

INCIDENTAL PAPER

**Regulation of Intra-EU Roaming:
A Summary of the 2000-2010 Decade**

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*EU POLICY CASE-STUDY IN THE FIELD OF
TELECOMMUNICATIONS*

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A SUMMARY OF THE 2000 - 2010 DECADE**

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REGULATION OF INTRA-EU ROAMING

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EXECUTIVE SUMMARY

The purpose of this paper is to illustrate a case of European public policy, specifically of regulation in the dynamic field of mobile communications. After years of analysis, debate and struggle with the operators, the European Commission achieved in 2007 something fairly incompatible with its prevailing pro-competitive policies: getting through legislation which caps the charges applying to subscribers as they make use of their mobile phone when abroad (within the EU). Such caps have since been made more severe and they were extended to SMS's as well as to data communications. Whereas there is no doubt that the exorbitant charges had previously prevented many travellers from using their mobile (or compelled them to drastically limit use), the information available does not reflect a strong roaming traffic increase as should logically result from an average forced price reduction of the order of 70 %. The economic crisis as an explanation is debatable.

The future of the European roaming regulation is open; but it is likely at this stage that it will be continued, in one form or another, over the coming years.

1. BASICS

Public mobile communications networks (also called cellular networks or – less precisely – wireless networks)

Mobile telephony started to be offered in the developed world in the 1970's and then exploded to become of common usage mainly since the 1990's. It has led to a gigantic industry still growing quickly: according to one research organization¹, global spending on *wireless* equipment and services surpassed one trillion - i.e. one thousand billion – dollars in 2009 for the first time. Because each country wants to keep control over its radio-waves (or so-called *radio spectrum*), mobile phone networks are established on a national basis²: the operators of these networks are national entities licensed by some public national authority to operate them. Each European country – most of which are *EU Member States*³ - typically has several mobile networks, hence several mobile operators which compete for subscribers and traffic.

*Roaming*⁴ refers to a subscriber from country A who requires service (to make or receive a call, to send or receive an SMS, or to send or receive data) while he happens to be in country

¹ This evaluation is by California based *iSuppli*, which designates itself a “global leader in electronics value chain research and advisory services”.

² This applies more broadly to telecommunications networks in general if they include transmission facilities. Radio transmission deserves however special attention in all states.

³ The *European Union* has (in 2010 since 2007) 27 *Member - States*, following a number of enlargements which took place over the last 40 years. Important European countries not member of the EU are Norway and Switzerland. Half-a-dozen smaller countries as well as Turkey have applied to become a member. The outcome of these negotiations is uncertain.

⁴ In Europe, *roaming* refers in practice to *international roaming*. The same is not true in the U.S. nor in some other large countries where different mobile operators serve different areas, thus leading to roaming agreements

B; the intervention of a cellular operator based in country B is then obviously required; as the subscriber will be charged by his home operator, the latter has to “buy traffic” from the operator which provided the service in country B; this is where the notion of a wholesale market comes in.

The need for *roaming services* appeared practically as early as mobile telephony itself; but its wide necessity and offering have raised a number of technical, business and policy problems.

Mobility within the EU

Right from the beginning of the European integration effort, easy mobility of people – beyond easy exchange of goods and capital – was recognized as a key ingredient towards strengthening the European identity. The so-called *Schengen*⁵ agreement and the creation of the *Euro* certainly have been - among others - important facilitators in this respect. And it became natural to wish that when European citizens move around within the *Union*, they also could easily use their mobile phone.

The core issue

Roaming agreements between operators of different countries were widely set up throughout the world⁶, and naturally throughout Europe. In the latter case however, the reality of roaming was more straightforward because all European cellular operators use the same technical standard (*GSM*⁷) and compatible radio frequencies, as a result of harmonization efforts initially dating back to the 1980's. (This is not the case in the USA, nor in other parts of the Americas, or Asia).

Roaming being thus technically – and even business-wise - unhampered within Europe, increasing attention was given by the end-users and by the business or political circles to the “exorbitant” level of the roaming charges. Whereas the issue focused for a long time on voice-calls, the prices charged for *SMS's* or for *data* a roamer sends or receives while abroad have become a real cause of concern.

The roaming charges issue is virtually worldwide. But the EU case is unique because of the institutional framework which allows directly applicable and enforceable legislation throughout the whole Union.

2. REGULATORY HISTORY

within their borders. Intra-U.S. roaming in particular has been a big issue since the inception there of mobile communications (formally in October 1983).

⁵ The *Schengen Agreement* was originally signed in 1985 between the five countries then constituting the *European Economic Community*. It was since gradually expanded and by 2010 the « borderless » *Schengen area* includes 25 (out of EU's 27) Member-States, encompassing over 400 million people. Border controls between those countries are eliminated.

⁶ By year-end 2001, already some 20 000 roaming agreements had been signed across the *GSM* world.

⁷ The *Global System for Mobiles* standard was developed in Europe during the 1980's and was later adopted by a large number of operators and countries. The number of *GSM* subscribers thus reached two billion worldwide already mid-2006. Obviously, international roaming is particularly important in the *GSM* context.

The prices of roamed calls were seen as excessive both with respect to national calls and equivalent non-roamed international calls: a 1999 report from a users association⁸ indicated that some roaming calls cost up to five times as much as comparable non-roamed international calls.

In July 1999 the *European Commission* (here called the *Commission*⁹) decided to open a sector inquiry into mobile roaming. Its services completed an analysis of roaming prices for the 1997 – 2000 period which aimed, as its prime goal, at determining if the roaming services market was competitive within Europe. Observing that there are actually two clearly distinct relevant markets – the wholesale roaming market and the retail roaming market - they came to the following conclusions:

- Excessive pricing and price collusion were likely concerning both the level of wholesale rates and the mark-ups applied in retail markets.
- In a number of national markets, the different mobile operators charged almost identical wholesale rates which appeared to reflect coordinated pricing behaviour or tacit collusion. In some of these, mobile operators applied similar retail tariffs as well.

