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#### mobilkom austria group response to the Draft European Regulators Group Common Position on Future Charging Mechanisms

mobilkom austria group (mag) welcomes the opportunity to comment on the draft European Regulators Group (ERG) Common Position on Next Generation Networks Future Charging Mechanisms/Long Term Termination Issues.

Before giving comments on the quite detailed questions of the consultation document mag would like to make a few general comments on the necessity to discuss a change of the interconnection regime at all.

The most general question for mag is: what is the real motivation for trying to introduce a BaK regime in the first place? Is it non sustainability of two different charging regimes in NGN-IP networks or is a CPNP regime simply deemed to be more disadvantageous for the further development of competition in the telecoms industry than BaK due to the existence of the termination bottleneck and the difficulties of NRAs to set interconnection charges right?

Regarding the question of the treatment of voice services in an all IP world mag believes that it is essential for operators to distinguish voice traffic from other traffic streams in order to uphold today's quality standards for voice services. Today's internet has two significant weak spots: firstly minimal quality of service control as characterized by only best efforts quality which cannot prevent, for example, data losses or simply too much delay in downloading or streaming data creating a negative user experience. Secondly SPAM emails which have a significant negative impact on the economy not only by forcing users to spend time cleaning their email inboxes from SPAM mails but also by binding financial and human resources to the development, application and maintenance of anti SPAM software. If Bak leads to a situation where voice traffic could not be distinguished from data traffic any more, similar negative effects (SPAM/SPIT, nuisance calls) as in today's internet could arise for voice services. In order to prevent this welfare decreasing development it will be paramount that operators are able to identify voice traffic also in an all IP world. This holds even more true for legislative reasons: in order to support public safety by providing the means for legal interception or, for example, to be able to provide emergency services with the caller's location, it is essential that operators have the possibility to identify voice traffic on their networks. If this necessary service differentiation will be possible, however, there is no eminent reason to implement a similar interconnection charging regime as in today's internet world as two separate charging regimes could be sustained at the same time without creating arbitrage or other problems.

While it is true that the existence of a CPNP regime will uphold the situation in which operators have SMP on the termination bottleneck necessitating NRAs to set interconnection prices it seems disproportionate to change the whole interconnection charging regime just because of this. During the last years NRAs have not only amassed great amounts of knowledge on how to determine the right interconnection charges but the recently published recommendation of the EU Commission on the

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Regulatory Treatment of Fixed and Mobile Termination Rates foresees the continuation of the CPNP regime. Furthermore, a change to BaK would probably not decrease the regulatory burden for operators but also for NRAs themselves as the regulatory workload would not vanish but shift from economic to technology regulation in a BaK regime without any significant benefits.

Apart from this general question mag doesn't see the merits of favouring BaK over the CPNP in regard to the welfare of customers. Today's customers have quite different calling patterns. While some user groups tend to make more calls than they receive some user groups receive more calls than they make. A change to BaK would mean that those customers who receive more calls than they make will have to expend more money than they did under the CPNP regime (irrespective of how retail tariffs will change) while customers who make more calls than they receive will save on their budgets for communication means. Consequently, the change in the interconnection regime will lead to fundamental distribution changes. mag cannot judge if these changes increase or decrease distributive justice. But for mag it is not clear which problem of termination markets really call for such a fundamental change in equity.

Another more general problem following a change to BaK which mag sees is a potential decrease in investment incentives in NGN – especially for mobile network operators. As BaK leads to a situation in which the price for the service "termination" will be set at zero, investments in new infrastructure might be discouraged. While in theory it might be possible to recoup the losses in wholesale revenues by additional revenues from retail customers it is not sure if this would really be possible due to the fierce competition in (mobile) retail markets. Considering the possibility that operators would not be able to cover their losses in (wholesale) revenues the incentive to invest in NGN would be decreased significantly contradicting the goals of EU telecommunications policy.

Last but not least mag wants to point out that a change to BaK might not only lead to an increase in illegitimate conduct (e.g. SPAM and SPIT etc) but also to competitive distortions between operator (groups) if BaK is not introduced worldwide as operators in a BaK domain will subsidize operators in other domains in which BaK does not apply. In order to minimize these repercussions it is paramount that BaK would be introduced in all European countries at he same time while preserving a CPNP regime towards all other countries which do not apply a BaK regime as well.

