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## INTERNATIONAL ROAMING REGULATION – AND WHY ATK IS WRONG

In February 2007 the European Parliament's committee on Internal Market and Consumer Protection (IMCO) issued an opinion on the European Commission's proposal to regulate international roaming. The opinion of the IMCO drew on a study by Copenhagen Economics.

Shortly after the IMCO had presented its opinion, A.T. Kearney (*not* A.T. Kearney/GSMA) issued a study<sup>1</sup> commenting on two specific issues in the Copenhagen Economics study, namely the size of the roaming specific costs at wholesale level and the size of the profit mark-up over retail costs on retail level. In their study, A.T. Kearney argues that both the roaming specific costs and the profit mark-up are higher than estimated by Copenhagen Economics.

In this memo, we show why A.T. Kearney is wrong; and hence, why the A.T. Kearney reply does not change our previous recommendations on regulating prices on international roaming.

Before addressing the two specific issues raised by A.T. Kearney, let us take a step back and look at the bigger picture. We look at the prices for international roaming currently paid by consumers and compare them to the costs for operators of supplying roaming services, as calculated by A.T. Kearney. When doing that, we find that A.T. Kearney argues for costs so high that their proposed retail price cap will be above the current price level on many routes. Hence, the regulation will not lead to lower prices. This seems to indicate that A.T. Kearney exaggerates the costs.

A.T. Kearney finds that a cost based retail price cap should be around €55ct - €56ct per minute<sup>2</sup>, while the GSMA says that consumers may experience prices on international roaming of just €33ct. The average price on the top 20 routes are €43ct per minute according to the GSMA, cf. Figure 1<sup>3</sup>.

Table 1: Comparing retail prices with A.T. Kearney's cost estimates, eurocents per minute

Retail roaming prices according to the GSMA <sup>1</sup>		A.T. Kearney suggestion for retail price cap based on costs for making a roaming call
Lowest price	33	55-56 <sup>3</sup>
Average on Top 20 routes	42	
Average price on all routes	62 <sup>2</sup>	

<sup>1</sup> A.T. Kearney, "International roaming regulation – comments on the Copenhagen Economics 'Study on roaming' published in February 2007", dated 27<sup>th</sup> of February 2007.

<sup>2</sup> See page 13 in the A.T. Kearney report in footnote 1.

<sup>3</sup> GSMA, "International roaming – developments in the retail market", <http://www.gsmworld.com/roaming.shtml>.

*1: See footnote 3; 2: The average price in the last quarter of 2006, it may be a mix of making and receiving a roaming call; 3: Actually A.T. Kearney advocates that roaming costs are even higher by €1ct per minute as they believe the current estimate underestimates retail costs by €1ct, see the A.T. Kearney/GSM, “Proposed retail mark-up and allocation of actual industry average retail costs”, November 2006.*

We will now briefly address the two specific points raised by A.T. Kearney, that is, 1) the size of the roaming specific costs at wholesale level; and 2) the size of the profit mark-up on retail level.

### Roaming specific costs

The conclusion is that A.T. Kearney, while being very good at reporting, merely shows that if you *assume* that the components that make up roaming specific costs are high, you will find that the total roaming specific costs are also high. A.T. Kearney uses for input costs estimates without any real explanation and without ever providing the original source of the estimates. Consequently, the A.T. Kearney-“estimate” that the roaming specific costs are around €7ct-€8 ct per minute (as opposed to our estimate of around €2ct per minute) is a nice calculation example, but nothing more.

Looking beyond the many pages of meticulous calculations presented by A.T. Kearney, the fact remains that the results of whatever sophisticated model depend on the inputs. The inputs are the components needed for operators in order to provide international roaming. Two important components are the CAMEL technology and the Interconnect billing system. The cost estimates of these two components (€15 m for CAMEL and €7 m for Interconnect billing system) are taken from the ITRE study which do not provide sources and where assumptions are not at all clear. Hence, their sizes are very debatable (some operators have told us that these prices seem very high). Nevertheless, A.T. Kearney simply adopts these estimates well aware of the lack of documentation.

A second issue is that the estimated costs for say CAMEL and an Interconnect billing system are not roaming *specific* costs as both components are often used for many other purposes too, not just for roaming. The A.T. Kearny cost estimate of €15 m for CAMEL technology and of €7 m for an Interconnect billing system simply cannot be the cost attributed to international roaming only. The fact is that all operators need an Interconnect billing system regardless of roaming. For example, operators need it for ordinary traffic. And many operators use the CAMEL technology for many other things than roaming. For example, the CAMEL technology entails a number of advantages such as real time call control and credit ratings. Consequently, only a fraction of €15 m and €7 m should be allocated to roaming.