Upon the *Commission's* request, the telecommunications regulators¹⁰ of the 25 Member-States (at that time) launched an inquiry which established that operators – in a number of situations - charged seven to 15 times more for roaming calls than for equivalent domestic calls.

In 2005, the *Commission* warned consumers of the cost of using their mobile phone abroad and targeted a lack of price transparency¹¹.

Later, the *2006 Eurobarometer Survey on Roaming* strengthened the desire of the European authorities to take real action, recognizing implicitly that competition as such was not sufficient to lower roaming charges, whether wholesale or retail. The results of this survey¹² showed that a large fraction of Europe's travelling population was unhappy about the high level of these charges which deterred them from using their phone abroad or forced them to use it much less than while in their home country; and nearly half of the respondents stated that they were confused as to the prices they pay for roaming. Indeed, in 2006, a four-minute roaming call between two EU countries could cost as little as 0.2 Euros to as much as 13 Euros.

Early 2006, the new *Commissioner* in charge of *Information Society and Media*, confirmed the *Commission's* intent to seek adoption of a *Regulation* on international roaming charges in the EU, at the retail level. The aim was, ideally, to eliminate roaming charges on intra-EU

⁸ This report was from INTUG, to which we will get back later.

⁹ The *European Commission* acts as the « executive » of the European Union. It proposes legislation and implements decisions.

¹⁰ So-called *NRA's: National Regulatory Agencies*

¹¹ The July 2005 release says: "As the peak holiday season approaches.....the *European Commission* is warning consumers about the high cost of using their mobile phone while abroad. Known as international roaming charges, these have been for some time already a concern both to the *Commission* and national regulators. In spite of first signs of movement in the markets, the *Commission* is not satisfied that the prices to be paid by consumers already reflect the result of effective competition".

¹² Over 24 000 people from the 25 EU countries were questioned in September 2006. 70% of the respondents were favourable to EU intervention to reduce roaming prices.

calls received while abroad; and, when making calls, to be charged as at home plus some cost-based-fee. Strangely, such an approach was opposed by the *European Regulators Group (ERG)*¹³ which preferred aiming at a wholesale price regulation only. Obviously, the mobile communications industry (the operators) was opposed to regulatory moves and their arguments and tactics are analyzed below.

In July 2006, a proposed regulatory text was formally tabled by the *Commission*. Its President stated in support that “the Single Market is first and foremost for consumers”, and the *Commissioner* in charge added that “we are tackling one of the last borders within Europe’s internal market”. That this was an important matter derived clearly from the observation that at least 147 million EU citizens were affected¹⁴. The intended regulation consisted essentially in capping at a uniform level within the EU wholesale roaming rates on one hand and retail roaming rates on the other.

To support this action, an *impact assessment* was produced by the *Commission*’s staff at the same time. This document explains that the *Framework Directive* of 2002¹⁵, was not sufficient to effectively address the concerns relating to roaming charges. Said plainly: in this instance competition does not work. However, the assessment does not examine a key impact question: how will the roaming traffic and the industry be affected by the regulation? In March 2007, the telecom ministers representing the governments of the 27 Member-States – the so-called *Council* - expressed agreement with the intended measure¹⁶. And at the end of May 2007, the European Parliament adopted the corresponding text, after tough negotiations however with the *Council* – in practice, with some major Member-State governments – on key points including:

- The exact level of the caps: the final compromise reached was 49 Eurocents / minute for outgoing roaming voice-calls; 24 Eurocents / minute for incoming roaming voice-calls¹⁷, at retail level¹⁸.
- The “opt-in” model: to take advantage of the capped tariffs, some negotiating parties wanted the subscriber to go through an “opt-in” procedure with his operator (like making a specific call to customer service prior to a foreign trip). This cumbersome provision was finally scratched.

This meant that after the Summer of 2007¹⁹, all mobile operators within the EU²⁰ were to introduce a transparent *Eurotariff* for voice calls below the mentioned caps. In the

¹³ The *ERG* is composed of representatives of all national telecommunications regulators in Europe, often referred to as *NRA*’s for *National Regulatory Agencies*. It was replaced early in 2010 by *BEREC* – the *Body of European Regulators for Electronic Communications* - a similar structure, but assumed to have more clout.

¹⁴ « 37 million tourists and 119 million business customers » according to EC’s July 12th 2006 release. One should not infer from this that there are more business travellers than other travellers.

¹⁵ *Directive of the European Parliament and of the Council of March 7 2002 on a common regulatory framework for electronic communications networks and services.*

¹⁶ The formal approval by the *Council*, hence by the Member States, came only end of June, hence after *European Parliaments*’s vote.

¹⁷ Further reduction in 2008 and in 2009 were already foreseen in the adopted text.

¹⁸ National taxes like VAT (*value added tax*) are added to these caps. Hence, as these taxes differ significantly, the end-users do not have a perception of uniform caps around the EU, say in Euros.

¹⁹ Though the regulation in principle entered into force already on June 30th.

²⁰ As well as in Norway, Iceland and Liechtenstein (members of the so-called *EAA* – *Economic European Area*). A major exception to the domain where the roaming regulation applies, is Switzerland.

Commission's evaluation, this results in reductions on the average of 60% of the costs for subscribers of roaming calls within the EU²¹.

Regarding *SMS's* and transmission of data, the *Commission* had subsequently hoped that mobile operators would voluntarily reduce the exorbitant roaming charges in response to extended regulation threats. This, though, was not the case.

In September 2008, the *Commission* made a further proposal containing four elements:

- Reduction of the roamed voice-call price caps
- The principle of *per second billing* for roamed voice calls
- Capping prices of roamed *SMS's*
- More transparency for data roaming services.