In conclusion, mag believs that the ultimate effects of a migration to a BaK regime in Europe have not been studied deeply enough by the ERG as the impacts on consumers as well as operators are still not completely understood. Accordingly, we believe that the proposed change in the interconnection regime should be subject to a thorough impact assessment which the ERG failed to produce in its draft Common Position.

Following we outline our position on the more detailed questions of the ERG draft Common Position in regard to a possible introduction of a BaK regime in the European Union.

#### Questions 1 and 2:

In general mag is convinced that it will also in an all IP world be possible to technically identify different services although all services will be using a shared network layer as we see the migration to



a multi service NGN environment as a technical progress which should help us to offer our customers the services they want to acquire in an way even more targeted to their personal preferences than today.

If network operators were not able to differentiate between different services (voice and data) anymore after the migration to NGNs is completed mag believes that the whole discussion of advantages or disadvantages of a BaK regime compared to a CPNP regime is completely futile. Without being able to distinguish voice services from data services in the network layer the industry would be forced to implement the same interconnection charging mechanism also for voice services which is prevailing today in the internet world for data services (similar to BaK).

However, if it is possible to technically distinguish voice services from data services there is no reason to believe why operators should not be able to keep up different interconnection regimes for different services.

In fact, if operators could not distinguish voice from data services anymore they would have an incentive not to migrate to NGNs. Voice services are real time services where any break up, delay etc. causes a negative user experience which operators will try to prevent from happening at all costs as voice services will always be in the main focus of operators. Even though usage of data services will increase in the future most data services have less quality of service issues as voice services.

Apart from mag's belief that operators will be able to distinguish different services also in an all IP world and keep up different interconnection regimes for different services there are also "legislative" reasons why operators must be able to do so: in order to support public safety by providing the means for legal interception or, for example, are able to provide emergency services with the caller's location, it is essential that operators have the possibility to identify voice traffic on their networks.

#### Question 3 (Section 3.2): How would you define the boundary for the application of BaK and where should it be located (i.e. points of interconnection where BaK is applicable)?

mag welcomes the introduction of the concept of boundary in the context of a BaK regime by the ERG. However, we think the ERG underestimates the complexity of setting the rules regarding the boundary. While it would be possible for NRAs to develop enough knowledge to understand the complexity of network architecture, routing mechanisms and regional parameters which influence the location of PoIs, mag wants to point out that at the moment the migration to NGN is still at the beginning in most of the Member States. Network operators themselves are still in the planning process without being able to make any valid statements on the most efficient network architecture in regard to the level of interconnection in the future. There is still too much uncertainty about different factors which will not only change over time but will have a significant influence on the efficient number of PoIs.

Furthermore we fail to see why this should reduce the regulatory burden on operators as well as provide more regulatory certainty as only the content of regulatory decisions would be changed from setting a price to setting rules on network architecture (see also comments on question 5).



#### *Question 4 (Section 4.2): What is your conclusion on the relationship between the charging mechanism and penetration, usage and price level?*

Although the data presented in the draft CP seems at a first glance quite convincing in demonstrating that BaK increases overall welfare it has to be noted that the "analysis" is far away from being a thorough econometric analysis which would be required in order to be able to draw reliable conclusions on any possible relationship between wholesale arrangements for termination charges including the level of termination rates and key market outcomes.

Instead of promoting again and again the same anecdotal data of a higher usage level in the US with lower retail prices we would have welcomed a comprehensive econometric analysis regarding the effects of BaK compared to a CPNP regime. It is even less understandable as Ofcom already has commissioned such a study which they published earlier this year giving the ERG enough time to incorporate the compelling findings of this study.

Following are the main findings of the CEG econometric study for Ofcom:

- The take-up of SIM cards will tend to be higher,
  - the higher the level of MTRs and
  - $\circ \quad$  if a country has adopted a CPNP regime rather than a BaK regime
- No robust statistical evidence on the relationship between usage and level of MTRs
- The evidence does not robustly show that the level of MTRs affects the (average) level of retail prices

Taking these findings into account it seems unclear why the ERG still insists of identifying a robust relationship between BaK and usage or the level of termination charges and the level of prices without presenting conclusive econometric evidence.

In addition to failing to produce thorough econometric evidence mag regrets that the ERG is not even attempting to explain possible reasons why the mentioned differences between the US and Europe should be attributed to a BaK regime instead of any other(e.g. socio-economic) reasons.

