



Brugge

College of Europe  
Collège d'Europe



Natolin

# Vodafone Facing the EU Roaming Regulations

Elise CACHIN, Aimé HEENE, Jacques PELKMANS



DEPARTMENT OF  
EUROPEAN ECONOMIC STUDIES

Bruges Series on European Business Cases

02 / 2015

The **Bruges Series on European Business Cases** collects business-oriented case studies which analyse the two-way interaction between the European Union and the world of corporate or non-profit enterprises in Europe.

The Series is meant to promote business education with a European dimension and encourage the use of case methods and discussion on key strategy and business issues which are affected by EU regulation, liberalisations and common policies of the European Union.

#### **EDITORS**

Prof. Aimé Heene (Chair)

Prof. Phedon Nicolaidis

Prof. Philippe de Buck

Prof. Jacques Pelkmans

Dr. David Rinaldi

Gil Stein

#### **DISCLAIMER**

Cases are intended to include publicly available data. If, however, the case contains confidential information, an approval has to be obtained from the enterprise. The cases remain intellectual property of the author(s); however, interested organization(s) can contact the European Economic Studies Department of College of Europe to remove sensitive data or to ask permission of reproduction.



Brugge

College of Europe  
Collège d'Europe



Natolin

**Bruges Series on**  
**European Business Cases**

**VODAFONE FACING THE EU ROAMING  
REGULATIONS**

Elise CACHIN, Aimé HEENE, Jacques PELKMANS

**Abstract**

EU institutions have consequently made telecoms integration in the European Union a priority through programmes such as the "Digital Agenda". Three Roaming Regulations were adopted in 2007, 2009 and 2012 introducing caps on roaming fees until 2022 to foster competition and market integration while ensuring affordable roaming prices for consumers.

The Roaming Regulation packages faced strong industry resistance. The imposed price caps were believed to be too low to reflect the true costs of data and were therefore perceived as the reason for cutbacks in infrastructure investments. This case will analyse how Vodafone reacted to the capping of roaming fees, with particular reference to its lobbying strategy.

## Table of contents

|           |   |           |
|-----------|---|-----------|
| <b>1</b>  | <b>Introduction .....</b>   | <b>1</b>  |
| <b>2</b>  | <b>Vodafone, a global player .....</b>  | <b>1</b>  |
| <b>3</b>  | <b>The Roaming Regulations .....</b>  | <b>4</b>  |
| <b>4</b>  | <b>A long quest for the first Roaming Regulation.....</b>                       | <b>5</b>  |
| 4.1       | <i>Vodafone positioning as a strong opponent to the Regulation.....</i>         | 7         |
| 4.1.1     | <i>A preventive pricing strategy... ..</i>                                      | 7         |
| 4.1.2     | <i>... to become a “legitimate actor” against the Roaming Regulations .....</i> | 8         |
| 4.2       | <i>Aiming towards industry coordination .....</i>                               | 9         |
| 4.2.1     | <i>The weak role of industry associations .....</i>                             | 9         |
| 4.2.2     | <i>The 2007’s legal complain .....</i>  | 9         |
| <b>5</b>  | <b>Extending to the 2009’s Roaming Regulation .....</b>                         | <b>10</b> |
| 5.1.      | <i>A more offensive strategy for Vodafone .....</i>                             | 11        |
| 5.2.      | <i>Improving but questionable industry coordination .....</i>                   | 12        |
| <b>6</b>  | <b>The ambitious 2012 Roaming Regulation .....</b>                              | <b>13</b> |
| 6.1.      | <i>Vodafone struggling .....</i>  | 14        |
| 6.2.      | <i>A strong industry coordination .....</i>                                     | 15        |
| <b>7</b>  | <b>What’s next? The Connected Continent Package .....</b>                       | <b>16</b> |
| 7.1       | <i>From a proposal.....</i>   | 16        |
| 7.2       | <i>....To a first vote.....</i>   | 17        |
| <b>8</b>  | <b>Conclusion.....</b>  | <b>17</b> |
| <b>9</b>  | <b>Case questions for discussion .....</b>                                      | <b>19</b> |
| <b>10</b> | <b>Annexes .....</b>  | <b>20</b> |
| 10.1      | <i>Annex 1: Vodafone’s financial highlights .....</i>                           | 20        |
| 10.2      | <i>Annex 2: EU25 demand for regulation in 2006 .....</i>                        | 20        |
| 10.3      | <i>Annex 3: Chronology .....</i>  | 21        |
| 10.4      | <i>Annex 4: Detail of the Roaming Regulations (excluding VAT).....</i>          | 24        |
| 10.5      | <i>Annex 5: GSMA and GSMA Europe.....</i>                                       | 25        |
| <b>11</b> | <b>References .....</b>   | <b>26</b> |



## 1 Introduction

Despite important achievements in European Integration, the Single Market for Telecommunications remains a dream for business and citizens. Roaming, i.e. the ability for customers to use automatically their mobile phone when travelling abroad, has long been an important obstacle to economic integration, as high and uncompetitive roaming fees inhibit innovation and cross-border trade. EU institutions have consequently made telecoms integration in the European Union a priority through programmes such as the "Digital Agenda". In particular, Three Roaming Regulations were adopted in 2007, 2009 and 2012 introducing caps on roaming fees until 2022, in order to foster competition and market integration while ensuring affordable roaming prices for customers.

The Roaming Regulation packages faced strong industry resistance. The imposed price caps were believed to be too low to reflect the true costs of data and were therefore perceived as the reason for cutbacks in infrastructure investments. Roaming represented a significant business for telecommunication operators, as the service accounted for 3.68% of the total EU mobile market in 2008 (€164.0bn), with a predominance of voice roaming (71% of the retail roaming market, 69% of the wholesale market), followed by data (17% and 15% of retail and wholesale market respectively) and text messages (11% and 16% of retail and wholesale market respectively).<sup>1</sup>

This case will analyse how Vodafone reacted to the capping of roaming fees, with particular reference to its lobbying strategy.

## 2 Vodafone, a global player

Vodafone is a British telecommunication group established in July 1984 in England. Vodafone offers voice, message and data services (*Figure 1*) to 404 million mobile customers over the world, 8% of which are enterprises.<sup>2</sup> The group employed over 90,000 people around the world and generated £12.0 billion in adjusted operating profits in 2013 (*Annex 1*).<sup>3</sup>

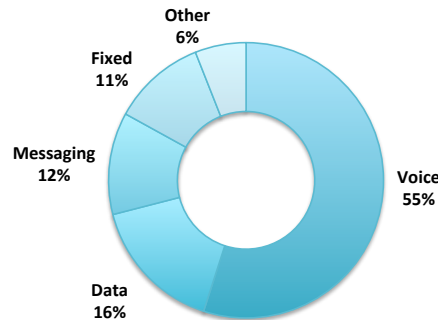
---

<sup>1</sup> European Commission, *Report [...] on roaming on public mobile communications networks within the Community, as amended by Regulation (EC) No 544/2009*, July 6<sup>th</sup> 2011

<sup>2</sup> Vodafone, *Annual Report 2013*, p. 23

<sup>3</sup> *Ibid.*, pp. 3, 35

**Figure 1: Vodafone's Service revenue by type in 2013**



Source: Vodafone Annual Report 2013

The company began to expand internationally in 1991 aiming to become “the world’s leading international mobile telecommunications company”<sup>4</sup> in the 2000s (Figure 2). Vodafone is a major player in the European telecommunication market thanks to both direct (subsidiary undertakings, joint ventures, associated undertaking and investment) and indirect agreements (such as market agreements).

**Figure 2: Vodafone's Global footprint in 2013**

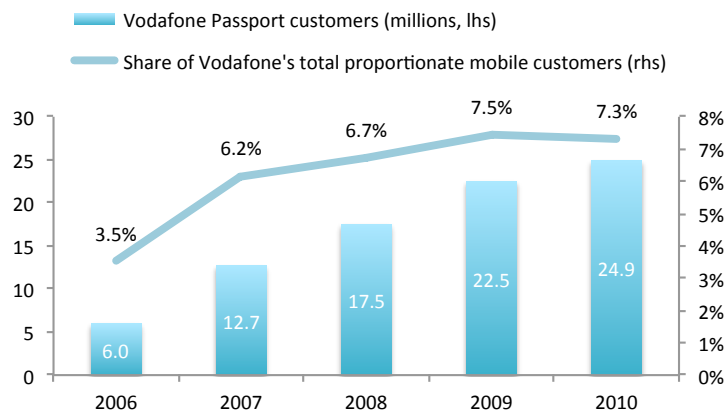
| Equity interersts         | Northern and Central Europe  | Southern Europe  | Africa, Middle East and Asia Pacific  | Non-Country interests and Common Functions |
|---------------------------|--|--|---|--|
| Revenue                   | €24.0bn<br>(£20.1bn)   | €12.5bn<br>(£10.5bn)                                     | €16.1bn<br>(£13.5bn)  | €0.6bn<br>(£0.5bn)                         |
| Operating free cash flow  | €3.9bn<br>(£3.3bn)   | €2.7bn<br>(£2.3bn)                                       | €2.9bn<br>(£2.5bn)  | -€0.6bn<br>(-£0.5bn)                       |
| Adjusted operating profit | €2.5bn<br>(£2.1bn)   | €2.1bn<br>(£1.8bn)                                       | €2.0bn<br>(£1.7bn)  | €7.6bn<br>(£6.4bn)                         |
| Countries                 | Czech Republic<br>Germany<br>Hungary<br>Netherlands<br>Romania<br>Turkey<br>United Kingdom | Albania<br>Greece<br>Italy<br>Malta<br>Portugal<br>Spain | Australia<br>Egypt<br>Fiji<br>Ghana<br>India<br>Safaricom (Kenya)<br>New Zeland<br>Qatar<br>Vodacom<br>(South Africa, Tanzania,<br>Mozambique, Lesotho,<br>Democratic Republic of<br>Congo) | Verizon Wireless                           |

Sources: Vodafone Annual Report 2013

<sup>4</sup> Vodafone, Annual Report 2006, p. 12

Because of its international dimension, roaming represents a substantial part of Vodafone's activities and income. Its internationalisation enabled the company to offer competitive roaming products offers – such as "Vodafone Passport" – reducing roaming charges for made and received calls (Figure 3). Capping roaming fees would therefore be detrimental to the company's income stream.

**Figure 3: Vodafone Passport customers**



Sources: Vodafone Annual Reports 2006, 2007, 2009 and 2010

In Europe, Vodafone faces a very challenging environment, facing both regulatory complexity/uncertainty and high competitive pressures. Up to 20% of Vodafone's revenues were subject to EU regulation in 2008<sup>5,6</sup>, and up to 10% of the decline in its EU mobile revenues between 2010 and 2013 can be associated with the Roaming Regulations<sup>7</sup>.

