Hutchison Whampoa (Europe) Limited
Contact: John Blakemore, Director of European Regulatory Affairs Hutchison 3G
Hutchison Europe Brussels Branch
Square de Meeus 35
1000 Brussels
T: + 32 2 509 0074

3 Group's response to the European Regulators' Group draft Common Position on symmetry of mobile/ fixed call termination rates (ERG (07) 83)

25 January 2008

Introduction

This paper contains the response of the **3** Group in Europe to the European Regulators' Group (ERG) draft Common Position on symmetry of mobile/ fixed termination rates (ERG (07) 83).

The **3** Group is part of Hutchison Whampoa Limited's telecoms division and includes the following operating companies in the EU: Hutchison 3G Austria GmbH, Hi3G Denmark ApS, Hutchison 3G Ireland Limited, H3G Spa (Italy), Hi3G Access AB (Sweden) and Hutchison 3G UK Limited (together, H3G).

The HWL telecoms division, comprising the **3** Group and Hutchison Telecommunications International, is the first global 3G operator, with 3G licenses in 10 countries[1]. Our 3G services were first rolled out in March 2003. The HWL Group had close to 16 million 3G customers globally and more than 13 million in Europe as of 22 August 2007. The **3** Group is one of the fastest growing telecoms businesses in Europe.

Summary

The key principles the ERG should have in mind are:

- The current approach to regulating mobile termination rates (MTRs) is based on the principle of efficient cost recovery. However, the primary concern of regulators should be to avoid distortions of competition.

- This will mean regulators setting termination rates to achieve efficient prices that enable undistorted competition to take place. The current 'cost recovery' approach to regulating interconnection charges results in distortion. Therefore a different approach to interconnection is required.

- Ultimately, the current system of termination rates should be replaced with a completely new model based on no payments between operators for interconnection (sometimes called bill and keep). This will remove the distortions that arise with termination charges.

- In the meantime and while regulators maintain the current system, it will be necessary to have asymmetric termination rates or other suitable transition arrangements. The **3** Group agrees with the reasons identified by the ERG for maintaining asymmetries, with the main reason being that above cost termination rates distort competition in favour of large incumbent operators.

- The ultimate end point (of no termination payments) should be the same for all Member States but the approach to the transition may need to differ to reflect national circumstances.

3 Group's response

This response follows the format of the ERG's draft Common Position. First, it considers the economic principles to follow in setting termination rates. Then it considers the specific

---

[1] Australia, Austria, Denmark, Hong Kong, Ireland, Israel, Italy, Norway, Sweden and the UK.

circumstances of mobile call termination. The **3** Group is a mobile-only operator and has not, therefore, commented on fixed call termination. The Annex to this response provides answers to each of the questions raised by the ERG in its paper.

General economic principles of termination rates regulation

The draft Common Position argues that economic principles *"tend to recommend a unique and uniform* [termination rate]*, determined with reference to costs incurred by an hypothetical efficient operator*". The **3** Group examines the question of symmetry further below, but the fundamental flaw with the ERG's approach, which is the approach that we currently observe in Europe, is that it is concerned solely with cost recovery. It assumes that termination rates should be set to recover efficiently incurred costs. This may have been appropriate in the past when it provided a mechanism to fund mobile network roll-out. However, it is not appropriate now, when the markets are mature and where costs should be recovered from customers and not from competitors (especially since between mobile networks the payments are a 'zero-sum game' that provide no net funding to the industry but can distort competition in related markets).

The emphasis on setting MTRs in accordance with efficient cost recovery ignores other possible objectives. In particular, it ignores the need to avoid competition and retail market distortions and to set efficient wholesale prices.

In fact, recent studies and evidence from the market show that the current system of termination rates give rise to significant market distortions. Notably termination rates:

- provide incentives to strategic and inefficient pricing at the retail level by large operators to the detriment of small operators;
- lead to significant financial transfers from small to large operators;
- distort convergence between telecommunications and the Internet;
- delay the introduction of new services and distort tariff innovation; and
- keep retails prices high.

The distortions from termination rates should be the principal concern of the ERG and national regulators. While they remain, competition will always be skewed in favour of large operators and consumers will not get the benefits of full competition. The ERG should be more concerned with setting efficient prices that avoid market distortions than with efficient cost recovery.

Ultimately, the solution to the market distortions and the way to achieve efficient prices is to move to a system without termination payments (sometimes called bill and keep). A system of no termination payments is consistent with the optimal termination rates identified by a number of recent academic studies. It moves away from the flawed assumption that only the initiator of a call benefits from it, and, therefore, takes account of positive call externalities (the benefit to receivers). It leads to operators recovering their entire costs from their own customers rather than from their competitors.