## *Question 5 (Section 5.1.3): How does BaK affect regulatory certainty and the risk of legal disputes?*

Before outlining the mag's position on question 5 we think it has to be pointed out that the argument of the ERG that moving cost recovery from termination to retail markets increases incentives for cost minimization ignores the fact that the network elements used for termination are also used for other services which are subject to (retail) competition. Accordingly, already today network operators have sufficient incentives to minimize costs for all network elements which would not be increased by migrating to a BaK regime.



When considering how BaK could affect regulatory certainty and the risk of legal disputes mag believes that this change in the interconnection regime would cause a shift from economic to technology regulation without any real benefits. As the ERG notes itself, BaK would require NRAs to determine the number and locations of points of interconnection which is also likely to be a key source of dispute with each party trying to minimize their costs and shift costs in to the other parties. That would mean that in the long run NRAs basically would have to put the same efforts in regulation as before even though the regulatory impact on operators and customers alike would be lower compared to setting interconnection prices.

In the short run, however, the migration to BaK would rather increase the risk of legal disputes. While NRAs today have a profound theoretical knowledge on the economics of termination regulation and considerable expertise in applying it, mag believes that a significant amount of disputes on principal questions would emerge from a migration to BaK which would have to be settled in courts of justice as were, for example, after the introduction of the 2003 regulatory framework.

# *Question 6 (Section 5.2.1.3): How do different wholesale charging mechanisms impact on the number of unwanted calls? Do you expect (other) effects on consumers/consumer groups? Where possible, provide a quantitative assessment of the expected effects.*

mag believes that ERG is underestimating the risk of SPIT and SPAM. For example, the ERG argues that automated messages are unlawful in the EU and concludes that it is labour costs and not the costs of voice traffic which make SPIT unprofitable. The risk from machines delivering recorded messages is neglected by pointing out that in the EU automated machine calling is not allowed. However, ERG does not take into account that in an IP world automated messages are hard to trace and will therefore not be kept at bay when the costs for making such calls are significantly reduced. Furthermore, although it might be illegal in the EU to send automated voice messages it will almost be impossible to apply EU law to unwanted communications coming from outside of the EU. Accordingly, mag would expect an increase in nuisance calls after a transition to BAK.

Apart from the problem of unwanted calls a relevant consideration which the ERG is not considering in its draft Common Position is whether BaK should also be imposed on other services if it is to be imposed on voice. mag believes that imposing BaK also on SMS will increase the volume and impact on consumers significantly. It has to be noted that one important reason for the introduction of SMS termination charges was the volume of SPAM text messages being sent to customers. This significant problem was almost eliminated after operators started to charge termination rates for received text messages.

## *Question 7 (Section 5.2): How do you assess the quantitative relevance of call and network externalities?*

Call externalities:



While the analysis of the consultation paper is reasonable in theory it is not considering reality: competition in mobile markets is fierce in European markets in general which might prevent operators from introducing a Receiving Party Pays principle. Accordingly, BaK would lead to a situation where call externalities were not better internalized than today.

Apart from that, mag foresees a second problem: if in some countries RPP (or, for instance, in the fixed market only) could be introduced while it couldn't in others (due to intensity of competition) the introduction of BaK would lead to competitive disadvantages between operators.

#### Network externalities:

mag agrees with the ERG that it is difficult to assess the size of the network externality. However, looking at the data from CEG and the ERG itself makes one thing clear: current levels of penetration differ significantly between countries with different wholesale charging regimes: the US and Canada have much lower penetration rates than Europe<sup>1</sup>. This indicates that the CPNP regimes is more likely to be able to internalise the network externality. The statement of the ERG that the size of the externality mark-up that Ofcom has applied in the past was rather small and therefore indicates that the network externality is rather limited seems to ignore the rather big differences in penetration rates in countries with zero or low termination charges (i.e. the US and Canada) and Europe with its CPNP regime.

## *Question 8 (Section 5.3.5): How would your business be affected by a move from CPNP to BaK? Please explain the expected impact on prices, volume of supplied services and profit.*

Current termination charges provide an important source of revenue to cover the cost of providing mobile services. For many customers, the volume of calls made and the volume of calls received may be fairly evenly balanced so that the level of mobile termination charges may not have a large impact on whether they can subscribe to a mobile network. However, current termination charges can mean that low income consumers are able to afford a mobile phone whom might not be able to do so with higher mobile retail prices following reductions in termination charges.