Regarding competition, the European telecoms market is very fragmented, preventing the firm from achieving large economies of scales while many alternative providers (virtual and non-virtual mobile network operators, Internet-based companies) are available on national markets.

---

<sup>5</sup> Mainly regarding termination rates and international voice roaming.

<sup>6</sup> Vodafone, *Annual Report 2008*, p. 10

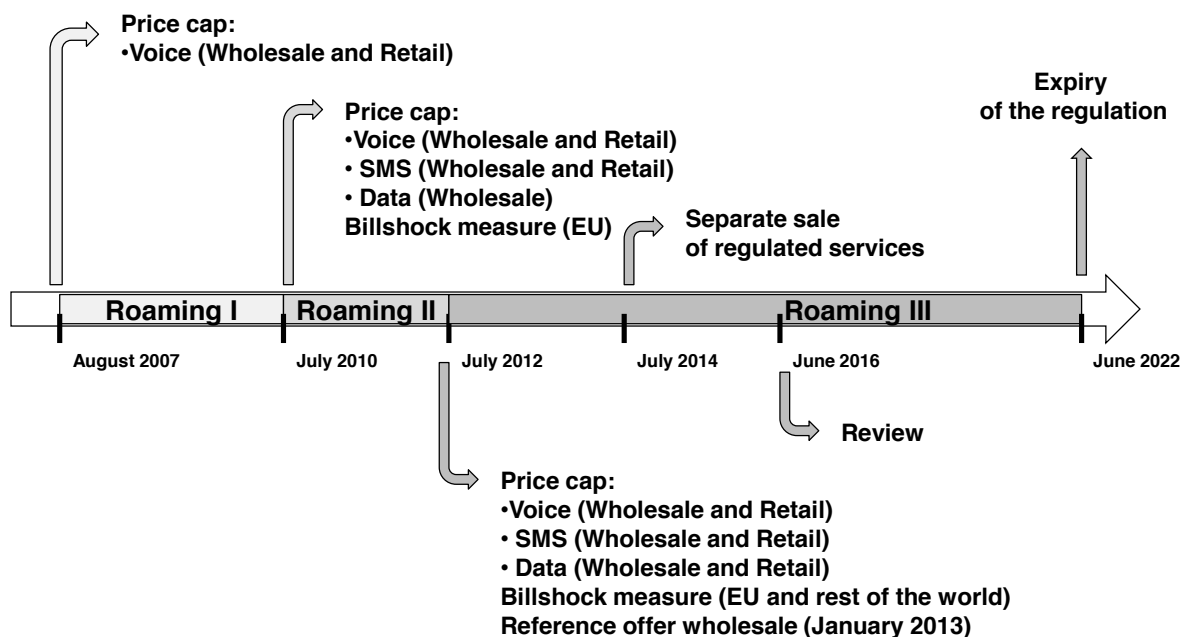
<sup>7</sup> Vodafone, *Half year results and strategy update*, November 12<sup>th</sup> 2013, p. 71



### 3 The Roaming Regulations

The European Commission tackled the issue of intra-EU roaming through three Roaming Regulations adopted in 2007, 2009 and 2012. They introduced prices caps and price transparency obligations to protect customers against excessive pricing and billing shocks (*Figure 4*).<sup>8</sup>

Figure 4: EU Roaming Regulation Roadmap



Sources: Infante, CNMC

We will now present each Roaming Regulation and the strategy consequently adopted by Vodafone. The company always adopted the same and unique strategy – first response. Vodafone thereby employed a preventive pricing strategy, in the attempt to prove that regulation was not needed to reduce roaming fees. Over time, its lobbying strategy moved towards strong frontal opposition with the Commission, relying on improving coordination within the industry.

<sup>8</sup> Annex 3 presents the chronology of events while Annex 4 exhibits the details of the Roaming Regulations.

#### 4 A long quest for the first Roaming Regulation

The quest for cheaper roaming in the European Union began in July 1999 with the European Commission's three-step inquiry on the telecom sector. By November, a British federation of telecommunication users' association, INTUG<sup>9</sup>, published a report on International Mobile Roaming (IMR). According to this report, the high IMR charges across the EU were unrelated to costs<sup>10</sup>, while mobile operators had adopted collusive behaviour<sup>11</sup>. Consequently, the European Commission launched the second step of its inquiry in February 2000, focusing on EU international roaming for the 1997-2000 period.<sup>12</sup>

First attempts to address the collusion issue were made in July 2004 and February 2005 when the Commission sent statements of objections regarding the excessive wholesale tariffs charged to other Mobile Network Operators for international roaming: Vodafone and O2 with regards to the British market, and to Vodafone and T-Mobile concerning the German market.<sup>13</sup> Still, by May 2005, the European Regulators Group (ERG) issued a common position after the Commission's inquiry: wholesale price reductions on IMR were not passed on to the customer and the market lacked clear information on roaming pricing.<sup>14</sup>

In July 2005 Commissioner Viviane Reding, responsible for Information Society and Media from 2004 to 2010, launched a transparency initiative on roaming prices to deal with the complexity of the IMR market, including the creation in October 2005 of a roaming website where customers could compare the cost of using their mobile device abroad. The Commission considered this transparency initiative as an incentive for mobile operators to address internally the IMR issue, making “... *regulation of international roaming unnecessary*”<sup>15</sup>.

---

<sup>9</sup> International Telecommunications Users Group

<sup>10</sup> Barth, G., *Regulation of Intra-EU Roaming: A Summary of the 2000-2010 Decade*, Harvard University, April 2011, p. 5

<sup>11</sup> Sutherland, E., *Governance of telecommunications markets – the case of international mobile roaming*, Competition and Regulation in Network Industries, November 25<sup>th</sup> 2012, p. 1

<sup>12</sup> Barth, G., loc. cit., p. 5

<sup>13</sup> European Commission, *Commission challenges UK international roaming rates*, Press Release, July 26<sup>th</sup> 2004

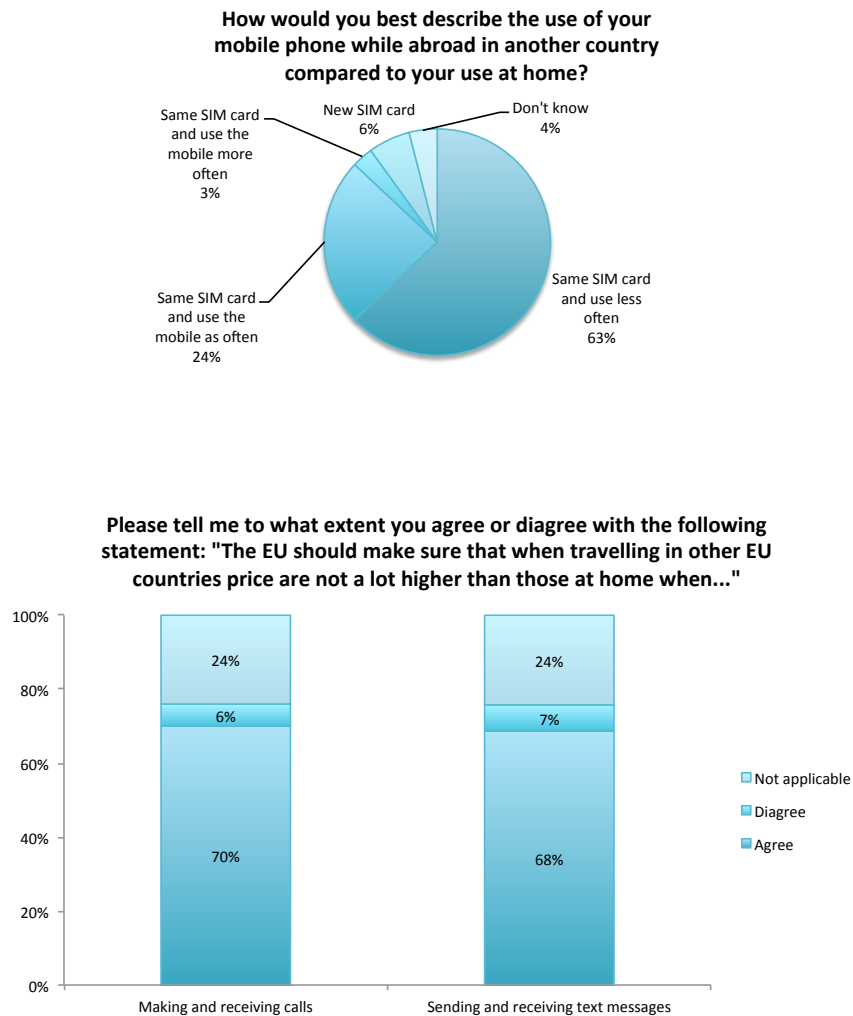
European Commission, *Competition: Commission challenges international roaming rates for mobile*, Press Release, February 10<sup>th</sup> 2005

<sup>14</sup> European Commission, *International Roaming Charges: Frequently Asked Questions*, Press Release, July 11<sup>th</sup> 2005

<sup>15</sup> Ibid.

However, the Commission’s attempts to promote self-regulation did not lead to the expected effects, and thus the Commission moved towards public regulation, relying on data from the 2006’s Eurobarometer survey on Roaming (*Figure 5, Annex 2*).<sup>16</sup>

**Figure 5: 2006’s Eurobarometer on roaming, EU25 figures<sup>17</sup>**



*Source: Eurobarometer*

The first EU Roaming Regulation<sup>18</sup> was adopted on June 27<sup>th</sup> 2007 and entered into force three days later.<sup>19</sup> It followed a “European Home Market Approach” – ensuring that customers would benefit

<sup>16</sup> Barth, G., loc. cit., p. 6

<sup>17</sup> More details are presented in *Annex 2*.

from similar conditions they have in their home country, when using their mobile phone in another Member State.<sup>20</sup>

Practically, the new legislation introduced a digressive price cap, or “Eurotariff”, on made and received calls in another Member State to be combined with any price plan until June 2010. It imposed information obligations on mobile operators, and included rules on billing increments and on the reception of voice messages, to be applied in all Member States.<sup>21</sup> As underlined by Viviane Reding, the implementation of Eurotariff quickly proved efficient: EU customers paid 60% less for using their mobile phone abroad in the summer of 2007 compared to the previous year.<sup>22</sup>

#### **4.1 Vodafone positioning as a strong opponent to the Regulation...**

##### *4.1.1 A preventive pricing strategy...*

The two antitrust cases from 2004 and 2005<sup>23</sup> made Vodafone understand that the issue of intra-EU roaming had to be tackled proactively. The company therefore launched in May 2005 the "Vodafone Travel Promise" that aimed at offering “*simplicity and better value for roaming services*”.<sup>24</sup> A new product, Vodafone Passport, supported the advertising campaign. Decreasing roaming charges for made and received calls by 30% between 2004 and 2005, the service segment grew rapidly, reaching six million customers by March 31<sup>st</sup> 2006.<sup>25</sup>

---

<sup>18</sup> Regulation (EC) No 717/2007 of the European Parliament and of the Council of 27 June 2007 on roaming on public mobile communication networks within the Community

<sup>19</sup> DG Competition closed in July 2007 the two antitrust proceedings previously mentioned as the Roaming Regulation solved the issue. The proceedings were initiated [against O2 and Vodafone in the United Kingdom in July 2004](#), and [against T-Mobile and Vodafone in Germany](#) regarding roaming charges at wholesale level.