This move received a positive reaction both from the *Council* and from the *European Parliament*. The latter voted a new regulation²² entering into force on July 1 2009, which capped the price of roamed SMS messages to 0.11 Euro (opposed to the previously prevailing average of 0.28 Euro); and it capped the price of data calls (e.g. to access the Web) to 1 Euro per megabyte (opposed to the prevailing average of 1.68 Euro)²³. The already in effect cap for voice call prices was at the same time reduced to 0.43 (from 0.46 Euro) per minute for roamed outgoing calls and to 0.19 (from 0.22 Euro) for roamed calls²⁴ received²⁵.

These rules are normally to apply until summer 2012. The question as seen in 2010 is whether such rules will be renewed beyond that time or be suspended because roaming price regulation is no longer considered necessary or appropriate. Towards this decision by the *Parliament*, the *Commission* produced an "interim report" by mid-2010 and will produce a "final report" by mid-2011; the former became available late June and will be referred to later.

Systematic monitoring by the regulatory bodies has shown that all mobile operators within the EU have complied with the regulations above. The *Eurotariffs* they offer are below the caps, though in general only slightly so.

3. ROLE OF USERS ASSOCIATIONS

²¹ There have been various formulations of what the capping meant in terms of average price reduction (including also the further reduction of the voice caps and the later capping of SMS prices). But figures of 60 or 70 % have been often mentioned.

²² Sometimes referred to as *Roaming Regulations II*.

²³ Also included in this revised / extended regulation, are provisions to protect consumers from "bill shock" likely to occur as a result of internet access: a cut-off mechanism once the bill reached 50 Euros, unless another limit is chosen by the subscriber. Operators had until March 2010 to put this cut-off mechanism in place.

²⁴ Further reduced to 0.11 cents by July 2011.

²⁵ The new regulation also introduced per second billing after 30 seconds for roamed calls and a measure to protect consumers from "bill shocks": a cut-off mechanism once the bill reaches 50 Euros (or another chosen amount).

Some mobile subscribers were already concerned about the high roaming charges in the 1990's. But the first collective complaint, namely from INTUG²⁶, did not come until 1999. This Brussels-based telecom users organization carried out in 1999 and 2000 a series of surveys which drew the attention in particular of the Commission's *Competition Directorate* of that time; they were key in triggering a formal investigation.

Subject surveys showed price variances of two to ten times for the same or a similar call. They further evidenced that roaming calls were typically much more expensive than equivalent international calls (without roaming). INTUG also condemned at that time the confusion surrounding how the actual charges were calculated as well as their instability over time.

When in 2004 the *Commissioner* in charge of telecommunications launched an EU-wide inquiry through the national regulators as well as a separate investigation into the roaming charges imposed by the UK's operators, INTUG "warmly welcomed this coordinated action by regulators in the EU".

A number of later INTUG reports and submissions continued to insist on the excessive level of the roaming charges and on the fact that the then current – say in 2005 – EU rules dated from the 1990's. In INTUG's view, these rules were no longer suited to complex markets where large players can exploit their dominant position; at the same time, single market logic dictates that it should be possible to use a mobile phone anywhere in Europe without higher charges.

In a speech given to the European Parliament in 2005²⁷, INTUG's Executive Director stated: *"It is disappointing to INTUG that international mobile roaming continues to be an issue with which we must struggle; that it has proved to be impossible to resolve, despite the passing of so many years. It is an issue which causes so much frustration to users, both individuals and corporations"*.

Another users organization (though not specialized in telecommunications), the *BEUC*²⁸ - the *European Consumers Organisation* - has played an important role in drawing attention to, and making more explicit the excessive roaming charges issue. In its response to the EC's inquiry launched in 2005, the BEUC stated: *"In our 2003 Mobile Phone Survey....., which aimed to ascertain in which areas consumers in Europe are experiencing problems with mobile communications, we found that roaming charges are very expensive and sometimes surprisingly similar between different operators in the same Member State"*²⁹.

²⁶ INTUG (*International Telecommunications Users Group*) represents national telecommunications users associations but focuses primarily on the interests of large users; it has been in existence since 1974. The surveys and the work on roaming referred to were primarily carried out by "INTUG Europe".

²⁷ More precisely to two Committees of the EP: the *Committee on Industry, Research and Energy*, and the *Committee on Internal Market and Consumer protection*.

²⁸ The *Bureau Européen des Unions de Consommateurs* is a Belgium-based AISBL (*Association Internationale sans But Lucratif*). It is partly funded by the EU which provides operational grants to European consumer organizations. Its members are national consumer rights bodies (43 in 2009) from 31 European countries.

²⁹ The BEUC submission goes on : *« In some cases a 4-minute call home from abroad costs more than 10 Euros. Roaming charges were consistently high, save a few exceptions. One Danish company for example seems to be offering significantly lower charges. Whereas customers from Denmark and other Member States had to pay around 5 Euros for a 4 minute call home, the cost to this company's customers was only 0.67 Euro, over seven times lower. We would be inclined to take the lower price as a realistic reflection of the costs"*.

A significant achievement of the BEUC was to commission, jointly with the French consumers organisation *UFC Que-Choisir*, an external³⁰ analysis of the matter, released in February 2007. This is a rather detailed – not to say technical - study which provides a number of pertinent observations. To mention just three here:

- The retail roaming prices have not evolved during recent months, contrary to the assertions of the operators. As to the package offers which have appeared, they are not suited to the needs of individual customers.
- A large international operator has a specific offering³¹ however limited to the networks of its group. The pricing schedules are very sensitive to the duration of the calls and short calls may be more costly than with the base-rate.
- Mechanisms to guide traffic to favoured visited networks have broadly expanded; but they did not result in lower prices for the final users.

Users associations from several Member States have remained quite vociferous about the roaming issue. In September 2009, the Spanish association FACUA and *UCF-Que Choisir* have both complained to the Commission about mobile data roaming charges (in practice mobile internet access). The French rates mentioned in the complaint were indeed very high (in the 5 to 9 Euros per megabyte) compared to typical rates charged by UK and Italian operators (of the order of 2 Euros). And so were the rates charged to Spanish users (up to more than 11 Euros).