The absence of termination payments between competing operators will also be central in removing the market distortions currently observed. The incentive to set large (and inefficient) on-net/ off-net price differentials would be reduced or removed. There would no longer be

transfers of profit from small to large operators. It would be possible to offer large bundles of minutes and flat rate tariffs. Research shows that countries without termination payments have lower average retail prices and higher usage of mobile phones.

While the current termination rate regime is retained, there will almost inevitably be market distortions. The debate then is about how to minimise the distortions under a sub optimal system of interconnection. This is the context of the ERG's current consultation. It examines how to balance the policy objectives and minimise the distortions through symmetry or asymmetry.

The **3** Group recognises that national circumstances will determine the timing and manner of the move to a regime of no termination payments. It therefore remains necessary to consider how regulators should manage the transition, to minimise the market distortions resulting from the current system and promote competition and innovation.

The retention of asymmetric termination rates in favour of late entrants to offset the disadvantages faced by them from the current system is one important tool which can be used to avoid competitive distortions. Under such an approach, asymmetries are required to: (i) prevent late entrants transferring margin to incumbents due to imbalances in termination traffic; (ii) allow late entrants to compete effectively against incumbents' discounted on-net offers; and (iii) enable late entrants to offer innovative and cheaper (for example, bundled) tariff packages to their customers. Having asymmetric termination rates does not mean keeping MTRs at their current levels. Rather, it means reducing MTRs while maintaining a sufficient gap between operators to avoid market distortions. In contrast to the policy of symmetric MTRs irrespective of market conditions, this approach would lead to lower prices for end customers in the short term, and the benefits of competition over the long term, prior to moving to the more sustainable and beneficial system of no termination payments.

Symmetry v. Asymmetry

Static efficiency

The ERG contends that, according to economic principles, symmetric termination rates may contribute to enhancing static economic efficiency, investment, innovation, regulatory certainty and overall welfare. In contrast, asymmetric rates do not give operators an incentive to achieve productive efficiency.

These statements may, in principle, be true, when applied to perfect market conditions with, *inter alia*, undistorted calling patterns and very low switching costs for customers. In real markets, especially mature ones, the conditions of competition are very different. Distortions exist and markets are not always sufficiently fluid. A major obstacle to market fluidity in mobile markets is created by incumbents' offering tariff plans with large differences between low on-net and high off-net retail prices. These on-net/ off-net pricing strategies convert off-net traffic into more lucrative on-net traffic for the incumbent while generating unfavourable traffic imbalances for smaller competitors. If termination rates are symmetric, the traffic imbalances lead to cash imbalances for smaller operators.

The existence of barriers to expansion and network effects that are difficult to overcome may also mean that it is not possible for operators to achieve the scale required for cost efficiency. It is only necessary to consider the limited market shares achieved by late entrants across Europe to recognise the obstacles they face. An important objective for regulators is to avoid and remove

distortions to competition. Market distortions through network effects, in particular, may require regulators to set asymmetric termination rates.

The ERG's statement is, in any event, only true if all operators face the same costs of providing termination. Termination on each operator's network is, for these purposes, a separate economic market. It is clearly not a perfectly competitive market where all suppliers face the same cost and market conditions. Even from a theoretical perspective there is no requirement, therefore, for all operators to have the same termination price.

One of the stated functions of regulation is to mimic the "competitive" outcome where effective competition does not exist. In these circumstances regulators should set price controls that force operators to cut costs, improve their efficiency and invest efficiently. This is the basis for RPI-X price controls on regulated utilities. To the extent that all operators can achieve the same level of cost (taking into account the effects of the later entry of some networks), and network effects are absent, the **3** Group agrees with the ERG that economic principles support symmetric termination rates.

Whether all operators can achieve the same level of cost is a matter for objective assessment based on the facts. Current MTR cost models (whether 'bottom-up' cost models or those using 'top down' accounting data) calculate a version of fully allocated costs. Under the current system of MTRs, it cannot be assumed that an operator with higher average costs is inefficient. In fact, operators compete vigorously with each other on the retail market and this should be a sufficient motivation for them to maximise their efficiency. Different costs may therefore not relate to differences in efficiency but to objective differences in the underlying causes of cost, which are beyond the control of the operators. If this is so, asymmetric termination rates that reflect the objective cost differences would be consistent with maximising productive efficiency.

The Commission's comments in the Article 7 procedure (repeated at Annex A of the draft Common Position) conclude that there may be objective cost differences between mobile operators (only) in "exceptional" cases. This is merely an assertion. The Commission presents no evidence to show that objective cost differences are the exception. The scale effects inherent in mobile networks suggests that it will be the rule rather than the exception that later entrants have objective cost differences. To reach the Commission's conclusion would require a study of the costs of providing mobile termination. If the ERG concludes that asymmetry should be allowed where there are objective cost differences, the next step would be to identify and quantify those differences.