<sup>20</sup> Europa, *Roaming on public mobile telephone networks*, Summaries of EU Legislation, , available at: [http://europa.eu/legislation\\_summaries/information\\_society/radiofrequencies/l24276\\_en.htm](http://europa.eu/legislation_summaries/information_society/radiofrequencies/l24276_en.htm)

<sup>21</sup> Austrian Regulatory Authority for Broadcasting and Telecommunications (RTR), *Roaming in the European Union*, , available at: [www.rtr.at/en/tk/Historie](http://www.rtr.at/en/tk/Historie)

<sup>22</sup> European Commission, *Roaming: Consumer prices now reduced by 60%*, Press Release, October 4<sup>th</sup> 2007

<sup>23</sup> See Footnote 19.

<sup>24</sup> Wikinvest.com, *Vodafone launches the Vodafone Travel Promise*, available at: [www.wikinvest.com/stock/Vodafone\\_Group\\_\(VOD\)/Vodafone\\_Launches\\_Travel\\_Promise](http://www.wikinvest.com/stock/Vodafone_Group_(VOD)/Vodafone_Launches_Travel_Promise)

<sup>25</sup> Vodafone, *Annual Report 2006*, pp. 16-17

The company took further measures in May 2006 at both the retail and wholesale levels. voice-roaming charges were cut by at least 40% by April 2007 compared to the June-August 2005 period, while wholesale agreements were consolidated.<sup>26</sup> On March 31<sup>st</sup> 2007, roaming charges on calls made are €0.45 or less for 90% of Vodafone's European traffic<sup>27</sup>, compared to a €0.49 price cap to be introduced in August of the same year<sup>28</sup>.

#### 4.1.2 ... to become a "legitimate actor" against the Roaming Regulations

This pricing strategy allowed Vodafone to position itself as a living proof that the Single Market for telecommunications can be realized without regulation. This fact allowed Vodafone, when Participating in the 2006's public consultations, to stress that roaming reductions would *"extend across the continent as a whole if they [were] allowed to. They [would be] driven by the need to increase scale and reduce cost in competitive markets."*<sup>29</sup>. Despite its negative view on the regulation, the company remained a legitimate actor in the eyes of the Parliament as its Public Policy Director, Richard Feasey, was invited to a mini-hearing on May 4<sup>th</sup> 2006.<sup>30</sup>

---

<sup>26</sup> Ibid.

<sup>27</sup> Vodafone, *Annual Report 2007*, p. 15

<sup>28</sup> Askcomreg.ie, *Reduced Roaming Rates from 1 July 2013*, June 25<sup>th</sup> 2013, , available at: [www.askcomreg.ie/news/reduced\\_roaming\\_rates\\_from\\_1\\_july\\_2013.7.1082.LE.asp](http://www.askcomreg.ie/news/reduced_roaming_rates_from_1_july_2013.7.1082.LE.asp)

<sup>29</sup> Vodafone, *Response to Commission call for comments on proposed regulation of international roaming charges*, March 22<sup>nd</sup> 2006, p. 3

<sup>30</sup> Europa.eu, *Mini hearing on "International roaming – its economic implications"*, , available at: [http://ec.europa.eu/information\\_society/activities/roaming/regulation/archives/hearing/index\\_en.htm](http://ec.europa.eu/information_society/activities/roaming/regulation/archives/hearing/index_en.htm)

## 4.2 Aiming towards industry coordination

### 4.2.1 The weak role of industry associations

A tool at Vodafone's disposal was its memberships in industry associations: GSM Association (GSMA) and its European branch, GSMA Europe<sup>31, 32</sup>. However, the industry tended to underestimate the reception of the Commission's proposal at the European Parliament.<sup>33</sup>

Indeed, GSMA did not publish any position against the Roaming Regulation before its vote at the Parliament<sup>34</sup> – despite participating in the public consultations – while GSMA Europe suffered from divergent opinions among its members<sup>35</sup>. GSMA finally took a strong stance against the Regulation on May 23<sup>rd</sup> 2007 – the day of its vote in the European Parliament – stating the regulation “... [was] unnecessary, [would] curb competition and risk long-term harm to consumers”<sup>36</sup>. This response however proved too late to influence the legislative process.

### 4.2.2 The 2007's legal complain

Vodafone promptly responded to the lack of industry coordination after the Roaming Regulation entered into force. In September 2007, the company coordinated a legal action to challenge the UK legal provisions for the implementation of the Roaming Regulation. The firm, supported by O2 Europe, T-Mobile and Orange, challenged the legal basis of the regulation, its subsidiarity and proportionality, as both retail and wholesale price caps were introduced.<sup>37</sup>

---

<sup>31</sup> Groupe Speciale Mobile Association Europe (Annex 5)

<sup>32</sup> Vodafone is also member of the European Competitive Telecommunications Association (ETCA). However, the company is not a member the European Competitive Telecommunication Association (ETNO), despite strong relationships with the organisation.

<sup>33</sup> Barth, G., loc. cit., pp. 10-11

<sup>34</sup> Only GSMA Europe evoked the proposal for the Roaming Regulation I as a factor for legal uncertainty in its *Response to the Communication from the Commission on the review of the EU regulatory framework for electronic communications, networks and services of 29.06.2006* (p. 6).

<sup>35</sup> Barth, G., loc. cit., p. 11

<sup>36</sup> GSMA, *GSMA Response to the European Parliament vote on EU Roaming Regulation*, Press Release, May 23<sup>rd</sup> 2007

<sup>37</sup> European Commission, C-58/08 *Vodafone*, judgment of 8 June 2010 *Internal market: the Court recognises the validity of the Regulation on roaming (Regulation (EC) No 717/2007 of 27 June 2007)*, October 2010

## 5 Extending to the 2009's Roaming Regulation

The 2007 Roaming Regulation left aside a large part of the IMR: text messages and data. According to the Commission, roaming text messages were charged ten times more than national texts<sup>38</sup>, while roaming data could cost up to €5.40 per megabyte for customers roaming with companies not belonging to their operator's group<sup>39</sup>.

Therefore, during the 2008 review of the Roaming Regulation I, the Commission introduced a proposal to extend both the timespan and the scope of the initial regulation.

This proposal was welcomed by the Council and the European Parliament, which adopted the Roaming Regulation II<sup>40</sup> in June 2009. In essence, this Regulation II comes down to the following:

- The regulation was extended to countries of the European Economic Area.<sup>41</sup>
- The validity of the regulation was extended until June 30<sup>th</sup> 2012.
- Eurotariffs were introduced on Short Message Service (SMS) and wholesale data roaming<sup>42</sup>, while Eurotariffs on calls were further reduced.
- Extended measures for transparency and a new mechanism against data roaming billing shocks were introduced.<sup>43</sup>

---

<sup>38</sup> European Commission, *"Texting without borders": Commission plans ending roaming rip-offs for text messages abroad*, Press Release, July 15<sup>th</sup> 2008

<sup>39</sup> European Commission, *Roaming prices: Calling home becomes cheaper again – but not (yet) texting across borders*, Press Release, August 28<sup>th</sup> 2008

<sup>40</sup> Regulation (EC) No 544/2009 of the European Parliament and of the Council of 18 June 2009 amending Regulation (EC) No 717/2007 on roaming on public mobile communication networks within the Community and Directive 2002/21/EC on a common regulatory framework for electronic communications networks and services

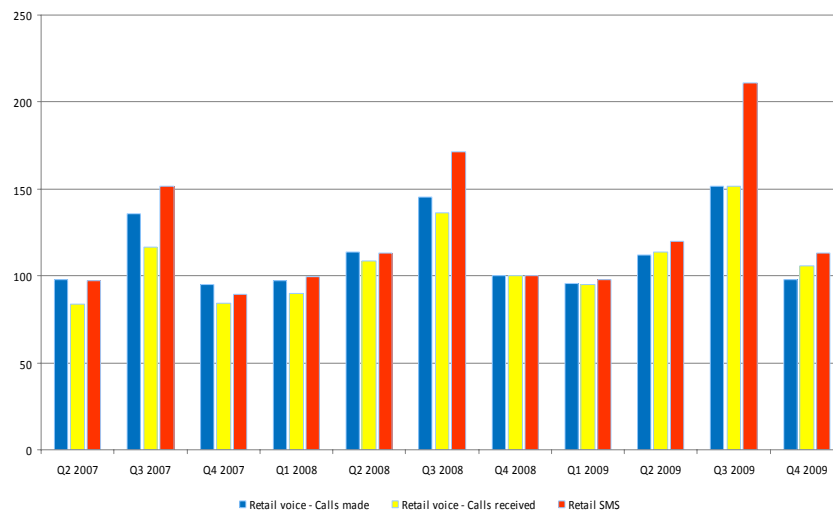
<sup>41</sup> Norway, Island and Liechtenstein

<sup>42</sup> Multimedia messages (MMS) remained outside the scope of the regulation.

<sup>43</sup> Austrian Regulatory Authority for Broadcasting and Telecommunications (RTR), *Roaming in the European Union*, , available at: [https://www.rtr.at/en/tk/Roaming\\_in\\_der\\_EU](https://www.rtr.at/en/tk/Roaming_in_der_EU)

**Figure 6: Intra-EU-EEA roaming trends in volume for retail voice calls and SMS**

(Q4 2008 = 100)



Source: Interim report on the state of development of roaming services within the European Union

By June 2011, roaming charges for made and received calls fell by respectively 46% and 55% compared to June 2007<sup>44</sup> (Figure 6) while SMS roaming charges fell by 60%<sup>45</sup>.