Mobile services have contributed significantly to improving overall telephony access in many of the new Member States – in countries such as the Czech Republic, Lithuania and Romania around half of all households have only mobile access<sup>2</sup>. But even in the older Member States, mobile services can represent the main means by which low income households obtain telephony access. Ofcom, for example, found that 33 per cent of low income consumers live in mobile only households.

<sup>&</sup>lt;sup>1</sup> The examples of Hong Kong and Singapore which have similar penetration rates as Europe might be misleading as network costs for operators in these densely populated city states are likely to be very low leading to low retail prices while at the same time GDP per capita is significantly higher than in Europe.

<sup>&</sup>lt;sup>2</sup> Reproduced from Eurobarometer, E-communications household survey, April 2007, p.12.



Pre-paid mobile phones (i.e. with no ongoing subscription charges) are particularly useful for low income households because they enable greater budgeting control. European mobile operators are more inclined to support affordable pre-paid services because even if the individual mobile customer makes relatively few calls, termination revenues can help to cover the difference to make it commercial viable to support low usage customers on their networks.

The US regulator, the FCC has noted:

"From the subscriber's point of view, use of CPP [i.e. Calling Party Pays] makes mobile phone service cheaper and more affordable, particularly in the case of low-income and low-usage customers. For this reason, CPP is widely regarded as being more conducive to the successful promotion of prepaid offerings than MPP [i.e. Mobile Party Pays]".<sup>3</sup>

In North America where termination revenues are much lower, so called 'pre-paid' tariffs generally require significant minimum monthly expenditure. North American operators have to recover all the costs of bringing a customer on to the network from that customer and hence have no incentive to support low usage customers. The existence of minimum monthly spend commitment means that low income US consumers do not have access to the same pre-paid tariffs, offering budgeting control, that European consumers enjoy.

Economic theory shows that changes in termination rates affect the profitability of individual subscribers and thereby affect operators' decisions including the level and structure of mobile retail prices. Or, as the UK Competition Commission considered: "*most of the reductions in revenue from termination charges being capped will be recovered from the retail market*".<sup>4</sup>

It is difficult to predict the precise effects in any one market in advance. There are a number of potential effects.

- Lower fixed-to-mobile prices:
  - The extent of the reduction will depend on pass-through by fixed operators. Experience from previous MTR reductions shows that a full pass-through in the short and even medium term is highly unlikely
- Higher subscription charges and higher handset prices:
  - Mobile subscription is highly elastic so that higher charges may cut off subscriber growth and lead to the loss of existing subscribers when handsets are broken, lost or stolen
  - $\circ$  High handset prices may deter switching and delay migration to 3G
- End of current pre-paid tariffs:
  - Operators may introduce minimum monthly spend commitments as they will be forced to recover the costs of acquiring and servicing a customer from that customer.

<sup>&</sup>lt;sup>3</sup> FCC, Annual Report and Analysis of Competitive Market Conditions With Respect to Commercial Mobile Services (2003), p.90.

<sup>&</sup>lt;sup>4</sup> UK Competition Commission, Calls to mobiles report, 2003, para. 2.563.



- In North America, significant minimum monthly expenditures are common on so-called 'pre-paid' tariffs. North American penetration rates continue to remain significantly below European penetration.
- Higher call prices:
  - Prices to call from a mobile phone may end up substantially above marginal cost with a consequent highly skewed pricing structure. UK operators, for example, have increased their call prices in 2008.
- Investment:
  - Investment may also be affected to the extent that the waterbed effect is incomplete or takes time
  - Investments in extending coverage and in deploying new services (3G/LTE/mobile broadband) may be reduced: the prevailing business model in the mobile industry in regard to rolling out new technologies is based on a simple mechanic: let the new technology be financed by voice services. Accordingly, any reduction in revenues from voice services (like MTRs) will impact on the speed of deploying new technologies as well as its quality levels (e.g. coverage).

# *Question 9 (Section 6.1): Do you agree with the conclusion that operators/users in the BaK domain will subsidise traffic coming from outside the domain (regardless of the legal aspect)? Are there any mechanisms to prevent this and how will they work in your view, in particular to avoid arbitrage?*

The analysis of the ERG very correctly demonstrates that operators/users in the BaK domain will subsidise operators/users from the CPNP regime if BaK is implemented unilaterally. However, mag does not agree with the conclusion that this effect does not require that BaK should be introduced in all Member States simultaneously and still allows for different speeds of transition. It has to be noted that even today's differences in termination rates across Member States is highly contradictory to the goal of the Single Market.