If there are such cost differences, asymmetric termination rates are not a form of entry assistance. They are simply applying the same regulation in a non-discriminatory way, taking account of objective differences. [2] Similarly, a level competitive playing field could be achieved through alternative mechanisms, including abolishing termination rate payments altogether, as explained above.

---

[2] In addition, recent studies show that asymmetric termination rates may be welfare enhancing. See, M Peitz, *Asymmetric access price regulation in telecommunications markets*, European Economic Review (2005), M Peitz and P de Bijl, *Regulation and entry into telecommunications markets*.

Dynamic efficiency

Even if the ERG was correct to conclude that static cost efficiency would require symmetric termination rates, this ignores dynamic efficiency. The whole project of telecoms liberalisation has been predicated on the basis that there are important benefits to be gained from introducing more competition in the sector. If the only objective were static cost minimisation, that may best be achieved through a monopolist, with suitable regulation to incentivise efficiency improvements. However, the underlying assumption of liberalisation is that, over the long term, dynamic efficiency gains outweigh any static losses.

The draft Common Position identifies that symmetric termination rates may harm competition by disadvantaging smaller operators. This is one of the main distortions from termination rates and one of the reasons for moving to a system of no termination payments. However, while termination payments remain, even if static efficiency argues for symmetric termination rates, asymmetry may be preferable in order to maximise long term benefits to consumers.

Retail market impacts

The need to set incentives to maximise static efficiency comes from regulation of monopoly utilities. As noted above, mobile operators are not in this position. They face competition on their retail markets and this should be sufficient to incentivise efficiency. There is an additional consequence and that is the impact of termination rate regulation on retail market competition. Operators pay each others' termination rates and are also competitors. This means that the level of termination rates affects competition between operators. Regulators should be alert to the need to avoid distortions of competition when regulating termination rates. In general, the need to avoid competition distortions should be a greater concern to competition authorities and regulators than avoiding excessive prices.[3]

The so-called "waterbed effect" (which describes a situation in which lowering termination rates leads to higher subscription prices) highlights the retail market distortion from high MTRs. If it exists, as recent academic work seems to suggest[4] (even if not 100%), then high MTRs give an advantage to those operators with the most terminating minutes – large operators.

Mobile Call Termination

Summary of current regulation of MTRs

It is notable that many regulators use either 'bottom up' cost models or fully allocated cost models with 'top down' accounting data to set regulated MTRs on a per minute basis. These cost models take fixed and common costs and allocate them across services, including termination, and also convert costs that do not change with traffic volumes into a per minute rate. This leads to a per minute cost of mobile call termination that is much higher than if the models only included those costs directly caused by the termination service and which are traffic sensitive.

---

[3] This is seen in the greater emphasis that competition law puts on tackling exclusionary practices than on tackling exploitative practices. The reason for this is that it is more important to ensure undistorted competition can take place, rather than dealing with exploitation of market power, which should only be temporary where competition is effective.

[4] See for example, Genakos, C and T Valletti (2007), Testing the 'waterbed' effect in mobile telephony, Imperial College.

By overstating the direct cost of termination, these models allow operators to earn a margin on termination. This has historically allowed operators, especially the first entrants that benefited from unregulated termination rates, to finance their network investments. However, given that the margin is paid for by competitors, this gives rise to the possibility for distortions, especially if traffic flows are not balanced.[5] It will also distort competition if some but not all operators on a market have been allowed to set higher termination rates over a long period, enabling them to over-recover their costs.

Maintaining termination rates above the directly incurred costs of termination even after an operator has recovered its initial investment allows that operator to earn an excess profit from termination. It is clear that in many cases this is what is happening. The early entrants on their national markets have in many cases more than recovered their whole network investment from termination rates alone. In contrast, late entrants on the same markets have yet to recover their initial network investment. If the current system of termination rates is to be applied consistently over time and between operators, it would require asymmetric termination rates that allow all operators to recover their costs, but not to over-recover them.

Cost models that overstate the costs of termination also help in keeping retail prices artificially high, to the obvious detriment of consumers.

It is also evident that cost models are not applied consistently. Regulators using the same cost model have obtained very different results, which are difficult to justify by objective differences and which are likely to be the result of policy decisions. [6] In particular, the level of termination rates and the existence, or otherwise, of asymmetries are policy decisions. The first step to greater harmonisation of MTRs across the EU is, therefore, agreement between regulators on the policy objectives of regulating MTRs.