Regarding data roaming, retail prices fell under the cap but wholesale prices remained too high, while bill shocks were not controlled.<sup>46</sup> Overall, the Roaming Regulations I and II led to an increase of roaming traffic in voice, SMS and data services.<sup>47</sup>

### 5.1. A more offensive strategy for Vodafone

Vodafone continued to apply its preventive pricing strategy by increasing the scope of Vodafone Passport to reach 22.5 million customers by April 2009. Facing the new proposal for a Roaming Regulation, the British company continued to apply its preventive pricing strategy, and adopted an even more offensive strategy in February 2008 when turning to international platforms to defend its vision. Indeed, during the Mobile World Congress, CEO Arun Sarin was able to strongly argue against

<sup>44</sup> European Commission, *Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of Regions on the interim report on the state of development of roaming services within the European Union*, June 29<sup>th</sup> 2010, p. 5

<sup>45</sup> Ibid., p. 7

<sup>46</sup> Ibid., p. 8

<sup>47</sup> Ibid., p. 10



the Commission's proposal of a SMS Eurotariff as the company had already reduced its wholesale roaming charges to address customers' discontent.<sup>48</sup>

Besides preventative pricing, the firm established a new business unit – Vodafone Roaming Services – in charge of international wholesale roaming activities across the Group<sup>49</sup>. The creation of the new service was in response to the fall in roaming revenue in 2008. Furthermore, the firm also included the European Parliament in its advocacy campaign. On January 8<sup>th</sup> 2009, Public Policy Director Richard Feasey participated in the EPP Group hearing at the Parliament, stating that “*Roaming I lowered prices but also shrunk the market*” and that the aim of telecoms regulation should be to “*minimise distortion at the outset rather than attempting to reverse later*”.<sup>50</sup>

## **5.2. Improving but questionable industry coordination**

Industry coordination continued to put aside formal strategies (no reliance on industry associations and unsuccessful legal proceedings<sup>51</sup>) to the benefit of parallel pricing strategies enabling operators to offset the fall in roaming revenues within the EU by increasing roaming revenues outside the EU.<sup>52</sup> As stressed by INTUG, an Italian calling from Russia faced a 25% increase in price between 2006 and 2008.<sup>53</sup>

---

<sup>48</sup> O'Brien, K., *Vodafone rejects call for caps on data roaming charges*, The New-York Times, February 12<sup>th</sup> 2008

<sup>49</sup> Vodafone, *Annual Report 2009*, p. 7

<sup>50</sup> Feasey, R., “Roaming II”, Presentation at the *EPP-ED Hearing on Roaming Regulation II*, January 8<sup>th</sup> 2009

<sup>51</sup> The European Court of Justice confirmed the legality of the legal basis of the first Roaming Package in June 2010 (cf. Section 4.2.2.).

European Commission, *Digital Agenda: Commission welcomes Court of Justice ruling on the legal validity of EU Roaming rules*, Press Release, June 8<sup>th</sup> 2010

<sup>52</sup> Barth, G., loc. cit., p. 11

<sup>53</sup> INTUG, *EU Operators Offset Eurotariff With Rate Hike for non-EU Roaming*, June 5<sup>th</sup> 2008

## 6 The ambitious 2012 Roaming Regulation

In 2010, Neelie Kroes replaced Viviane Reding as Commissioner for Digital Agenda for Europe. Created the same year, the Digital Agenda intended to drive the difference between national and roaming charges to zero.

Mrs Kroes first addressed the issue of roaming in June 2010, underlying that *“most operators propose retail prices that hover around the maximum legal caps. More competition on the EU roaming market would provide better choice and even better rates to consumers.”*<sup>54</sup>. Consequently, the Body of European Regulators for Electronic Communications (BEREC)<sup>55</sup> launched a public consultation on the review of the Roaming Regulations in December 2010.<sup>56</sup>

It translated into a new Roaming Regulation<sup>57</sup> to enter in force in July 2012:

- The timespan was expanded until June 2022.
- Voice and text Eurotariffs were further reduced and price caps for retail data roaming were introduced.<sup>58</sup>
- Protection measures were extended to non-EU countries and transparency requirements were strengthened.
- Separate sale of regulated retail roaming services would be introduced from July 1<sup>st</sup> 2014 onward: *“outside their home country, roaming customers will be able to choose an alternative roaming provider”*<sup>59</sup>.

---

<sup>54</sup> European Commission, *Telecoms: roaming prices down but competition still not strong enough, says Commission report*, Press Release, June 29<sup>th</sup> 2010

<sup>55</sup> BEREC is the successor of the ERG since January 2010.

<sup>56</sup> European Commission, *Impact assessment of policy option in relation to the Commission’s review of the functioning of regulation (EC) No 544/2009 of the European Parliament and of the Council of 18 June 2009 on Roaming on public mobile telephone networks within the Community*, July 6<sup>th</sup> 2011, p. 6

<sup>57</sup> Regulation (EC) No 531/2012 of the European Parliament and of the Council of 13 June 2012 on roaming on public mobile communication networks within the Union

<sup>58</sup> BEREC, *International Roaming, BEREC Benchmark Data Report, April 2013 – September 2013*, February 2014, p. 4

<sup>59</sup> Austrian Regulatory Authority for Broadcasting and Telecommunications (RTR), *Roaming in the European Union*, available at: [www.rtr.at/en/tk/Roaming\\_in\\_der\\_EU](http://www.rtr.at/en/tk/Roaming_in_der_EU)

### 6.1. *Vodafone struggling*

2010 was also a turning point for Vodafone as Vittorio Colao succeeded Arun Sarin as CEO.<sup>60</sup> Still, the company kept the same approach to face the new regulation:

- Its preventive pricing strategy led in 2011 to the extension of its one-off connection fee scheme to a new data-roaming plan.<sup>61</sup>
- Using public consultations to voice its critics, the corporation stressed that decoupling roaming would lead to more complexity and less transparency on the market.<sup>62</sup>

Still, the firm struggled to appear as a reference in the industry even as the Commission initiated proceedings against Vodafone Ireland Limited in December 2011, claiming Vodafone's non-compliance with the Roaming Regulation II.<sup>63, 64</sup>

Consequently, the firm moved towards a very offensive strategy. On February 27<sup>th</sup> 2012, CEO Vittorio Colao called for a moratorium on telecoms regulation at the Mobile World Congress, as the firm believed that stronger price caps would lead to lower employment and reduced investments in infrastructure.<sup>65</sup> His speech was badly received by Commissioner Neelie Kroes stating the next day that she does not "*respond well to threats*"<sup>66</sup>. Escalation occurred a month later at an event hosted by the World Trade Organisation when Richard Feasey, Public Policy Director, stressed that the Roaming Regulations were the result of political will with no regards to the economic reality, and that they should only concentrate on transparency issues.<sup>67</sup>

---

<sup>60</sup> Vittorio Colao was CEO Europe since October 2009.

<sup>61</sup> Vodafone, *Annual Report 2011*, p. 19

<sup>62</sup> Vodafone, *Review of the functioning of the Roaming Regulation, Comments of Vodafone*, January 26<sup>th</sup> 2011, pp. 3-4

<sup>63</sup> In February 2012, the company was found guilty of non-compliance with the Roaming Regulations and condemned to pay a €400,000 penalty.

<sup>64</sup> Askcomreg.ie, *ComReg finds Vodafone non-compliant with requirements of*, February 20<sup>th</sup> 2012

<sup>65</sup> Garside, J. *Vodafone boss calls for moratorium on mobile phone regulation*, The Guardian, February 27<sup>th</sup> 2010

<sup>66</sup> Roman, D., *EU Strikes Back After Vodafone Complains Of Too Much Regulation*, Digits, February 28<sup>th</sup> 2012

<sup>67</sup> Feasey, R., *Symposium on International Roaming, Views of Vodafone Group*, March 22<sup>sd</sup> 2012

Still, a month after the Regulation was adopted, the company launched a new roaming offer on June 29<sup>th</sup> in most of its European markets combining *“calls, texts and mobile Internet access for a daily payment of €3 or €4”*<sup>68</sup>.

## **6.2. A strong industry coordination**

The 2012 Roaming Regulation however led to positive outcomes regarding industry coordination. Indeed, both GSMA and its European branch published numerous strong position papers against the new reform:

- *“We believe that the rapid evolution of technologies and substitute product offerings is evidence that roaming services are competitive [...], questioning the rationale for further roaming regulation.”*<sup>69</sup>
- *“The European Parliament has a clear choice: support structural reforms and complement them with safeguard price caps, or [...] continue [...] with indefinite target based retail price capping.”*<sup>70</sup>

Additionally, GSMA launched a Data Roaming Transparency Initiative on June 21<sup>st</sup> 2012. Signed by twenty-four operators – including Vodafone –, the initiative introduced measures very similar to the EU Roaming Regulations II and III.<sup>71</sup>

As Vodafone’s position and legitimacy weakened, industry associations reinforced their positioning. This allowed the firm to get its voice heard despite a public confrontation with the Commission.

---

<sup>68</sup> Vodafone, *European Roaming Breakthrough: Vodafone Offers Simple, Worry-Free, Integrated Plan*, Press release, June 29<sup>th</sup> 2012

<sup>69</sup> GSMA, *GSMA’s Response to the Public Consultation for the Review of the Functioning of Regulation (EC) No 544/2009 (the “Roaming Regulation”)*, February 11<sup>th</sup> 2011, p. 6

<sup>70</sup> GSMA Europe, *Roaming Regulation, Safeguard Caps or Target Caps - A Clear Choice for the European Parliament*, December 20<sup>th</sup> 2011, p. 1

<sup>71</sup> GSMA, *GSMA Launches Data Roaming Transparency Initiative*, Press Release, June 21<sup>st</sup> 2012

## 7 What's next? The Connected Continent Package

### 7.1 From a proposal...

In September 2013, the European Commission released a proposal for a Connected Continent to simplify and reduce telecoms regulation while ensuring web neutrality and creating a competitive and innovative Single Market for telecoms. As Commissioner Neelie Kroes underlined that “*the current roaming rules are designed to reduce the problems of national markets but don’t build a real single market*”<sup>72</sup>, the proposal aimed at ending any intra-EU roaming service through cross-border partnerships.<sup>73</sup> According to the Commission, telecom firms could face a 0.5% reduction of revenues in the short term, which would be compensated in the medium term by higher consumption.

Vodafone badly received this new proposal: as a European firm, the company believed that such cross-border alliances could be anti-competitive. This reaction generated strong opposition from the Commission and damaged Vodafone’s public image, as Mrs. Kroes’ spokesman claimed “*Vodafone [was not] against roaming alliances. They just want[ed] a monopoly on them, and not the competition the proposals [would] provide.*”<sup>74</sup>. This outcome underlined a shift in Vodafone’s strategy towards achieving an integrated wide-scale European Single Market. Indeed, CEO Vittorio Colao had stressed during October 2012’s ETNO FT Summit that the EU needed “*to allow consolidation*” through cross-border mergers.<sup>75</sup>

Likewise, GSMA’s move towards a more organised strategy supported Vodafone’s overall strategy. Firstly, the association published in February 2013 its first *Mobile Policy Handbook*<sup>76</sup> advocating the removal of structural roaming barriers and the use of price regulation as a last resort<sup>77</sup>. Secondly, the association co-signed with its members’ CEOs – including Vodafone – an open letter to Commissioner Neelie Kroes on March 7<sup>th</sup> 2014 stating: “*Operators must have the commercial*

---

<sup>72</sup> European Commission, *Commission adopts regulatory proposals for a Connected Continent*, Press Release, September 11<sup>th</sup> 2013

<sup>73</sup> Ibid.