4. ATTITUDE AND REACTIONS OF THE CELLULAR INDUSTRY

When we refer to the “Cellular industry” here, we mean the mobile phone operators (sometimes called service providers³²) licensed in each Member State as well as their joint organisations. Not included are manufacturers of infrastructure or of phones, which play an extremely limited role – if any – pertinent to roaming³³.

Typically, the 3, 4 or 5 operators present in each country are represented by a national organisation. But of paramount significance is an international body, the so called *GSM Association* which initially grouped Europe’s GSM operators and then extended to the world as the adoption of the GSM standard became much broader. Its history reflects the birth and the deployment of that standard, a key early step being a joint development agreement between Germany and France in 1984.

³⁰ By *Altex Research*, a French consulting company.

³¹ *Passport* offered by *Vodafone*.

³² There are in fact two types of service providers: those which are facilities based on one hand and the MVNO’s (*Mobile Virtual Network Operators*) on the others: the latter do not have their own network facilities and have to buy traffic from the former. For various reasons, we limit the discussion here to actual operators running their networks.

³³ Except that they assisted in factoring in the roaming functions into the GSM standard when the latter was conceived in the 1980’s.

Beginning 2010, the GSMA spans 219 countries with about 800 national GSM networks³⁴ i.e. about 800 operators³⁵ and over three billion subscribers. Within the GSMA there is GSME (*GSM Europe*), the European regional interest group, representing 147 operators in 50 countries which serve about 560 million subscribers. Hence, roughly speaking, GSME weighs today only one fifth of GSMA. (We will get back to GSME below).

In response to a variety of complaints regarding the level and the lack of transparency of the roaming charges, *GSM Europe* published in July 2001 a *Code of Conduct for Information on International Roaming Retail Prices*. By the end of 2002, some 50 operators based in European countries had signed it and compliance with the code was monitored for a number of years. The key critique the code received though on the users' side was that it did not actually provide information about roaming charges; nor did it imply that such charges had to be reasonable.

Between 2000 and 2005, the *Commission* gave a number of warnings to the industry aimed at the high prices for roaming; and in 2006, the *Commissioner* in charge started to indicate that price regulation was considered. Some major operators quickly reacted by announcing spectacular price cuts³⁶, moves often seen as aiming to make regulation useless. One international operator³⁷ even announced he was abandoning charges for receiving calls abroad, a change perceived as quite threatening by his rivals.

But overall, the reaction of the industry – it appeared to many – was definitely not constructive:

- It insisted that both the retail and the wholesale roaming markets were competitive; no substantial roaming price reductions took though place over that period (during which the charges for national mobile services decreased considerably).
- It intentionally kept roaming fees and the market opaque to discourage unwanted scrutiny
- It added complexity to something which was intrinsically complex: roaming prices could depend on permutations of as many as fifteen mobile tariffs, two or more promotional plans, time-sensitive pricing structures and different wholesale pricing agreements for the 27 Member-States.
- It did not recognize the problem nor did it envisage any concerted effort to address it.
- It questioned the legal basis of a possible regulation, a position it maintained for years even after the passing of the regulation (as seen below).
- It threatened that if regulation was to be put in place, there could be negative impacts on the quality or very existence of roaming services; or on the prices for national services or for out-of-EU roaming services (so-called “waterbed effect”). The *Commission's* view was that national services were unlikely to be affected as national markets are quite competitive.

Actually, the industry remained convinced that the *Commission's* initiative - largely driven by a single “stubborn” Commissioner - would not materialize: it underestimated in particular the need felt by many disgruntled members of the *European Parliament* to address the problem in

³⁴ Under GSM network we mean any network complying with one or several standards of the “GSM family” including 2G versions named GPRS or EDGE, and 3G versions named UMTS, WCDMA, HSPA or HSPA+.

³⁵ Also members of the GSMA are 200 companies “in the broader mobile ecosystem, including handset makers, software companies, equipment providers, Internet companies, and media and entertainment companies”.

³⁶ In May 2006, appealing titles appeared in the media: “Vodafone and T-Mobile to slash roaming charges”. Or (in the Wall Street Journal): “Vodafone to cut roaming charges before EU move”. Or (in The Times): “The cost of making phone calls on holiday in Europe will be cut by up to 60%...”

³⁷ “O2's end to roaming may spark price war” (in The Times).

concrete terms. As the fight heated up in 2007, it clung to the “opt-in” provision³⁸ which certainly is dismissed by the average European traveller, if not by common sense.

The interests of the European industry, when facing the EU institutions on regulatory matters, are normally represented by *GSM Europe*³⁹. There is ample evidence over the last decade that *GSME* is a body in its own right which often interacted with the *Commission* on regulatory matters⁴⁰. On the question of radio frequencies for example, *GSME* issued fourteen position papers between 2003 and 2007.

But on the hot roaming scene, *GSME* has essentially vanished: *GSMA* was the body representing the industry and leading the fight against a regulatory approach. Only *GSMA* – and not *GSME* – appears as a respondent to the two public consultations the *Commission* launched in 2006 on its preliminary proposal. It was *GSMA* which commissioned a prominent law firm to try to show that *Article 95 of the European Community Treaty* cannot be the basis to authorize such a European regulation. One thus cannot exclude that it was intentionally that the dialogue between the European industry – the only one concerned by the regulation – and the European institutions was impoverished: Europe’s cellular operators could no longer speak up as a group. The worldwide cellular industry on one hand opposed regulation by all means; on the other it did not want to recognize that Europe, a geographical, economic and institutional reality, required to organize its internal roaming market in a specific way.

Since the capping regulation is in place (basically since mid-2007 for voice calls), the operators seem to have taken their revenge on the *Commission*: whereas intra-EU roaming charges stay to a very large extent just under the caps, charges for roaming outside the EU appear to have increased in the 2007-2010 period. “*Operators have sought to offset the revenue limiting effects of the EU caps by rebalancing roaming tariffs outside the EU*” says one study. There is contradictory information on this matter.