Reasons for an asymmetry

The ERG's draft Common Position examines the advantages of symmetry and asymmetry and concludes that symmetry should be the general rule but with asymmetry justified in certain cases. It identifies three cases where asymmetry could be justified:

1. Objective exogenous cost differences: The ERG identifies different spectrum allocations and spectrum licence fees. The ERG notes that these differences justify an asymmetry as long as the reasons for the differences exist.

2. Late entry: The draft Common Position argues for a temporary asymmetry for late entrants or operators with small market shares.

3. Until MTRs are at cost: The draft Common Position identifies that above cost termination rates distort competition and harm smaller operators. In particular, they allow anti-competitive on-net/ off-net pricing strategies, leading to or exacerbating traffic imbalances in favour of large operators.

---

[5] Some **3** Group businesses have significant imbalances between incoming and outgoing traffic as a result of local competitive conditions. Such conditions are largely out of the direct control of the companies to influence and the traffic imbalances observed in such countries are simply a function of being a late entrant.

[6] For example, using the same cost model, Ofcom has concluded that MTRs in the UK should come down to about 8€cents by 2010 – 2011, whereas PTS has already imposed MTRs of below 6€cents in Sweden.

The **3** Group has commented above on the arguments in favour of symmetry as the general rule. The following section comments on each of the three possible justifications for asymmetry.

1. Exogenous cost differences

In the context of the current approach to MTRs[7], there are likely to be objective cost differences that are beyond the control of operators. The example usually cited is the difference in costs between operators with 900 MHz, 1800 MHz or 2100 MHz spectrum. There is no reason to assume these differences will diminish over time, unless the underlying causes of the differences are removed (such as through spectrum "refarming" and appropriate redistributions of legacy spectrum).

2. Late entry

The assumption that late entrants in a saturated market will achieve a comparable market share is just that – an assumption with little evidence to support it. However, even accepting that assumption, the **3** Group agrees that a late entrant will need time to reach a comparable market share to the incumbents and that, in the meantime and in the context of the current system of MTR regulation, because networks exhibit economies of scale, its average costs will be higher.

Some regulators have tried to minimise those differences by adopting very long depreciation schedules (such as economic depreciation over 50 years). As for the duration of any asymmetry, this should be based on a realistic assessment of the time it will take for the new entrant to reach a similar scale to the incumbent operators.

Research by Hannes Leo[8], for example, indicated that it could take 10 to 20 years for a new entrant to reach a 20% market share. Work by Cabral[9] shows that 'tariff-mediated network effects', caused by on-net/ off-net price discrimination (which are partly a consequence of termination rates that exceed cost), present a significant barrier to entry and hinder the growth of a new entrant. Specifically, network effects decrease the value of an entrant (or a small network) and increase the average time that it takes to achieve a given market share. For equal termination charges (i.e. symmetric regulation), the long-run equilibrium state in Cabral's model is generally asymmetric, since a larger network is always more likely to attract new subscribers than a smaller network. For sufficiently strong network effects, the market is characterized by "increasing dominance" (that is, the larger network increases in size relative to the smaller network), since consumers are willing to pay more to join a larger network, and larger firms can maintain market share while spending less on subscriber acquisition than smaller networks.[10]

---

[7] As explained in this response, the **3** Group believes that the current system of termination rates is the underlying problem and that regulators should be moving to a system of no termination payments. This removes the need to debate symmetry or asymmetry. However, in the context of the current system of termination rates, it remains necessary to consider the merits of symmetry and asymmetry.

[8] First mover advantages in der mobilkommunikation: der einfluss des markeintrittszeitpunkts auf die marktanteilsentwicklung, Dr Hannes Leo.

[9] L Cabral (2007a) "Dynamic Price Competition with Network Effects," New York University, May; and L. Cabral (2007b) "Competition and Regulation in Wireless Telecommunications: A Dynamic Perspective," New York University, forthcoming.

[10] In one of his simulations, Cabral finds that long-run market shares converge to 80% for the larger ("incumbent") network and 20% for the smaller ("new entrant") network.

Thus, while regulators keep the current system of termination rates they are maintaining a distortion that will need an asymmetry to resolve. Actual experience of the growth of late entrants tends to bear this out. It is also relevant, as the ERG point out, to take account of market maturity at the time of entry and market fluidity, such as the effectiveness of number portability.

While cost differences and late entry are reasons for maintaining an asymmetry in the transition to no termination payments, the biggest problem facing a small, late-entrant operator is the retail market distortions that termination rates give rise to.