<sup>74</sup> Williams, C., *Vodafone: EU roaming reform ‘anti-competitive’*, The Telegraph, October 19<sup>th</sup> 2013

<sup>75</sup> Colao, V., “Panel I: Meeting the investment and growth challenged ahead”, Speech at the *FT ETNO Summit 2012*, October 2<sup>nd</sup> 2012

<sup>76</sup> GSMA, *Mobile Policy Handbook*, Second Edition, October 2013, p. 2

<sup>77</sup> Ibid., p. 59

*freedom to develop new business models [...] to restore the investment climate and drive innovation and competition.*<sup>78</sup>.

## **7.2 ....To a first vote**

On April 3<sup>rd</sup> 2014 the European Parliament adopted the Commission's proposal for a regulation to achieve a Connected Continent including the end of roaming charges by December 2015. The proposal for the regulation was discussed in the Council at the end of 2014, under the Italian Presidency, but no final agreement was reached.<sup>79</sup> Spectrum policies and net neutrality were the issues of dispute. On roaming the debate was not particularly fierce and focused more on whether the roaming ban should have been implemented in 2016, as initially demanded by the Parliament, or delayed, as several Member States requested. The industry reaction to the roaming aspect of this proposal was relatively weak: Vodafone remained silent while GSMA only called for a *"comprehensive review of the existing regulatory framework for electronic communications, focusing on the underlying reasons for Europe's lagging investment"*<sup>80</sup>. An agreement was reached on the very last day of the Latvian presidency, on 30 June 2015; the roaming ban is expected to enter into force on 15 June 2017 and as from April 2016 surcharges for roaming will be capped at € 0.05 per minute for calls, € 0.02 for text messages and € 0.05 per megabyte for data.<sup>81</sup>

## **8 Conclusion**

The Roaming Regulations were introduced to foster consumer protection on a very complex segment of the EU telecoms market. Price caps on voice, text message and data roaming have been introduced on retail and/or wholesale markets. These measures have been accompanied by transparency requirements and a system against data billing shocks.

---

<sup>78</sup> GSMA, *GSMA and CEOs of mobile operators set out key success factors to an effective EU Telecoms Single Market*, Press Release, March 7<sup>th</sup> 2014

<sup>79</sup> European Commission, *European Parliament votes to end roaming charges, expand consumer rights and make it easier to create better telecoms*, Press Release, April 3<sup>rd</sup> 2014

<sup>80</sup> GSMA, *More comprehensive "Connected Continent" package required to address current economic challenges, says GSMA*, Press Release, April 3<sup>rd</sup> 2014

<sup>81</sup> European Commission, *Commission welcomes agreement to end roaming charges and to guarantee an open Internet*, Press Release, June 30<sup>th</sup> 2015

Vodafone's position had been very consistent regarding the regulation of roaming. However, the efficiency of its advocacy campaign against the Roaming Regulations could be questioned. The company appeared as "the enemy to bring down" while its 2012's condemnation for non-compliance with the Roaming Regulation prevented the firm from being a reference actor despite its leadership position on the telecoms world market. However, the company was able to rely on improving – still imperfect – Industry coordination to reach the Commission. Overall, Vodafone's main focus shifted away from maintaining roaming fees towards achieving a regulation-free integrated Telecoms Single Market.

## 9 Case questions for discussion

- How could Vodafone have improved its credibility in the eyes of EU institutions?
- Would Vodafone have benefited from a more flexible positioning against the Roaming Regulations?
- Should Vodafone have made better use of industry coordination?
- What could Vodafone have done to improve its lobbying strategy?



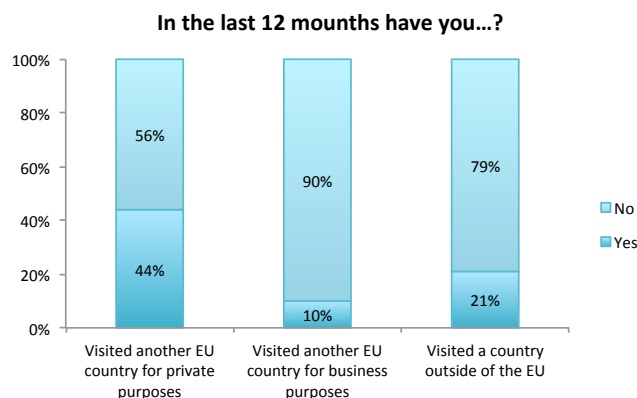
## 10 Annexes

### 10.1 Annex 1: Vodafone's financial highlights

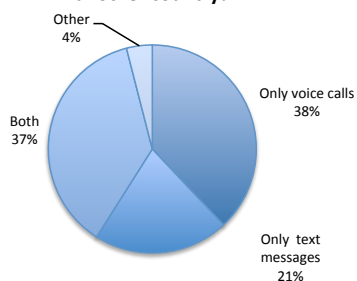
| Year                      | 2006    | 2007    | 2008    | 2009    | 2010    | 2011    | 2012    | 2013    |
|---------------------------|---------|---------|---------|---------|---------|---------|---------|---------|
| Revenue                   | £29.3bn | £31.1bn | £35.5bn | £41.0bn | £44.5bn | £45.9bn | £46.4bn | £44.4bn |
| Adjusted operating profit | -       | £9.5bn  | £10.1bn | £11.8bn | £11.5bn | £11.8bn | £11.5bn | £12.0bn |
| Free cash flow            | £6.4bn  | £6.1bn  | -       | £5.7bn  | £7.2bn  | £7.0bn  | £6.1bn  | £5.6bn  |

Source: Vodafone Annual Reports

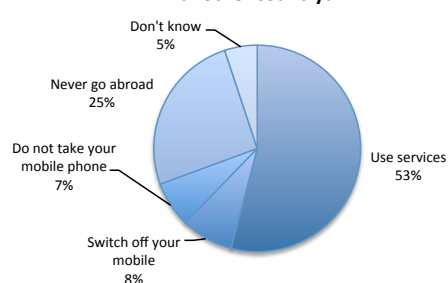
### 10.2 Annex 2: EU25 demand for regulation in 2006



**Which of the following mobile communication services do you use most when you are abroad in another country?**



**Which of the following mobile communication services do you use most when you are abroad in another country?**



Source: 2006's Eurobarometer

### 10.3 Annex 3: Chronology

#### Legend:

|       |                     |              |                      |
|-------|---------------------|--------------|----------------------|
| Event | European Commission | <b>Event</b> | Vodafone             |
| Event | Legislative Act     | <b>Event</b> | GSMA and GSMA Europe |

| 1999   |   |
|--|---|
| July 27 <sup>th</sup>                              | - The European Commission launches a three-step inquiry on the telecoms sector (cf. February 4 <sup>th</sup> 2000 and May 2005)   |
| November   | - International Telecommunications Users Group (INTUG) report on International Mobile Roaming   |
| 2000   |   |
| February 4 <sup>th</sup>                           | - The European Commission launches the second step of its inquiry the telecoms sector focusing on mobile roaming (cf. July 27 <sup>th</sup> 1999 and May 2005)  |
| 2004   |   |
| January 1 <sup>st</sup>                            | - Viviane Reding becomes Commissioner for Information Society and Media   |
| July   | - The Commission issue a statement of objections against Vodafone and O2 regarding the excessive wholesale tariffs charged to other Mobile Network Operators for international roaming in the British market  |
| 2005   |   |
| February   | - The Commission issue a statement of objections against Vodafone and T-Mobile regarding the German market  |
| May  | - European Regulators Group (ERG) common position on roaming after the Commission's inquiry (cf. July 1999)<br>- <b>Vodafone launches its roaming campaign The Vodafone Travel Promise, accompanied by a new roaming product offer, Vodafone Passport</b> |
| July   | - Information Society and Media Commissioner Viviane Reading launches the transparency initiative on roaming  |
| September  | - <b>Vodafone coordinates a legal complaint to challenge the UK legal provisions for the implementation of the Roaming Regulation.</b>  |
| October  | - Creation of a roaming website where customers can compare cost of using their mobile abroad (cf. July 2005)   |
| 2006   |   |
| February 21 <sup>st</sup> – March 22 <sup>nd</sup> | - First phase of the public consultation on national markets for international roaming services on public mobile telephone networks   |
| March 22 <sup>nd</sup>                             | - <b>Vodafone submits its contribution to the first phase of the public consultation on roaming services</b>  |
| March 28 <sup>th</sup>                             | - The Commission issues a proposal for an EU Regulation on Roaming  |
| April 3 <sup>rd</sup> – May 12 <sup>th</sup>       | - Second phase of the public consultation on national markets for international roaming services on public mobile telephone networks  |
| May 4 <sup>th</sup>                                | - <b>Vodafone Public Policy Director Richard Feasey at the European Parliament's mini-hearing on "International roaming – its economic implications"</b>  |
| May 8 <sup>th</sup>                                | - <b>Vodafone decides to cut retail voice-roaming by at least 40% compared to the June-August 2005 period, and to consolidate wholesale agreements</b>  |
| May 12 <sup>th</sup>                               | - <b>Vodafone submits its contribution to the second phase of the public consultation on roaming services</b>   |
| June 8 <sup>th</sup>                               | - <b>Public announcement of May 8<sup>th</sup> decision</b><br>- <b>Vodafone CEO Arun Sarin: "You do retail price regulation where the market is not functioning. But I have not seen any evidence that that is the case in the EU."</b>                  |