The range of discount plans in Europe increased appreciably between 2006 and 2009, adding to the complexity as perceived by the subscribers. (Typically a fixed monthly fee is required to take advantage of lower per minute rates⁴¹). Such schemes seem aimed at making the *Eurotariffs* less relevant.

Not only did the mobile operator community try by all means to avoid the capping legislation from being introduced; once it was in effect some of its members spread strange news about its negative impact. A case in point is a study commissioned by the three operators of a Member-State by a respectable academic institution, which concluded publicly that “*Roaming caps are a disastrous failure*”; but the underlying report could never be found⁴².

³⁸ « Opt-in » implies that a European subscriber, before travelling to another EU country, would have to go through some procedure with his operator to take advantage of the Eurotariff.

³⁹ Their website still stresses that « GSM Europe is the public face of European mobile operators and the key representative forum for the European wireless industry »

⁴⁰ As early as October 2000, *GSM Europe* formally submitted comments on the *99 Review Telecoms Package* and in a related press release “gave a cautious welcome to the *Commission’s* proposed package, while stressing the need to minimize regulation”; the organization’s chair being quoted: “*GSM Europe is seeking to take a proactive approach to working with the European institutions..... GSM Europe will continue to voice its concerns regarding ex-ante regulation of access, interconnection and retail prices*”.

⁴¹ For instance, O2 / Telefonica introduced « My Europe – High Roamer » across the EU during summer months. The fixed monthly fee is typically 10 Euros.

⁴² The dramatic scenario depicted in November 2008 was that, for that country “the decrease in EBITDA due to the roaming regulation amounts to a total of EUR 81.5 million for the three mobile providers. This decline has a direct impact on investment.....which decreased by 41.2 % in the first half of 2008 compared to the same

Similarly, in August 2009, the CEO of one of the largest mobile communications companies stated that the telecoms industry in Europe would lose out on 40 billion Euros between 2007 and 2012 because of caps the *Commission* has put on roaming charges and mobile termination rates; he added that companies affected by the regulation would invest 6 billion Euros less during the period (implying an impact on jobs) due to the changes in the regulatory framework. It is questionable if such figures are plausible; but not enough quantitative information on the industry is available – and even less spelled out⁴³ - to allow putting them in perspective.

Operators often complain that the increase in roaming traffic which the *Commission* led them to expect (as a result of forced price decreases) did not take place. One could logically think that the operators are in the best position to understand price elasticity in their various markets and to use it to their advantage. This relates to the important aspect of “volumes” addressed below.

Let us conclude this section with an important legal action and decision. In 2007 four of the leading European mobile operators⁴⁴ challenged the validity of the *roaming regulation* before the *High Court of Justice of England and Wales*. That Court subsequently asked the *Court of Justice of the European Union* whether the *Community* was entitled to adopt the regulation on the basis of *Article 95 EC*. The *European Court* released its decision on June 8th 2010 upholding the capping legislation by stating: “The community had the right to impose caps on the prices charged by mobile phone operators for roaming calls in the interest of the internal market”. Two important operators reacted by stating publicly that they regretted this outcome⁴⁵. One may hope that this episode puts to bed the unwarranted attacks by the industry against the measures taken by the European institutions in favour of the European citizens.

5. ATTITUDE OF MEMBER STATES, NRA’S AND NATIONAL MEDIA

Member-State governments can be instrumental in the development of such an issue in several ways. Informally, through their relationship with dominant operators, still strong in historic or even capitalistic terms, in a number of EU countries; formally, through their role in the *Council*. Furthermore, the Member-State which presides the Union at a given point in time (this presidency is rotating on a six-months basis), can be particularly effective in influencing or speeding up a legislative process. It is generally recognized that in finalizing

period of the previous year. In absolute terms, this means EUR 128.3 million in the first half-year 2008 versus EUR 218.2 million in the first half-year 2007, prior to the introduction of the EU roaming voice caps”. This scenario appears unreasonable and the base-data could never be obtained.

⁴³ We do not have investment figures. But in relation to the European mobile operators total revenues, 6 billion Euros is actually a tiny figure. Indeed, on the basis of the *European Mobile Industry Observatory* published jointly by *GSM* and *AT&T*, total revenues over the 6 year period (2007 – 2012) are well beyond 1000 billion Euros.

⁴⁴ Formally, the parties in court were: *Vodafone Ltd*, *Orange Personal Communications Services Ltd*, *Telefonica 02 Europe plc*, *T-Mobile AG*. The three first ones are in fact UK based entities.

⁴⁵ The spokesman of one of the largest operators was reported by the *Wall Street Journal* as saying: “We feel that this does not reflect the best interest of the European market”.

the adoption of the roaming regulation⁴⁶ in an extremely divisive environment, the German presidency of the EU (at that time) played a key role, particularly in pushing through capping of retail - in addition to wholesale - prices.

As to the *NRA*'s, though in principle "independent" institutionally in most of Europe, they are de facto close to the executive: open conflicts between an *NRA* and its government are generally considered as inappropriate.

The views of European governments and of the *NRA*'s have been somewhat heterogeneous. Whereas the national authorities of Northern Europe were rather supportive of the *Commission*'s efforts to address vigorously the roaming problem, some others preferred to remain on the side of their historic operator or to take a negative stand – at least initially - on price regulation altogether. Another consideration was that by striving towards capping of retail prices, the *Commission* was clearly doing something novel but concrete, directly for the European citizen (over 150 million travel inside the Union!), whereas most moves by Brussels target some industry sector, big company, arcane standard or remote environmental objective: one cannot exclude the possibility that in the eyes of some governments the *Commission* could, through its action on roaming, acquire a public prestige beyond what they wished to see.

