and timescales to any CP who requests it.

Ofcom has not offered any suggestions for how traffic to ported numbers would be handled. At present the range holding and recipient networks share the notional cost of Donor Conveyance. Donor Conveyance Charges (DCC) would become significant costs in a bill and keep environment.

COLT would also be concerned at the flood of “spam” calling that would arise as a result of there being no cost to call mobile networks. Spam callers who are outside the UK do not take notice of the Telephone Preference Service lists.