|  |   |
|--|---|
| November 11 <sup>th</sup>                                      | - Special Eurobarometer on Roaming  |
| <b>2007</b>  |   |
| May 23 <sup>rd</sup>   | - Vote of the EU Roaming Regulation I at the European Parliament<br>- GSMA: <i>"The proposed EU regulation of roaming services, which was approved by a vote in the European Parliament today, is unnecessary, will curb competition and risks long-term harm to consumers."</i>                |
| June 27 <sup>th</sup>  | - Adoption of the EU Roaming Regulation I   |
| June 30 <sup>th</sup>  | - The EU Roaming Regulation I enters into force   |
| July   | - DG Competition closed the two antitrust proceedings as the Roaming Regulation resolved the issue (cf. July 2004 and February 2005)  |
| <b>2008</b>  |   |
| February 12 <sup>th</sup>                                      | - CEO Arun Sarin at the Mobile World Congress: <i>"You do retail price regulation where the market is not functioning. But I have not seen any evidence that that is the case in the EU."</i>   |
| May 7 <sup>th</sup> – July 2 <sup>sd</sup>                     | - Public consultation on the functioning and the effects of the EU Roaming Regulation   |
| November   | - <b>Vodafone creates a new business unit, Vodafone Roaming services</b>  |
| December   | - The European Parliament issues the <i>Review of the Roaming Regulations</i>   |
| <b>2009</b>  |   |
| January 8 <sup>th</sup>  | - <b>Vodafone Public Policy Director Richard Feasey's presentation at the EPP-ED Hearing on Roaming Regulation II: "Roaming I lowered prices but also shrunk the market"</b>  |
| June 18 <sup>th</sup>  | - Adoption of the EU Roaming Regulation II  |
| July 2 <sup>sd</sup>   | - The EU Roaming Regulation II enters into force  |
| <b>2010</b>  |   |
| January 1 <sup>st</sup>  | - Neelie Kroes replaced Viviane Reding as Commissioner for Digital Agenda for Europe  |
| May 19 <sup>th</sup>   | - Presentation of the Digital Agenda by the European Commission   |
| June 8 <sup>th</sup>   | - The European Court of Justice confirmed the legality of the legal basis of the Roaming Regulation I (cf. September 2007)  |
| June 29 <sup>th</sup>  | - The Commission publishes its <i>Interim report on the state of development of roaming services within the European Union</i><br>- <b>Vittorio Colao succeeds Arun Sarin as Vodafone's CEO</b>   |
| December 8 <sup>th</sup> 2010 – February 11 <sup>th</sup> 2011 | - Public consultation on a review of the functioning of the Roaming Regulation II   |
| <b>2011</b>  |   |
| January 26 <sup>th</sup>                                       | - <b>Vodafone submits its contribution to the public consultation on the Review of the functioning of the Roaming Regulation</b>  |
| July 6 <sup>th</sup>   | - The Commission publishes a proposal for a new Roaming Regulation  |
| December 9 <sup>th</sup>                                       | - The Commission initiates proceedings against Vodafone Ireland Limited under non-compliance with the Roaming Regulation II   |
| December 20 <sup>th</sup>                                      | - GSMA Europe: <i>"The European Parliament has a clear choice: support structural reforms and complement them with safeguard price caps, or push back on the proposals to decouple roaming from domestic services, and continue instead with indefinite target based retail price capping."</i> |
| <b>2012</b>  |   |
| February 11 <sup>th</sup>                                      | - GSMA's Response to the Public Consultation: <i>"We believe that the rapid evolution of technologies and substitute product offerings is evidence that roaming services are competitive, especially when looking at data market, questioning the rationale for further roaming regulation"</i> |
| February 20 <sup>th</sup>                                      | - Vodafone Ireland Limited is condemned to pay a €400,000 penalty for non-compliance with the Roaming Regulation II   |
| February 27 <sup>th</sup>                                      | - <b>CEO Vittorio Colao calls for a moratorium on telecoms regulation at the Mobile World Congress</b>  |

|                            |   |
|----------------------------|---|
| February 28 <sup>th</sup>  | - Commissioner Neelie Kroes responds to Vittorio Colao: <i>"I don't respond well to threats"</i>  |
| March 22 <sup>sd</sup>     | - <b>Public Policy Director Richard Feasey's Symposium on International Mobile Roaming hosted by the World Trade Organisation: <i>"Like many things in the European debate, this is pure political artifice and has nothing to do with the proper functioning of competitive markets."</i></b>  |
| May 10 <sup>th</sup>       | - Adoption of the EU Roaming Regulation II  |
| June 21 <sup>st</sup>      | - <i>GSMA launches its Data Roaming Transparency Initiative</i>   |
| June 29 <sup>th</sup>      | - Special Eurobarometer on Roaming<br>- <b>Vodafone launches a new roaming offer</b>  |
| July 1 <sup>st</sup>       | - The EU Roaming Regulation III enters into force   |
| October 2 <sup>sd</sup>    | - <b>CEO at Vittorio Colao at ETNO FT summit: <i>"The solution has to be found in scale"</i></b>  |
| <b>2013</b>                |   |
| February                   | - <i>GSMA publishes the first Mobile Policy Handbook</i>  |
| September 11 <sup>th</sup> | - The European Commission releases its proposal for a Connected Continent<br>- Commissioner Neelie Kroes: <i>"The current roaming rules are designed to reduce the problems of national markets but they don't build a real single market"</i>  |
| October                    | - <i>GSMA publishes the second Mobile Policy Handbook</i>   |
| October 19 <sup>th</sup>   | - <b>Vodafone claims the European Commission's roaming reforms are anti-competitive</b><br>- Commissioner Neelie Kroes' spokesman: <i>"Vodafone aren't against roaming alliances. They just want a monopoly on them, and not the competition the proposals will provide."</i>   |
| <b>2014</b>                |   |
| March 7 <sup>th</sup>      | - <i>GSMA and its CEOs – including Vodafone – send an open letter to Commissioner Neelie Kroes: <b>"Operators must have the commercial freedom to develop new business models [...] in order to restore the investment climate and drive innovation and competition in the global marketplace."</b></i>   |
| April 3 <sup>rd</sup>      | - The European Parliament adopted during its first reading the proposal for a Connected Continent including the end of roaming charges by December 2015 (cf. end of 2014)<br>- <i>GSMA calls for a <b>"comprehensive review of the existing regulatory framework for electronic communications, focusing on the underlying reasons for Europe's lagging investment"</b></i> |
| End of 2014                | - The first reading of the proposal for a Connected Continent at the Council (cf. April 3 <sup>rd</sup> 2014)   |
| <b>2015</b>                |   |
| June 30 <sup>th</sup>      | - Agreement reached under the Latvian presidency on the roaming ban that is expected to enter into force on 15 June 2017  |

Sources: dates and sources are referred in the case text

#### 10.4 Annex 4: Detail of the Roaming Regulations (excluding VAT)

|  | Roaming Regulation I  |                  | Roaming Regulation II  |   |               | Roaming Regulation III                    |               |  |
|--|---|------------------|--|---|---------------|---|---------------|--|
|  | August 30th 2007  | August 30th 2008 | July 1st 2009  | July 1st 2010   | July 1st 2011 | July 1st 2012                             | July 1st 2013 | From July 1st 2014                                   |
| <b>Eurotariff on voice calls</b>                   |   |                  |  |   |               |   |               |  |
| Wholesale  |   |                  |  |   |               |   |               |  |
| Price limit for calls made                         | €0.30   | €0.28            | €0.26  | €0.22   | €0.18         | €0.14                                     | €0.10         | €0.05  |
| Retail   |   |                  |  |   |               |   |               |  |
| Calls made   | €0.49   | €0.46            | €0.43  | €0.39   | €0.35         | €0.29                                     | €0.24         | €0.19  |
| Calls received                                     | €0.24   | €0.22            | €0.19  | €0.15   | €0.11         | €0.08                                     | €0.07         | €0.05  |
| Mandatory per-second billing                       |   |                  |  |   |               |   |               |  |
| Voicemail  | -   | -                | -  | Obligation not to charge consumers to receive a voicemail                                   |               |   |               |  |
| <b>Eurotariff on SMS</b>                           |   |                  |  |   |               |   |               |  |
| Wholesale  |   |                  |  |   |               |   |               |  |
| Price limit for SMS                                | -   | -                | €0.04  | €0.04   | €0.04         | €0.03                                     | €0.02         | €0.02  |
| Retail   |   |                  |  |   |               |   |               |  |
| SMS sent   | -   | -                | €0.11  | €0.11   | €0.11         | €0.09                                     | €0.08         | €0.06  |
| SMS received                                       | -   | -                | Operators are no more able to charge consumers for receiving SMS while   |   |               |   |               |  |
| <b>Eurotariff on data</b>                          |   |                  |  |   |               |   |               |  |
| Wholesale  |   |                  |  |   |               |   |               |  |
| Per megabyte                                       | -   | -                | €1.00  | €0.80   | €0.50         | €0.25                                     | €0.15         | €0.05  |
| Retail   |   |                  |  |   |               |   |               |  |
| Per megabyte                                       | -   | -                | -  | -   | -             | €0.70                                     | €0.45         | €0.20  |
| Mandatory billing per kilobyte                     |   |                  |  |   |               |   |               |  |
| Measures against data billing shock                |   |                  |  |   |               |   |               |  |
| Measures   | -   | -                | -  | Automatic opt for a €50.0 data roaming cap with the possibility to opt for a customed limit |               | Data roaming caps extended outside the EU |               |  |
| <b>Pricing transparency</b>                        |   |                  |  |   |               |   |               |  |
| Mandatory SMS sent to consumers                    | Free<br>Includes roaming pricing detail for voice (calls made and received) |                  | Free<br>Includes roaming pricing detail for voice, SMS, MMS and data<br>Free number to receive more detailed pricing information<br>Information on the European emergency number 112 |   |               |   |               |  |
| <b>Separate sale of regulated roaming services</b> |   |                  |  |   |               |   |               |  |
| Separate sale                                      | -   | -                | -  | -   | -             | -   | -             | Customers can choose an alternative roaming provider |

Sources: Askcomreg.ie, Roaming Regulation III

## **10.5 Annex 5: GSMA and GSMA Europe**

Abstracts from the GSMA website

### *10.5.1 About the GSMA*

The GSMA represents the interests of mobile operators worldwide. Spanning more than 220 countries, the GSMA unites nearly 800 of the world's mobile operators, as well as more than 200 companies in the broader mobile ecosystem, including handset makers, software companies, equipment providers, Internet companies, and media and entertainment organisations. The GSMA also produces industry-leading events such as the Mobile World Congress and Mobile Asia Expo.

### *10.5.2 About the GSMA Europe*

GSMA Europe represents the interests of European mobile network operators as well as companies in the broader mobile ecosystem such as handset and device makers, software companies, equipment providers and Internet companies. Moreover, as mobile technologies have become enablers for many other industry sectors, it reaches out to organizations in fields such as payments, identity services, health, education, and smart cities, including innovative transport, utilities and automotive.

In the European Union the GSMA represents more than 100 mobile network operators providing 600 million subscriber connections across the region. We use our combined expertise to give the mobile communication industry a single and powerful voice.

GSMA Europe organizes a whole range of events including the annual Mobile 360 Europe conference and the Mobile Meetings Series. GSMA Europe's "Mobile Economy Europe Report", the "Mobile Policy Handbook" and the "Mobile Discovery Newsletter" form part of the collateral available to those wanting to learn more about the European Telecommunications sector.