Although it is true that the differential between MTRs should be reduced over time with the new termination rates recommendation, it is still doubtful that this would realy be the case. But even if the differential was reduced it does not mean that the difference between BaK and the "new" European average MTR (after 2013) is low or unsubstantial even if it might be smaller than today. Accordingly, operators from countries with below average MTRs or even BaK would continue to subsidize operators from countries with higher MTRs. This would contradict the European Union's goal to create and strengthen the single market also for communication services and allow existing market distortions to continue. Therefore, mag believes it would be necessary to introduce BaK in all Member States at the same time if a change of the wholesale charging regime was deemed to be necessary by the European Union.

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If that was not the case and BaK would not be introduced in all Member States simultaneously mag believes it to be paramount to introduce a two folded wholesale charging regime: BaK between operators (both mobile and fixed) who also apply BaK and a CPNP regime for external traffic from operators/countries which still have not completed the migration to BaK.

It is even more important to allow for a differentiated charging regime towards traffic from non EU countries which do not apply a BaK regime as only this could prevent a significant net outflow of capital from the EU. A rough calculation by mag based on data from 2008 shows that this capital outflow could be higher than 400 Million Euro<sup>5</sup> per year for mobile operators only which would affect especially those operators in smaller countries with a high share on non-EU traffic. The loss of revenues of EU operators would have to be compensated by raising more revenues from European customers.

As the ERG points out the subsidy from the BaK domain to the CPNP domain could be prevented by differentiating within the BaK domain for internal traffic and traffic from outside the domain. While it is true that there would be an incentive for operators in a BaK domain to compete for external traffic directed to the BaK domain in order to be able to charge a terminating fee for it and deliver the traffic on the destination network without cost there already today exist mechanisms to effectively prevent this from happening. This can be seen in countries where operators are allowed to charge a different termination fee for national and international traffic. Although operators in these countries would have the same incentive as operators in a BaK domain would have for external traffic empiric evidence shows that it would indeed be possible to effectively differentiate internal from external traffic although this would increase fraud detection efforts of operators. Apart from operators own interest to distinguish traffic from outside the BaK domain also public authorities will share this interest as it is important to be able to identify the origination of calls due to reasons of public safety.

Regarding the prices for terminating traffic from an CPNP domain to a BaK domain mag suggests to set these prices on the average level of termination rates in each CPNP domain. In order to facilitate this pricing principle the European Union could publish the average termination charges of each CPNP country on a quarterly basis which would than be applied by BaK domain operators for the traffic from CPNP countries.

## *Question 10 (Section 6.3): Do you see any implementation problems for a migration period towards BaK? How could such problems be addressed?*

As already explained above there will always be net payers and net receivers leading to market distortions if interconnection charges are not harmonized. This holds even more true if BaK was not implemented in all Member States and not for all mobile operators at the same time. Before the

<sup>&</sup>lt;sup>5</sup> Calculation is based on the volume of 2008 traffic to non-EU countries of mobilkom austria, Mobiltel and Simobil and the corresponding interconnection charges. These costs were extrapolated to EU level according to the share in population of the three countries to overall EU population.



introduction of BaK can be seriously considered it would be paramount to set the interconnection charges for all mobile operators across the EU to the same level in a first step in all Member States.

mag disagrees strongly with the statement of the ERG that the migration period can be shorter the lower the level of interconnection rates are. In order to harmonize the Internal Market BaK should be introduced with the same speed for all operators within the EU only after termination charges are harmonized in the European Union, i.e. all mobile operators would introduce BaK at the same time<sup>6</sup>.

#### Question 11 (Section 7): Does the draft CP miss any other relevant issues?

Although the draft CP states that a converged multi-service NGN-IP seems to benefit from a single terminating charging mechanism it is not clear if BaK would have to be applied only for all-IP-traffic or also for circuit switched traffic.

It also misses to discuss how the ERG wants to ensure that in an all-IP-world quality of service for voice services can be upheld as well as it is not considering any aspects of how operators could comply with their legal obligations in regard to public safety (i.e. legal interception etc).

<sup>&</sup>lt;sup>6</sup> Of course it should be possible to introduce BaK in one Member State before it is legally introduced in other Member States if all operators of the same type agree on doing so. This doesn't mean, however, that a NRA should be allowed to introduce BaK in its country ahead of all other Member States. It should only be possible on a voluntarily basis by operators.