3. Until MTRs are at cost

The draft Common Position recognises that asymmetry may be necessary in the short run to offset competition distortions and to maximize the long term benefits from competition. As far as the **3** Group is concerned, this is the main reason for maintaining asymmetric termination rates under the current approach, and also the main reason why regulators need to move to an alternative system (resulting in no termination payments) in, at least, the medium term.

The ERG's draft Common Position accurately portrays the difficulty faced by small operators under the current system of termination rates. This is borne out by small operators' experiences and by recent studies examining MTRs.

Recent studies of the interaction of termination rates with strategic competition between networks have provided a deeper understanding of the potential for large firms to use high MTRs, and on-net/ off-net price discrimination, to distort competition in their markets.[11] A key insight of these studies is the role of call externalities. Consumers benefit from receiving calls. This means that, other things being equal, consumers benefit more from subscribing to a network where they receive more calls. If a large network can deter its customers from making calls to a small network, it reduces the value of that small network to potential subscribers. If subscribers derive less value from the small network, the network is unable to charge as much for its services. Therefore, the small network can make less profit from its subscribers.

Large networks can deter calls to their smaller rivals by setting high off-net tariffs. Small networks can also set high off-net prices but the effect is not the same, since they have relatively few subscribers, so the impact on the value of larger networks to their customers is also small.[12] This is why we observe off-net tariffs at levels far above other tariffs (such as on-net and to fixed networks), and significantly higher than can be justified solely by differences in the wholesale costs of those calls (that is, by differences in the levels of termination costs and charges). It is also why large networks tend to set higher off-net tariffs than small networks.

---

[11] Relevant studies include: Jeon, Laffont and Tirole (2004) "On the Receiver Pays Principle," *RAND Journal of Economics*, 35, 85-110; Armstrong and Wright "Mobile call termination in the UK" *UCL* September 2007; Calzada and Valletti (2007) "Network Competition and Entry Deterrence," *Economic Journal*, forthcoming; Hoernig "On-net and off-net pricing on asymmetric telecommunications networks" *Information Economics and Policy*, 19(2), 171-188; Cabral "Competition and Regulation in Wireless Telecommunications: A Dynamic Perspective," New York University, forthcoming; Berger (2005) "Bill-and-Keep vs. Cost-Based Access Pricing Revisited,"*Economics Letters*, 86(1), 107-112; Harbord and Pagnozzi "On-net/ off-net Price Discrimination and 'Bill and Keep' vs 'Cost Based' Regulation of Mobile Termination Rates" forthcoming; Parcu and Manganelli "Powerless Monopoly: call termination and new entrants" Mercato Concorrenza Regole, 2007.

[12] In addition, subscribers to small networks will wish to make a relatively large number of off-net calls compared with subscribers to larger networks. Therefore, mimicking large networks' high off-net prices would have a correspondingly large impact on the value of the small network to its subscribers.

Moreover, since small and large networks set different off-net tariffs in the presence of call externalities, the traffic between a small networks and a large network will not be in balance, even under a so-called "balanced calling pattern."[13] This has a further negative effect on the competitiveness of small networks because it creates a permanent "access deficit", whereby the smaller network's profits from termination charges are significantly reduced, while the wholesale charges it pays to larger networks remain constant, or decrease only slightly. With symmetric MTRs this results in a transfer of profit from small to large operators, which cannot be in the interests of long-term sustainable competition.

The recent economic literature has shown that on-net/ off-net price discrimination as practiced by the large incumbent networks is caused by a combination of high MTRs and the strategic effects induced by call externalities. These create network effects, or 'tariff mediated network externalities'[14] which make large networks more attractive to subscribers. When on-net calls are priced below off-net calls, *ceteris paribus*, subscribers to large networks will experience lower average call charges than subscribers to smaller networks, since more of their calls are made on-net. This makes larger networks more attractive and places smaller networks at a competitive disadvantage.

The presence of the call externality and the possibility for large networks to set prices strategically to harm their smaller rivals has led these studies to conclude that optimal termination rates are below cost.[15] The strategic incentive to set high off-net tariffs does not disappear with termination rates below cost, but they become more difficult to sustain and are less damaging to the new entrant because it can respond with lower off-net prices.

The theory is borne out by the **3** Group's experience of competing in the European markets and high MTRs. The **3** Group businesses face high off-net and low on-net tariffs in all its markets. In some cases on-net tariffs set by the large operators are below the level of their MTRs. This is the case in Italy and Austria for example. In these cases it becomes very difficult for the **3** Group to match the tariffs offered by the large operator without losing money. [16]

The difficulty faced by small networks competing against low on-net tariffs is that, since a large network has more on-net calling opportunities, a potential subscriber will see that for many calls the larger network is cheaper. Small networks can also offer low on-net call prices, but with much less appeal, due to their more limited customer base. A small network can even offer off-net tariffs at the same level as the large operator's on-net tariffs in order to be competitive, but

---

13 That is, if all consumers would call each other with the same probability in the absence of tariff differentials.

14 Laffont, Rey and Tirole "Network competition: II. Price discrimination" *RAND Journal of Economics*, 29(1), 38 – 56.

15 See, for example, Harbord and Pagnozzi "On-net/ off-net price discrimination and 'bill and keep' vs 'cost based' termination pricing" forthcoming.