Certainly some governments feared imposed regulation on roaming as this could spread - in a way difficult to control - to other sectors of activity. Furthermore, head-on opposition between the *Commission* and such a big industry made a number of governments uncomfortable⁴⁷.

Relatively small Member-States appear to have been – and still are – favourable to the regulation, larger countries preferring to adopt a more ambiguous profile. This is noticeable for instance when analyzing the lists of respondents to consultations on the issue launched by the *Commission*: the large Member States have a tendency to abstain, leaving the responder role to their operators (and in rare cases, to their users organizations).⁴⁸

Before the *Commission*'s drive gathered momentum in 2006-2007, some consideration was given to having roaming prices regulated by the *NRA*'s in their respective countries, but this did not lead far because the problem is intrinsically international. One of the *NRA*'s examined this option in depth, but concluded that regulation was unnecessary because the roaming market was competitive.

The governments, with their *NRA*'s, had for a long time recognized the complexity of the issue and the existences of imbalances at several levels. Clearly, the South of Europe gets many more visitors from the North than vice-versa, which generates more revenues for the Southern States, particularly if the roaming charges are capped and tend to be symmetrical, whereas the traffic is asymmetrical..

⁴⁶ *EU regulations* are legal acts that are directly applicable in the 27 EU Member States. Unlike an *EU Directive*, an *EU Regulation* does not need to be implemented into national law, but is in principle the law throughout the Union from the day of its publication.

⁴⁷ In its comments to the Commission of March 2006, the UK (through the voice of its *Department of Trade and Industry*) wrote: "[The complexity of the issue] makes it especially important for the Commission to work closely with the industry at all stages, and to seek, where possible, voluntary or co-regulatory solutions in preference to imposed regulation (especially at the retail level)."

⁴⁸ For instance, to a consultation the Commission launched in 2008 to review the regulation and possibly extend it, there were 44 responses among which only six Member States. And all six are small nations indeed. Of course, smaller nations – often more affluent - are more concerned by roaming.

The idea of wholesale price regulation was more easily envisaged - by the individual governments - than that of retail price regulation, somehow “a first”. And once they had to accept the principle of retail price caps, they preferred the latter to be high; substantially higher than the Commission or the Parliament wanted, which toughened the negotiations in the spring of 2007. Lobbying was fierce and the governments of some major countries sided with their dominant operator which happened also to have a significant international footprint (particularly in Europe, but also beyond); hence a special stake in roaming.

Another player of significance in the whole process was the *ERG (European Regulators Group)*⁴⁹, one may or may not see as an emanation of the governments. As early as March 2006, the *ERG* expressed support for the idea of regulation, but wanted it to be limited to wholesale prices, at least to start with; retail price regulation being viewed as a later step, if wholesale regulation would not provide the expected results. The *ERG* also played a key role in aggregating market information necessary to establish the policy or to monitor its effects.

The national media were more or less influenced by their country’s positioning – if not by the dominant operator; fortunately, national consumer bodies often spoke out. Poor or non-positive coverage was observed in countries where the authorities kept their distance from the *Commission’s* initiative and obstinate perseverance. The international paper⁵⁰ with a leading position in Europe provided good detailed and objective coverage which certainly was a positive contribution to the process; whereas business papers based in London or New-York strongly expressed their “anti-regulation” philosophy.

6. INTRA-EU ROAMING VOLUMES

There are basically two dimensions to what we call “roaming volumes” here:

- Traffic: minutes of voice conversation or of voice messages, number of text messages (SMS’s), Megabytes (MB’s) of data.
- Revenue associated with such traffic.

Overall, the matter of volumes has been largely absent from the lengthy debates on the roaming issue. This is surprising as there was rather broad agreement on two assumptions: on the one hand, many travellers make minimal use of their mobile devices when abroad⁵¹; on the other, the difference between retail prices and wholesale prices was generally exorbitant. Consequently, it was logical to surmise that there was considerable growth potential in the sector; and that substantial price reductions, even if imposed, would lead to substantial increases in volume and not necessarily make the roaming business less attractive.

⁴⁹ The European Regulators Group brings together the NRA’s of all EU’s Member States. Representatives of four EFTA States and of four Accession / Candidate States participate as observers. It was created in October 2002 to act as an advisory body to assist the *Commission* in its regulatory and market development missions, regarding electronic communications.

⁵⁰ *International Herald Tribune* published in Paris.

⁵¹ This has been recognized by at least some operators.

The already mentioned *Eurobarometer* study (of 2006) ordered by the *Commission* led to the following conclusions regarding roaming:

- A large majority of the Europeans owning a mobile phone travel abroad within the EU at least sometimes.
- A (slight) majority of the Europeans having a mobile phone use it when abroad, to call or to receive calls, or to send / receive SMS's. But a significant fraction of them cut it off or do not take it with them.
- A large majority of those who use it abroad, use it much less there than at home. A majority said they would use it more abroad if the charges were lower.

This leads to the belief that the roaming traffic, though constituting only a small fraction of the home traffic, is of importance; and again that there is great potential to expand it. Note that one cannot conclude from this study whether “professional mobility volumes” are superior to “non-professional mobility” volumes.

Several national studies show that the roaming traffic grew very fast until 2007 or so:

- A French inquiry showed that, as seen from France during the 2000 to 2004 period, on the average, roaming out voice traffic grew 13 % p. a., revenue from roaming grew 12 % p.a., and the number of roamed SMS's exploded.
- Data released by Spain show that during the 2003 to 2007 period, the number of outbound minutes nearly doubled; with again an exploding number of SMS's.
- Data released by the UK show that in the 2006 – 2008 period, revenue from roaming increased between 10 and 15 % p.a.

For the more recent years, actually since the second quarter of 2007, intra-EU roaming traffic figures are collected more formally by the *ERG* (and lately by *BEREC*⁵²) from the 27 *NRA*'s who get them from their national operators. Results from this rather complex – probably difficult⁵³ - exercise (which are quarterly and extremely skewed season-wide) are publicly available in relative form, but no actual volumes are published⁵⁴. Only a crude analysis is therefore possible; it allows to state the following about the evolution of intra-EU roaming traffic for the period 2007 – 2010⁵⁵, averaged over the 27 member-states.