## 11 References

### 11.1 European Institutions

#### 11.1.1 Legislation

- Regulation (EC) No 717/2007 of the European Parliament and of the Council of 27 June 2007 on roaming on public mobile communication networks within the Community
- Regulation (EC) No 544/2009 of the European Parliament and of the Council of 18 June 2009 amending Regulation (EC) No 717/2007 on roaming on public mobile communication networks within the Community and Directive 2002/21/EC on a common regulatory framework for electronic communications networks and services
- Regulation (EC) No 531/2012 of the European Parliament and of the Council of 13 June 2012 on roaming on public mobile communication networks within the Union
- Europa, Roaming on public mobile telephone networks, Summaries of EU Legislation, [http://europa.eu/legislation\\_summaries/information\\_society/radiofrequencies/l24276\\_en.htm](http://europa.eu/legislation_summaries/information_society/radiofrequencies/l24276_en.htm)
- Europa, *Digital Agenda for Europe*, Summaries of EU Legislation, available at: [http://europa.eu/legislation\\_summaries/information\\_society/strategies/si0016\\_en.htm](http://europa.eu/legislation_summaries/information_society/strategies/si0016_en.htm)
- European Commission, *Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of Regions on the interim report on the state of development of roaming services within the European Union*, June 29<sup>th</sup> 2010, available at: [http://ec.europa.eu/information\\_society/activities/roaming/docs/interim\\_report2010.pdf](http://ec.europa.eu/information_society/activities/roaming/docs/interim_report2010.pdf)
- European Commission, *C-58/08 Vodafone, judgment of 8 June 2010 Internal market: the Court recognises the validity of the Regulation on roaming (Regulation (EC) No 717/2007 of 27 June 2007)*, October 2010, [http://ec.europa.eu/dgs/legal\\_service/arrets/08c058\\_en.pdf](http://ec.europa.eu/dgs/legal_service/arrets/08c058_en.pdf)
- European Commission, *Impact assessment of policy option in relation to the Commission's review of the functioning of regulation (EC) No 544/2009 of the European Parliament and of the Council of 18 June 2009 on Roaming on public mobile telephone networks within the Community*, July 6<sup>th</sup> 2011, available at: [http://ec.europa.eu/information\\_society/activities/roaming/docs/impac\\_ass\\_11.pdf](http://ec.europa.eu/information_society/activities/roaming/docs/impac_ass_11.pdf)
- European Commission, *Report from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the regions on*

*the outcome of the functioning of Regulation (EC) No 717/2007 of the European Parliament and of the Council of 27 June 2007 on roaming on public mobile communications networks within the Community, as amended by Regulation (EC) No 544/2009, July 6<sup>th</sup> 2011,*  
[http://ec.europa.eu/information\\_society/activities/roaming/docs/roaming\\_report\\_11.pdf](http://ec.europa.eu/information_society/activities/roaming/docs/roaming_report_11.pdf)

#### 11.1.2 Press Releases

- European Commission, *Commission challenges UK international roaming rates*, Press Release, July 26<sup>th</sup> 2004, [http://europa.eu/rapid/press-release\\_IP-04-994\\_en.htm?locale=en](http://europa.eu/rapid/press-release_IP-04-994_en.htm?locale=en)
- European Commission, *Competition: Commission challenges international roaming rates for mobile*, Press Release, February 10<sup>th</sup> 2005, available at: [http://europa.eu/rapid/press-release\\_IP-05-161\\_en.htm?locale=FR](http://europa.eu/rapid/press-release_IP-05-161_en.htm?locale=FR)
- European Commission, *International Roaming Charges: Frequently Asked Questions*, Press Release, July 11<sup>th</sup> 2005, available at: [http://europa.eu/rapid/press-release\\_MEMO-05-247\\_en.htm?locale=en](http://europa.eu/rapid/press-release_MEMO-05-247_en.htm?locale=en)
- European Commission, *Roaming: Consumer prices now reduced by 60%*, Press Release, October 4<sup>th</sup> 2007, [http://europa.eu/rapid/press-release\\_IP-07-1445\\_en.htm?locale=en](http://europa.eu/rapid/press-release_IP-07-1445_en.htm?locale=en)
- European Commission, *"Texting without borders": Commission plans ending roaming rip-offs for text messages abroad*, Press Release, July 15<sup>th</sup> 2008, available at: [http://europa.eu/rapid/press-release\\_IP-08-1144\\_en.htm](http://europa.eu/rapid/press-release_IP-08-1144_en.htm)
- European Commission, *Roaming prices: Calling home becomes cheaper again – but not (yet) texting across borders*, Press Release, August 28<sup>th</sup> 2008, available at: [http://europa.eu/rapid/press-release\\_IP-08-1276\\_en.htm](http://europa.eu/rapid/press-release_IP-08-1276_en.htm)
- European Commission, *Digital Agenda: Commission welcomes Court of Justice ruling on the legal validity of EU Roaming rules*, Press Release, June 8<sup>th</sup> 2010, available at: [http://europa.eu/rapid/press-release\\_MEMO-10-242\\_en.htm](http://europa.eu/rapid/press-release_MEMO-10-242_en.htm)
- European Commission, *Telecoms: roaming prices down but competition still not strong enough, says Commission report*, Press Release, June 29<sup>th</sup> 2010, available at: [http://europa.eu/rapid/press-release\\_IP-10-851\\_en.htm](http://europa.eu/rapid/press-release_IP-10-851_en.htm)
- European Commission, *Commission adopts regulatory proposals for a Connected Continent*, Press Release, September 11<sup>th</sup> 2013, available at: [http://europa.eu/rapid/press-release\\_MEMO-13-779\\_en.htm](http://europa.eu/rapid/press-release_MEMO-13-779_en.htm)
- European Commission, *European Parliament votes to end roaming charges, expand consumer rights and make it easier to create better telecoms*, Press Release, April 3<sup>rd</sup> 2014, available at: [http://europa.eu/rapid/press-release\\_IP-14-373\\_en.htm](http://europa.eu/rapid/press-release_IP-14-373_en.htm)



- European Commission, *Commission welcomes agreement to end roaming charges and to guarantee an open Internet*, Press Release, June 30<sup>th</sup> 2015, available at: [http://europa.eu/rapid/press-release\\_IP-15-5265\\_en.htm](http://europa.eu/rapid/press-release_IP-15-5265_en.htm)

### 11.1.3 Europa Website

- Europa.eu, *Mini hearing on “International roaming – its economic implications”*, available at: [http://ec.europa.eu/information\\_society/activities/roaming/regulation/archives/hearing/index\\_en.htm](http://ec.europa.eu/information_society/activities/roaming/regulation/archives/hearing/index_en.htm)
- Europa.eu, *Viviane Reding, About the Vice-President, CV*, available at: [http://ec.europa.eu/commission\\_2010-2014/reding/about/cv/index\\_en.htm](http://ec.europa.eu/commission_2010-2014/reding/about/cv/index_en.htm)
- European Commission, *Special Eurobarometer on Roaming, September-October 2006*, n°269, March 2007, available at: [http://ec.europa.eu/information\\_society/newsroom/cf/document.cfm?action=display&doc\\_id=250](http://ec.europa.eu/information_society/newsroom/cf/document.cfm?action=display&doc_id=250)

## 11.2 Regulators

- Austrian Regulatory Authority for Broadcasting and Telecommunications (RTR), *Roaming in the European Union*, available at: [www.rtr.at/en/tk/Historie](http://www.rtr.at/en/tk/Historie)
- Austrian Regulatory Authority for Broadcasting and Telecommunications (RTR), *Roaming in the European Union*, available at: [www.rtr.at/en/tk/Roaming\\_in\\_der\\_EU](http://www.rtr.at/en/tk/Roaming_in_der_EU)
- Askcomreg.ie, *ComReg finds Vodafone non-compliant with requirements of*, February 20<sup>th</sup> 2012, available at: [www.askcomreg.ie/news/comreg\\_finds\\_vodafone\\_non\\_compliant\\_with\\_requirements\\_of.1057.LE.asp](http://www.askcomreg.ie/news/comreg_finds_vodafone_non_compliant_with_requirements_of.1057.LE.asp)
- Askcomreg.ie, *Reduced Roaming Rates from 1 July 2013*, June 25<sup>th</sup> 2013, available at: [www.askcomreg.ie/news/reduced\\_roaming\\_rates\\_from\\_1\\_july\\_2013.7.1082.LE.asp](http://www.askcomreg.ie/news/reduced_roaming_rates_from_1_july_2013.7.1082.LE.asp)
- Body of European Regulators for Electronic Communications (BEREC), *International Roaming, BEREC Benchmark Data Report, April 2013 – September 2013*, February 2014, available at: [file:///Users/20130311/Downloads/4246-international-roaming-berec-benchmark-da\\_0%20\(1\).pdf](file:///Users/20130311/Downloads/4246-international-roaming-berec-benchmark-da_0%20(1).pdf)
- Infante, J., *EU Regulation in International Roaming and MVNOs*, CNMC, October 2013, available at: <http://cnmcblog.es/wp-content/uploads/2013/10/MVNOs-and-Regulation-in-International-Roaming-2.pdf>

### 11.3 Vodafone

#### 11.3.1 Annual Reports

- Vodafone, *Annual Report 2006*, available at:  
[www.vodafone.com/content/dam/vodafone/investors/annual\\_reports/annual\\_report\\_accounts\\_2006.pdf](http://www.vodafone.com/content/dam/vodafone/investors/annual_reports/annual_report_accounts_2006.pdf)
- Vodafone, *Annual Report 2007*, available at:  
[www.vodafone.com/content/dam/vodafone/investors/annual\\_reports/annual\\_report\\_accounts\\_2007.pdf](http://www.vodafone.com/content/dam/vodafone/investors/annual_reports/annual_report_accounts_2007.pdf)
- Vodafone, *Annual Report 2008*, available at:  
[www.vodafone.com/content/dam/vodafone/investors/annual\\_reports/annual\\_report\\_accounts\\_2008.pdf](http://www.vodafone.com/content/dam/vodafone/investors/annual_reports/annual_report_accounts_2008.pdf)
- Vodafone, *Annual Report 2009*, available at:  
[www.vodafone.com/content/dam/vodafone/investors/annual\\_reports/annual\\_report\\_accounts\\_2009.pdf](http://www.vodafone.com/content/dam/vodafone/investors/annual_reports/annual_report_accounts_2009.pdf)
- Vodafone, *Annual Report 2011*, available at:  
[www.vodafone.com/content/dam/vodafone/investors/annual\\_reports/annual\\_report\\_accounts\\_2011.pdf](http://www.vodafone.com/content/dam/vodafone/investors/annual_reports/annual_report_accounts_2011.pdf)
- Vodafone, *Annual Report 2013*, available at:  
[www.vodafone.com/content/annualreport/annual\\_report13/downloads/vodafone\\_annual\\_report\\_2013.pdf](http://www.vodafone.com/content/annualreport/annual_report13/downloads/vodafone_annual_report_2013.pdf)