16 From Harbord & Pagnozzi: MNOs in the UK and Europe frequently set prices for on-net calls – i.e. calls originating and terminating on their own networks – much lower than regulatory estimates of their incremental termination costs. For example, Ofcom's estimates of "LRIC" for the incumbent UK operators in 2006 all exceeded 5 ppm, whereas the average price of on-net calls in 2006 was reported to be 3.5 ppm (see Ofcom, The Communications Market 2007, Figure 4.40). Similarly, the Portuguese regulator (ANACOM 2007) has recently estimated that on this basis, termination costs in Portugal are of the order of C=0.036 per minute, compared to the regulated rate of C=0.11 per minute. See also the discussion of the French regulator ARCEP (2007), Chapter 4 and pp. 81-82.

this is expensive for the small network. Where on-net call prices are below the level of MTRs as in Italy and Austria, the on-net offers simply cannot be replicated by small operators.

As noted above, the theory predicts unfavourable traffic imbalances for the small network where there are large on-net/ off-net differentials. The **3** Group businesses generally face traffic imbalances of varying degrees. The size of the differences may reflect local conditions such as market fluidity (itself dependent on factors such as the effectiveness of number portability) and the extent of on-net/ off-net pricing, but their uniform existence supports the conclusion that they are a feature of being the small, late-entrant operator.

Traffic imbalances are reinforced in those markets, such as Italy, where often the same customer purchases two or three SIM cards, and uses the one of the smaller operator (which typically has lower call charges) mainly for making calls, whilst continuing to receive calls on a different SIM.

The long term solution to the problem of on-net/ off-net price discrimination and the resulting traffic imbalances is to have no termination payments. However, in the meantime, it is necessary to deal with the competition distortions that currently exist. The current regulatory framework does not seem able to tackle directly the on-net/ off-net discrimination issue. In which case, this issue can be addressed through setting asymmetric termination rates that balance the cash flows between small and large operators. Alternatively, effective non-discriminatory price controls would be needed, together with accounting separation, similar to those in place for fixed networks.

A further distortion from MTRs is that they give more profit to large operators than to small operators. While termination rates are above cost, operators are earning a margin on them (that is, they are a source of profit). The more termination minutes, the more the profit. Those termination profits can then be used to distort competition in the retail market. So, when regulators set MTRs above cost they are granting large operators more profit and a competitive advantage. What is even more distortionary is that those profits are paid for by direct competitors.

This is evident from figures provided by the Austrian regulator. According to the regulator's own estimates, its price controls that set a glide path to symmetry, allowed the incumbent, Mobilkom, to earn an excess termination profit (that is, revenues above the regulator's own estimate of cost) of €296 million over the 5 year price control period (2004 to 2008). By comparison the regulator allowed 3 Austria termination profits of €17 million over the same period.

The ERG concludes that these retail market distortions justify an asymmetry until MTRs are at the level of actual cost. The **3** Group agrees with the ERG's analysis of the problem but notes that the long-term solution is to have no termination payments. However, unless and until regulators abolish termination payments, the competition distortion should at least be reduced through mechanisms such as asymmetry in favour of the small operator(s), even though this is unlikely to be fully effective in countering the disadvantages faced by the small operator(s).

The ERG identifies one of the risks of asymmetric termination rates being an increase "of off-net tariffs of incumbent operators." This misunderstands the motivation for having high off-net tariffs. Off-net tariffs are rarely related to the termination rates payable and rarely change with reductions in termination rates. Incumbents set high off-net tariffs not because other operators' termination rates are high but because they deter off-net calls, which reduces the value of other networks to subscribers and reinforces the network externality of their own network. This motivation exists regardless of the termination rate.

Balancing the objectives

The draft Common Position implicitly identifies two policy objectives in setting MTRs: (i) to maximise economic efficiency; and (ii) to avoid distorting competition. The proposed solution is symmetry, but with asymmetry permitted where objectively justified. In practice that is the approach we currently observe. However, as already noted, regulators are taking different policy decisions and putting different emphases on the relative merits of symmetry or asymmetry, and therefore reaching different conclusions.