- The number of calls made (actually the total number of minutes) evolved little
- The number of calls received (actually the total number of minutes) grew by some 10 % p.a. on the average
- The number of SMS's sent grew by some 14 % p.a on the average.

This picture is more or less compatible with the bar charts (representing quarterly volumes for the 2007 – 2009 period) contained in a June 2010 report the *Commission* presented to the *Parliament*⁵⁶.

One can conclude that, in spite of the dramatic price reductions implemented mid-2007 (with further decreases in the following years), the roamers did not tend to **make** more calls; they

⁵² *BEREC: Body of European Regulators for Electronic Communications* . So to say a replacement of the *ERG* but with stronger prerogatives.

⁵³ In principle, the collected data should exhibit some coherence.

⁵⁴ Like numbers of minutes (calls made / calls received) and numbers of SMS's sent.

⁵⁵ By November 2010, data were available only for the first half of the year.

⁵⁶ *Interim report on the state of development of roaming services within the European Union*.

tend to **receive** significantly more voice calls and to send even more **SMS's**. Overall, the combined traffic pattern is quite modestly boosted by the important price decreases, thus resulting probably in falls of operator revenues generated by roaming within the EU⁵⁷. The *Commission* implies that this is mainly due to the economic crisis and to the “significant decline in tourism and business travel”. This argument seems somewhat overblown; an analysis of EUROSTAT’s air passenger statistics shows that⁵⁸:

1. Yearly intra-EU (i.e. international) air passenger traffic grew by 7.6 % in 2007 (vs. 2006) and was flat in 2008⁵⁹.
2. For 2009, there are (at least so far - November 2010) no intra-EU traffic data available. Looking at the total number of air passengers in Europe, we find a 6 % decrease vs. 2008; not a huge dip after so many years of strong growth.

Comparison⁶⁰ between the elements we have about the (intra-EU roaming traffic) growth pattern during the earlier part of this decade until 2007 and the growth pattern since 2007 strengthens the view above: the price capping did not have the impact on volumes which one could logically expect from the ensuing gigantic price reductions. The likely explanation is that the operators have responded to the regulation by introducing and promoting a multiplicity of tariff-offerings which shadow the straight-forward *Eurotariff* and confuse the travellers. Generally speaking, the latter remain convinced that “roaming is expensive” though they do not really know how much it costs.

7. DISCUSSION

The aim of the following is to suggest how the stakeholders could have behaved differently and how the issue could have developed in a different way.

We limit this modest analysis to six points.

a. What was the Regulation’s Goal ?

The outspoken goal of the regulation – as well as of the *Commission*’s efforts during the eight years preceding it – was to reduce the exorbitant roaming charges within the EU. One may though question whether this is a real policy goal⁶¹. High roaming prices may have a (minor) impact on Europe’s business competitiveness, but what one ideally wants to achieve is that travellers more generally use their mobile device abroad as easily and freely as they do in their home country.

⁵⁷ Minutes from calls made generate much more revenue than minutes from calls received.

⁵⁸ There is no doubt that today the quantitative evolution of European air passenger traffic – particularly of intra-EU traffic - reflects the evolution of intra-EU travel. For instance, a traveller from Amsterdam to Madrid is unlikely to switch from air to road or to train because of the state of the economy.

⁵⁹ Eurostat reports a decrease of 0.5 % when the exact percentage is 0.26 % on the basis of their precise figures.

⁶⁰ Though the pertinent base data – which exist – are not available to us.

⁶¹ One can make here a parallel: when a government reduces some tax in a specific sector, the objective is generally to quantitatively develop that sector.

Whereas high prices are the key barrier to unrestricted roaming, they probably are not the only barrier. Very little attention was given to the functional aspects.

In our view, it is logical to consider that a public policy focusing on roaming has reached its goal when the roaming traffic has substantially increased (considering that it is very restricted). Hence, volumes should have been a key consideration at the very outset of the *Commission's* efforts and a key element of the dialogue with the industry.

b. What is Known about Intra-EU Mobility ?

To understand the intra-EU roaming needs and potential, one must understand intra-EU mobility (in the wide sense: travel abroad for any reason and duration). It is disappointing not to find any study within the last 15 years focusing on this topic. Such an approximate evaluation is possible, particularly on the basis of various EUROSTAT data. It is not known if any initiative has been taken by the *Commission* in this respect, beyond the following.

The *2006 Eurobarometer Survey on Roaming* gives an extremely interesting picture of how the European nations relate qualitatively to travel, to roaming and to roaming prices; it was a key piece to get EU's institutions moving towards regulation. But it does not inform on the roaming needs quantitatively.

This lack fuels misconceptions, like the quantitative dominance of business travel sometimes officially implied⁶². EUROSTAT's figures do definitely not confirm it: the most important air traffic routes (for passengers) between Member States are UK-Spain and Germany-Spain, fuelled by the busy holiday travel. Of course, it is well possible that **today** business travellers spend overall more on roaming than other travellers on a yearly basis.

There are strong reasons to believe that the availability of comprehensive intra-EU mobility data⁶³ would have led to a different dialogue with the industry.

c. Which Quantitative Information on the Roaming Market is Available ?

In the numerous debates over so many years there was frequent reference to the retail roaming market or to the wholesale roaming market within the EU. However, there is extremely little information available on their size and this oddity has been noted on several occasions⁶⁴.

Independently of the impact assessments made prior to the regulation, it would be of value to have an objective picture – even if approximate – of the European roaming business and its evolution, now that over three years have passed since the regulation basically entered into

⁶² A July 12th 2006 release by the Commission mentions that 147 million EU citizens are affected by roaming, namely 37 million tourists and 119 million business customers.