#### 11.3.2 Corporate Website

- Vodafone, *Vodafone to reduce the cost of European roaming by at least 40% by April 2007*, Press Release, June 8<sup>th</sup> 2006, available at:  
[www.vodafone.com/content/index/media/vodafone-group-releases/2006/press\\_release08\\_05.html](http://www.vodafone.com/content/index/media/vodafone-group-releases/2006/press_release08_05.html)
- Feasey, R., *Symposium on International Roaming, Views of Vodafone Group*, March 22<sup>nd</sup> 2012, [www.wto.org/english/tratop\\_e/serv\\_e/sym\\_march12\\_e/sym\\_march12\\_e.htm](http://www.wto.org/english/tratop_e/serv_e/sym_march12_e/sym_march12_e.htm)
- Vodafone, *European Roaming Breakthrough: Vodafone Offers Simple, Worry-Free, Integrated Plan*, Press release, June 29<sup>th</sup> 2012, available at:

[www.vodafone.com/content/index/media/vodafone-group-releases/2012/european\\_roaming.html](http://www.vodafone.com/content/index/media/vodafone-group-releases/2012/european_roaming.html)

- Vodafone, *Half year results and strategy update*, November 12<sup>th</sup> 2013, available at: [www.vodafone.com/content/dam/vodafone/investors/financial\\_results\\_feeds/half\\_year\\_30september2013/p\\_halfyear2013.pdf](http://www.vodafone.com/content/dam/vodafone/investors/financial_results_feeds/half_year_30september2013/p_halfyear2013.pdf)

#### 11.3.3 Participation to public consultations

- Vodafone, *Response to Commission call for comments on proposed regulation of international roaming charges*, March 22<sup>nd</sup> 2006, available at: [http://ec.europa.eu/information\\_society/activities/roaming/docs/comments/vodafone.pdf](http://ec.europa.eu/information_society/activities/roaming/docs/comments/vodafone.pdf)
- Vodafone, *Review of the functioning of the Roaming Regulation, Comments of Vodafone*, January 26<sup>th</sup> 2011, available at: [www.vodafone.com/content/dam/vodafone/about/public\\_policy/position\\_papers/vodafone\\_response\\_roaming\\_jan10.pdf](http://www.vodafone.com/content/dam/vodafone/about/public_policy/position_papers/vodafone_response_roaming_jan10.pdf)

#### 11.3.4 Other

- Feasey, R., "Roaming II", Presentation at the *EPP-ED Hearing on Roaming Regulation II*, January 8<sup>th</sup> 2009, available at: [http://arc.eppgroup.eu/Press/peve09/eve001\\_en.asp](http://arc.eppgroup.eu/Press/peve09/eve001_en.asp)
- Colao, V., "Panel I: Meeting the investment and growth challenged ahead", Speech at the *FT ETNO Summit 2012*, October 2<sup>nd</sup> 2012, available at: [www.ft-live.com/ft-events/ft-etno-summit-2012/sessions/panel-i-meeting-the-investment-and-growth-challenges-ahead](http://www.ft-live.com/ft-events/ft-etno-summit-2012/sessions/panel-i-meeting-the-investment-and-growth-challenges-ahead)

### 11.4 Industry associations

#### 11.4.1 GSMA

- GSMA, *GSMA Response to the European Parliament vote on EU Roaming Regulation*, Press Release, May 23<sup>rd</sup> 2007, available at: [www.gsma.com/newsroom/gsma-response-to-the-european-parliament-vote-on-eu-roaming-regulation/#.UzG3\\_615Px5](http://www.gsma.com/newsroom/gsma-response-to-the-european-parliament-vote-on-eu-roaming-regulation/#.UzG3_615Px5)
- GSMA, *GSMA's Response to the Public Consultation for the Review of the Functioning of Regulation (EC) No 544/2009 (the "Roaming Regulation")*, February 11<sup>th</sup> 2011, available at: [www.gsma.com/gsmaeurope/wp-content/uploads/2012/03/roamingregreview2011.pdf](http://www.gsma.com/gsmaeurope/wp-content/uploads/2012/03/roamingregreview2011.pdf)
- GSMA, *GSMA Launches Data Roaming Transparency Initiative*, Press Release, June 21<sup>st</sup> 2012, available at: [www.gsma.com/newsroom/gsma-launches-data-roaming-transparency-initiative/#.UzaYIK15Px4](http://www.gsma.com/newsroom/gsma-launches-data-roaming-transparency-initiative/#.UzaYIK15Px4)

- GSMA, *Information Paper Overview of International Mobile Roaming*, June 25<sup>th</sup> 2012, available at: [www.gsma.com/publicpolicy/wp-content/uploads/2012/10/GSMA-Information-Paper-on-International-Mobile-Roaming-for-ITU-T-Study-Group-3-FINAL.pdf](http://www.gsma.com/publicpolicy/wp-content/uploads/2012/10/GSMA-Information-Paper-on-International-Mobile-Roaming-for-ITU-T-Study-Group-3-FINAL.pdf)
- GSMA, *Mobile Policy Handbook*, Second Edition, October 2013, available at: [http://mph.gsma.com/publicpolicy/wp-content/uploads/2013/07/Mobile\\_Policy\\_Handbook\\_2013-English.pdf](http://mph.gsma.com/publicpolicy/wp-content/uploads/2013/07/Mobile_Policy_Handbook_2013-English.pdf)
- GSMA, *GSMA and CEOs of mobile operators set out key success factors to an effective EU Telecoms Single Market*, Press Release, March 7<sup>th</sup> 2014, available at: [www.gsma.com/newsroom/gsma-and-ceos-mobile-operators/#.U0QDIK1\\_vx4](http://www.gsma.com/newsroom/gsma-and-ceos-mobile-operators/#.U0QDIK1_vx4)
- GSMA, *More comprehensive "Connected Continent" package required to address current economic challenges, says GSMA*, Press Release, April 3<sup>rd</sup> 2014, available at: [www.gsma.com/newsroom/more-comprehensive-connected-continent-package/#.U0QCQK1\\_vx4](http://www.gsma.com/newsroom/more-comprehensive-connected-continent-package/#.U0QCQK1_vx4)

#### 11.4.2 GSMA Europe

- GSMA Europe, *GSME Europe*, available at: [www.gsma.com/gsmaeurope/](http://www.gsma.com/gsmaeurope/)
- GSMA Europe, *GSM Europe response to the Communication from the Commission on the review of the EU regulatory framework for electronic communications, networks and services of 29.06.2006*, October 27<sup>th</sup> 2006, available at: [www.gsma.com/gsmaeurope/wp-content/uploads/2012/03/reponsecommissionreview06.pdf](http://www.gsma.com/gsmaeurope/wp-content/uploads/2012/03/reponsecommissionreview06.pdf)
- GSMA Europe, *Roaming Regulation, Safeguard Caps or Target Caps - A Clear Choice for the European Parliament*, December 20<sup>th</sup> 2011, available at: [www.gsma.com/gsmaeurope/wp-content/uploads/2012/03/gsmaeuropeonroamingsafeguardcapsortargetcaps20december2011-1-1.pdf](http://www.gsma.com/gsmaeurope/wp-content/uploads/2012/03/gsmaeuropeonroamingsafeguardcapsortargetcaps20december2011-1-1.pdf)
- GSMA Europe, *Roaming Regulation - Getting the Balance Right, Safeguard Caps and a Holistic Approach to Technical Implementing Solutions*, February 21<sup>st</sup> 2012, available at: [www.gsma.com/gsmaeurope/wp-content/uploads/2012/03/gsmapositionpaperonroaming21febr2012-1.pdf](http://www.gsma.com/gsmaeurope/wp-content/uploads/2012/03/gsmapositionpaperonroaming21febr2012-1.pdf)

#### 11.5 Papers

- Barth, G., *Regulation of Intra-EU Roaming: A Summary of the 2000-2010 Decade*, Harvard University, April 2011, available at: [www.pirp.harvard.edu/pubs\\_pdf/barth/barth-i11-2.pdf](http://www.pirp.harvard.edu/pubs_pdf/barth/barth-i11-2.pdf)

- Sutherland, E., *Governance of telecommunications markets – the case of international mobile roaming*, Competition and Regulation in Network Industries, November 25<sup>th</sup> 2012, available at: [www.crninet.com/2011/a2a.pdf](http://www.crninet.com/2011/a2a.pdf)

## 11.6 Articles

- Wikinvest.com, *Vodafone launches the Vodafone Travel Promise*, available at: [www.wikinvest.com/stock/Vodafone\\_Group\\_\(VOD\)/Vodafone\\_Launches\\_Travel\\_Promise](http://www.wikinvest.com/stock/Vodafone_Group_(VOD)/Vodafone_Launches_Travel_Promise)
- O'Brien, K., *Vodafone rejects call for caps on data roaming charges*, The New-York Times, February 12<sup>th</sup> 2008, available at: [www.nytimes.com/2008/02/12/technology/12iht-voda.4.9982882.html?\\_r=0](http://www.nytimes.com/2008/02/12/technology/12iht-voda.4.9982882.html?_r=0)
- Garside, J. *Vodafone boss calls for moratorium on mobile phone regulation*, The Guardian, February 27<sup>th</sup> 2010, available at: [www.theguardian.com/business/2012/feb/27/vodafone-boss-moratorium-mobile-phone-regulation](http://www.theguardian.com/business/2012/feb/27/vodafone-boss-moratorium-mobile-phone-regulation)
- INTUG, *EU Operators Offset Eurotariff With Rate Hike for non-EU Roaming*, June 5<sup>th</sup> 2008, available at: <http://intug.org/2008/06/eu-operators-offset-eurotariff-with-rate-hike-for-non-eu-roaming/>
- Light Reading, *ECTA Wants End to Roaming*, May 25<sup>th</sup> 2007, available at: [www.lightreading.com/ecta-wants-end-to-roaming/d/d-id/642255](http://www.lightreading.com/ecta-wants-end-to-roaming/d/d-id/642255)
- Roman, D., *EU Strikes Back After Vodafone Complains Of Too Much Regulation*, Digits, February 28<sup>th</sup> 2012, available at: <http://blogs.wsj.com/digits/2012/02/28/eu-strikes-back-after-vodafone-complains-of-too-much-regulation/>
- Williams, C., *Vodafone: EU roaming reform 'anti-competitive'*, The Telegraph, October 19<sup>th</sup> 2013, available at: <http://uk.finance.yahoo.com/news/vodafone-eu-roaming-reform-anti-184348721.html>