The difficulty with the approach proposed by the ERG is that it recognises the conflicting objectives but does not propose how those should be balanced. To improve consistency, it would be necessary to agree on how to achieve the right balance. Indeed, under the current approach to regulating MTRs, it is not clear how the ERG can achieve both of its policy objectives at the same time.

The real problem is intrinsic to termination rates

The recent studies that have identified the competition distortions arising from the current MTR regime also conclude that efficient MTRs should be below cost, with some studies concluding that the optimal solution is to have no termination rates.

The absence of MTRs does not take away a large operator's incentives to use on-net/ off-net pricing strategies but does remove its ability to sustain those prices. Without MTRs, small operators would be better able to compete against large rivals.

Having removed the ability to sustain on-net/ off-net tariffs, abolition of MTRs would remove the main drivers of traffic imbalances. In any event traffic imbalances would no longer entail a transfer of profit as occurs with MTRs.

There are other reasons the absence of MTRs will benefit competition and consumers. High MTRs prevent the emergence of flat rate access pricing and of large bundles of minutes. Comparisons with countries that have low or no MTRs show that those countries have lower average retail prices and higher average usage of mobile phones.

It is notable that the system of calling party's network pays (CPNP) and of per minute call termination charges is just one of the possible conventions for arranging interconnections. Other conventions include receiving party's network pays, mixtures of the two and no termination rates. There is no inexorable reason why regulators in Europe should be bound to set per minute termination rates according to cost models. If the competition distortions from the current system of CPNP are thought to outweigh its benefits, then the ERG and regulators should not hesitate to move to other, less distorting conventions. Mobile operators in countries where CPNP is not followed are able to finance their networks and retail strategies, showing that there is no requirement to have termination rates as a source of funding for the industry.

The ERG considers (at page 37) alternatives to CPNP and per minute charging for fixed termination but not for mobile termination. The arguments for looking to alternatives (such as to enable flat-rate offers, promote competition on an equal basis or to better reflect the way costs are incurred) are the same for both types of network.

MTRs are also revealing the differences between the telecommunications model for interconnection and the Internet model. The **3** Group is able to offer unlimited Skype to Skype

calls because those calls follow the Internet model of low cost transit and peering (bill and keep). In contrast, MTRs prevent unlimited circuit-switched calls. This will become increasingly evident as more and more consumers switch to VoIP calls to take advantage of the lower prices. A further disadvantage of MTRs is that they create an artificial incentive for the large incumbent operators to avoid innovation in addressing and pricing, such as Skype. Current numbering systems for identifying users reflect a technology from many decades ago. However with MTRs the incumbent operators have financial incentives (maintained by regulators) to retain this outdated technology. The result is that incumbent operators delay the introduction of new services such as VoIP, but also Instant Messaging and mobile e-mail as alternatives to SMS.

Convergence of fixed and mobile termination rates

The draft Common Position questions the size of the difference between FTRs and MTRs and asks whether this should be reduced. The **3** Group's proposed solution of no termination payments would inevitably lead to a convergence of fixed and mobile termination rates.

Conclusion

Efficient cost recovery should not be the ERG's sole concern. Removing competition distortions is a much more important objective since it will allow markets to work better for the benefit of consumers. Abolishing termination rates will remove the competition distortions that the ERG identifies in its draft Common Position and which would justify an asymmetry. This should be the target that regulators set for termination rates. National circumstances will determine the timing and manner of abolishing MTRs. In the meantime it will be necessary to retain asymmetries to offset the resulting distortions from the current system of termination rates.

ANNEX: Response to general questions

G1: *Do you think that the principles outlined in the general economic introduction cover adequately the underlying economic situation of both mobile and fixed termination markets? If yes, do you think they are sufficiently reflected in the two parts on "MTR symmetry" and "FTR symmetry" and that they are consistently applying the principles? If no, what do you think is missing and which reasoning should be added?*

The principles refer to the need to achieve economic efficiency but do not define what that is. They concentrate on efficient cost recovery and ignore all other aspects of economic efficiency and other possible policy objectives. They do not cover the theory of regulation and what regulation of MTRs is intended to achieve. For example, is regulation necessary to encourage efficiency where operators compete in other markets? And, what does the perfect competition outcome look like for mobile termination, where there are different economic markets? The principles do not make sufficient reference to dynamic efficiency. They are constrained by the current system of interconnection with termination rates, whereas the ERG ought to provide a review of other interconnection models and their pros and cons.

G2: *Any further comments regarding consistent regulation of both MTR and FTR with regard to symmetry is welcome.*

As explained in the text, the **3** Group's position is that MTRs are a source of market distortion. This is especially the case in Europe where MTRs are very high. A recent survey by the ITU showed that MTRs in Europe are the highest in the world.