⁶³ A way to approach the travel / roaming relationship could be to focus on a pair of contiguous member-states and to achieve through diplomatic efforts a “two-state free roaming zone” intended to promote, boost and observe roaming.

⁶⁴ A 2006 inside briefing note of the European Parliament says : « *The limited degree of integrity and completeness of the market data has created debate.....The Commission has voiced its view that the operators are not providing comprehensive information for a full assessment of the roaming market. On the other hand, operators insist that they have given the appropriate data*”.

force. As stated earlier, the volume information BEREC releases is relative only (and quarterly); furthermore nothing is said on revenues from roaming.

As to the operators, they take great care not to reveal publicly any information which would allow observers to size their roaming business, notwithstanding strong statements about the negative impact of the regulation⁶⁵. Two comprehensive reports about the mobile industry and its business were produced by *ATKEARNY* recently⁶⁶: they do not mention roaming.

d. With Which Industry was the Commission Interacting and in what Spirit ?

Regulation of intra-EU roaming concerns basically Europeans and, of course, the European mobile industry which itself consists of over 70 nationwide facilities-based operators licensed by the Member-States.

These operators are collectively represented by *GSM Europe*, or *GSME*, a body in its own rights which has extensively interacted with the *Commission* and other European organizations since year 2000, as indicated above. However, once the roaming topic became really hot and the possibility of regulation appeared on the horizon, *GSME* vanished: *GSMA* (i.e. the worldwide organization) took over and became the body representing the industry in the fight against a regulatory approach⁶⁷.

The fact is that *GSMA* fought hard against the prospect of regulation but did little to address the basic problem⁶⁸.

To handle the intra-EU roaming issue, dealing with a body truly representing the Union's national operators would probably have been more appropriate. It even could have been suitable –and it still may be – to establish such an organization specifically for the roaming debates and negotiations. Again, especially in a regulatory perspective, the true operators are the nationally licensed entities even if they are controlled by multi-national companies. Often not much is known quantitatively about their business but they may be considered as fairly autonomous entities⁶⁹.

The language used by the Commission – justifiably frustrated by the industry's attitude - was occasionally violent and so was the industry's in return; this climate prevailed until 2008 and

⁶⁵ The following statements were relayed by *Informa Telecom's & Media*, a credible research organization : « Vodafone reported a 111 million pound loss in Q32007 revenue directly attributable to impact of roaming regulation. TIM reported a 88 million Euro fall in revenue for 2007 as a result of roaming price caps. A number of other European operators reported similar revenue losses ». Such statements are not meaningful, unless some indication is given about the total roaming revenue. Furthermore, during Q32007 the roaming regulation was barely in effect.

⁶⁶ « *Demystifying the European Mobile Industry* » prepared by *ATKearny* and Professor David Newbery was issued in June 2009. “*The European Mobile Industry Observatory 2009*” was published by *ATKearny* early 2010.

⁶⁷ *GSMA* is the entity which responded to the two relevant consultations the *Commission* launched in 2006.

⁶⁸ It is worthy of notice that *GSMA* commissioned a prominent law-firm to try showing that *Article 95* of the *European Community Treaty* cannot be the basis to authorize such a European regulation. This action failed.

⁶⁹ When for example *Orange* and *T-Mobile* establish a joint venture in the UK (as is the case in 2010), this process consists in combining the operations of *Orange UK* and *T-Mobile UK*; of course with the agreement of UK's regulator and competitive authorities. The result is a “new operator” in the UK (incidentally the largest one now), which logically has some autonomy in managing its business.

was not conducive to constructive debate, at least from an outsider's perspective. More analysis would be required to establish to what extent such a harsh relationship prevails typically between "regulator and regulated" in other industry sectors.

e. What is Special with the Eurotariff ?

The specificity of the *eurotariff* is not essentially that it is low: for certain situations (number and duration of calls) an alternative tariff offered by an operator may be cheaper. But the *eurotariff* is the one which applies without any specific arrangement by the traveller and its level is both reasonable and fairly uniform across the EU⁷⁰. The automatic application of the *eurotariff* – in many cases the best solution for the traveller – has not been sufficiently stressed by the authorities, and certainly not by the operators.

f. What is the Contribution of Competition towards solving the Intra-EU Roaming Problem ?

The belief that the solution to the roaming problem should come from increased competition has been unwavering in the thinking of the European institutions and particularly of the *Commission* for well over a decade; and it still is today.

Three considerations cast doubt on this credo:

1. During the many years preceding the regulation, no significant decreases of the exorbitant roaming prices were observed (whereas on the national mobile markets there were overall important price reductions); nor was it observed that the operators were really competing on this terrain.
2. Since the price caps came into force, reducing roaming charges in huge proportions, the effective prices remain extremely close to the caps throughout the EU.
3. The vast majority of the subscribers and even of the travellers do not select their home operator on the basis of its roaming offerings. Heavy roamers may do so but they do not constitute the gist of the European roaming issue: they get special rates or use alternative schemes.

Effective competition in roaming would require mobile operators to be truly established on an international basis whereas today each of them is licensed – and more or less regulated - by the Member-State where its infrastructure is based; it is even apparent that each of them has a market-strategy defined at a national level⁷¹. A totally new paradigm in spectrum management and in mobile communications regulation is called for in the Union⁷², which is likely to remain a politically difficult step for some years.

⁷⁰ As the *eurotariffs* are in fact close to the caps, they differ little between home countries except for VAT (Value added Tax).

⁷¹ The large mobile operators have an international footprint but do not consider this to be their uniform market. If they would do so, each of them would logically offer a uniform tariff and "internal" roaming charges would be suppressed.

⁷² There is currently talk (within the EU institutions) of the allocation of a harmonized 800 MHz band (the *digital dividend*) to broadband, with a view towards pan-European wireless services. But harmonization and allocation of a band does not as such lead to pan-European services as we could see with the long history of GSM.

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