A third issue is that A.T. Kearney does take into account that many of the roaming specific costs can be attributed to international roaming outside the EU. Sure, A.T. Kearney gives a

random discount of 20% on the components of roaming specific costs on that account (the discount must actually also cover the omission of SMS roaming); and then claim that this discount will result in a conservative estimate of the total roaming specific costs. But a discount of 20% does not at all result in a conservative cost estimate if the true discount is say 80%. An 80% discount may actually be more correct as operators must have the vast majority of roaming agreements outside the EU which are probably at least as expensive to set up as roaming agreements within the EU. So just pooling costs for EU and non-EU activities together and then subtract a 20% discount will not at all give you the right cost estimate.

Several other points of critique can be raised, but we choose to end here. Our aim is not to engage in a very technical discussion on each of the problematic issues.

### Retail profit mark-up

Discussing retail mark-ups, the important point is whether the mark-up should be levied on retail costs only, or on retail costs plus wholesale costs. A.T. Kearney argues for the latter, i.e. that a retail mark-up should be levied on the sum of wholesale and retail costs. Based on this intuition they arrive at a retail mark-up of €13 ct per minute. Retail costs are less, around €12 ct per minute. Again something is just not right. Let us try and see why.

A.T. Kearney rightfully says that the retail operator is acting as a reseller as it is merely “reselling a foreign network” to its own customers<sup>4</sup>. And therefore (for some reason), the mark-up should be levied on the total costs of providing the service. This, as we have seen, results in a mark-up approximately equal to the retail costs. But in a *competitive market* – whose price outcome we are trying to achieve through regulation – the retail mark-up should reflect the costs at the retail level, not total costs including the intermediate input factors, in this case wholesale services.

The profit should cover capital investment and risk. However, the retail provider has no capital invested in ‘foreign networks’ and bears no risk on ‘foreign networks’.

It may be illustrated imagining a competitive shoe market. If a shoe seller imports shoes worth €1 m and has retail costs to pay his own wage and rent of €0.1 m, he cannot simply claim that he is entitled to a retail mark-up in the vicinity of €1.1 m, the sum of wholesale and retail costs. If he tries to reap that profit through high prices on shoes, other shoe sellers will quickly enter the market and eventually drive down the profit, or the retail mark-up. Insisting on a profit of €1.1 m, our shoe seller will soon go out of business.

<sup>4</sup> The quote is located on page 12 in the report referred to in footnote 1.

### **The size of the mark-up**

A.T. Kearney claims that the retail mark-up should be 30% whereas we suggest 15%. This discussion has far less implications for the price caps than the issues above as both percentages are small when taken of the retail costs which we find to be approximately €12 ct per minute. Nevertheless, we will briefly address the issue.

First, A.T. Kearney suggests that we focus on the comparable profit measures of profit margin (we estimate it to be 10%) and EBIT margin (we estimate it to be 13%). The average of these two measures is 11.5% equivalent to a 13% mark-up on costs. This is close to the 15% that we proposed.

Second, A.T. Kearney claims that the proposed profit margins should be of similar size as the profit margins in the overall mobile industry not similar to the profit margins derived from the entire telecommunications industry (the above margins are calculated based on the entire telecommunications industry). However, by using the profit margin for the mobile industry only, the current exorbitant profits from roaming induce an upward bias in the profit margin estimate, which is exactly what the regulation sets out to reduce. Using the profit margin for the entire telecommunications industry instead reduces this impact from roaming profits.

Finally, A.T. Kearney decides to suggest a 30% mark-up as it is the retail mark-up originally proposed by the Commission. However, as A.T. Kearney correctly notes, the Commission anticipated this mark-up to cover both retail costs and a profit contribution, not just a profit contribution.<sup>5</sup> Hence, it seems rather inappropriate to use the Commission as a source when suggesting a 30% pure profit contribution.

<sup>5</sup> *"The European Commission's proposed regulation of roaming tariffs for operators in EU countries proposes caps based on wholesale costs plus a retail mark-up (which presumably should cover both retail costs and a contribution to overall profits)", first sentence page 3 in the report in 1.*