G3: *Finally, we would like to ask you to elaborate on the question of converging MTR and FTRs and the timeframe you envisage for this.*

The **3** Group's conclusion on optimum termination rates is based on analysis of the mobile sector and the distortion of competition between mobile operators that arises from termination payments. The analysis may not apply to the fixed sector where conditions of competition differ. However, if the conclusion that termination payments should be abolished is equally valid for the fixed sector, then there would be a convergence of fixed and mobile termination. As explained in the main text, the timing and manner of the move to abolishing termination payments will be determined by national circumstances.

M1: *Do you agree with the general principle of promoting symmetry: "Termination rates should normally be symmetric"?*

See the main text. Symmetry assumes that all operators can achieve the same level of cost and ignores the network effects and other market distortions from termination rates. Even if costs are symmetric, a large network has an incentive to set higher off-net prices than a small network in the presence of call externalities. However, the debate about symmetry or asymmetry misses the underlying problem, which is the continuation of MTRs. As the draft Common Position recognises, MTRs distort competition. Only when MTRs are abolished will regulators achieve the dual objectives of economic efficiency and the avoidance of competition distortions. Obviously, absence of MTRs is a particular case of symmetry.

M2: Do you agree with the exception to take into account exogenous cost differences: "asymmetry is only acceptable to take into account exogenous factors, outside the control of

operators"? The only example, which is not related to a late entrance, identified by the ERG is cost differences due to spectrum license holdings. Can you identify other exogenous factors?

The **3** Group agrees that, while MTRs are maintained, it will often be necessary to retain an asymmetry. One of the grounds for retaining an asymmetry is where there are objective cost differences, such as different spectrum holdings. These cost differences would no longer be a relevant consideration if regulators abolish MTRs so as to achieve efficient pricing and remove market distortions.

M3: *Do you agree with the following principles: "Assuming that cost differences due to different spectrum allocations are properly evaluated, they may justify an asymmetry"?*

MTRs should be based on efficiently incurred costs, taking into account cost differences arising from later entry as well as differences in spectrum holdings. [Unless an alternative approach to interconnect arrangements, which better addresses competition distortions, can be implemented, as proposed in the main text.] In the context of the current system of MTRs based on fully-allocated incremental or accounting costs, where the efficiently incurred costs of operators differ, then so should the regulated MTR. Such differences may persist over significant periods of time.

M4: *Do you agree with the following principle: "If the level of competition in the mobile retail market asks for measures which create incentives for new network level entry or measures that strengthen the position of new entrants, substantial differences in the date of market entry can justify an asymmetry for a transitory period"?*

We agree. However, this question does not properly reflect the impact of the current system of MTRs. MTRs benefit large and incumbent operators. They support pricing strategies that favour large operators and that distort competition against small operators. The current system of MTRs is a deterrent to entry. Removing that entry deterrent would involve abolishing MTRs. Having asymmetric MTRs in the meantime partly offsets the disadvantages faced by small or late entrant operators and is necessary to ensure long term sustainable competition until efficient MTRs are established.

M5: *Do you agree with the principle of keeping the level of asymmetry reasonable?*

In some cases the level of asymmetry required to offset the disadvantages faced by new entrant and small operators would be very significant. For example, the size of asymmetry required to avoid transfers of profit from small to large operators may be very large in some Member States. Given that the current approach taken by regulators towards MTRs inherently favours large operators, a reasonable asymmetry is one that offsets the disadvantages faced by small operators. In any case, what constitutes a reasonable asymmetry will be determined by specific national market conditions.

M6: *Do you agree with the fact that an initial level should be accompanied by a glide path towards symmetry?*

The timing and manner of the transition to the symmetry of no termination rates will depend on national market conditions. Where MTRs are still retained, any interim glide paths should take account of appropriate costs rather than having symmetry as an aim in itself.

M7: *Do you agree with the fact that national factors should be taken into account to evaluate the length of the transition period?*

Yes. The principles and the desired end point (of no termination payments) should be the same, but Member States are at different starting points, and so the approach to the transition may need to differ.

M8: *Do you agree that in specific market circumstances (MTRs tariffs are significantly above MTR costs, there are high traffic imbalances between mobile operators and benefits of a transitory asymmetry outweigh any short term disadvantages of doing so), a temporary asymmetry may limit competitive distortions?*

Yes. This is the most important reason for maintaining an asymmetry prior to abolishing MTRs.

M9: *Do you agree that NRAs should first try to set MTRs at costs?*

The focus on setting termination rates in accordance with some measure of cost ignores the need to set efficient prices and to remove market distortions. This should be the objective of national regulators.