GSMA's Response to the Public Consultation for the Review of the Functioning of Regulation (EC) No 544/2009 (the "Roaming Regulation")

11th February 2011

The GSMA represents the interests of the worldwide mobile communications industry. Spanning 219 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 is focused on innovating, incubating and creating new opportunities for its membership, all with the end goal of driving the growth of the mobile communications industry. In the European Union the GSMA represents over 100 operators providing more than 600 million subscriber connections across the region. For more information on GSMA, please visit: Mobile World Live, the new online portal for the mobile communications industry at www.mobileworldlive.com, the GSMA corporate website at www.gsmworld.com, and GSMA Europe at http://www.gsmworld.com/our-work/public-policy/gsma_europe/gsma_in_europe.htm

Table of Contents

1 Introductory Comments

In 2007, the European Parliament and Council of Ministers adopted the European Commission's proposal to regulate the prices charged by European mobile operators for calls made and received by customers "roaming" in the EU outside their home country. This regulation was extended in 2009 by the introduction of further price regulation for SMS and data services. Since 2006, we have urged the Commission to view price regulation as a last resort, especially at the retail level, and only to intervene when market failure has been comprehensively proven. As a result of the Commission's intervention in the roaming market, and to a certain extent the effects of the global economic recession, the roaming market has shrunk by 7% per annum since 2006 whilst the overall mobile market has grown.

The GSMA welcomes the opportunity to engage with the Commission on this important topic as the Commission explores the impact of its regulation to date, and consults on the future framework for roaming regulation. We and our member operators continue to fully support the Commission's objectives of ensuring competition in roaming services and consumer transparency. The industry has been diligent in effectively implementing our obligations under the existing roaming regulation, including some complex and costly bill control measures. The industry has gone beyond the requirements of the regulation in providing information to consumers and as a result has greatly reduced and virtually eliminated "bill shock". We remain committed to engaging constructively with all stakeholders in this debate and to providing authoritative and objective technical input to inform the Commission's review of this important segment of the European communications market.

In this submission, we are pleased to respond to the questions posed by the Commission in its consultation published on the 8th December 2010. We submit detailed comments on the key questions posed by the Commission on behalf of our members, although of course, many operators will submit their own individual responses based on additional, commercially sensitive information.

Finally, the GSMA particularly welcomes the open minded approach being taken by the Commissioner and her desire for a collaborative relationship between the Commission and the industry. We look forward to continued open and frank debate in this ongoing effort to evolve the regulatory framework to meet the changing needs of consumers and the industry.

2 Executive Summary

The Commission's latest consultation on the regulation of mobile roaming services offers an important opportunity for the Commission to review and refine the regulatory framework for the period from 2012. The industry recognises that regulation must be continuously reviewed and updated to address any genuine market failures and we look forward to continued open and frank debate in this ongoing effort to develop the regulatory framework to meet the changing needs of consumers and the industry.

Industry efforts over the past few years have resulted in significant improvements in roaming services to the benefit of consumers

Ever since the inception of the GSM Standard enabled the creation of a roaming market through the provision of a seamless user experience, the industry has sought to provide value to consumers travelling across Europe. In recent years, the industry has continued to provide innovative and lower-price tariffs, and has been proactive in introducing transparency and consumer-protection measures, for instance, addressing the previous problem of "bill shock". Roaming continues to provide travelling consumers with seamless, user-friendly communication services globally.

We continue to believe that long-term price regulation is not in the best interests of consumers or industry and would have damaging effects on innovation, consumer services and total welfare

Prior to the introduction of regulation, prices for roaming voice services were declining by 24% p.a. under normal competitive pressures. Following regulation, prices have continued to fall below the current price caps due to strong competition outside of the regulated tariffs; voice prices for non-Eurotariffs are as much as 44% below the cap in some countries. However, traffic volumes have not increased sufficiently to prevent the retail roaming market from shrinking by 7% p.a. since 2006 (and by 13% p.a. for voice). Over the same period, the total European mobile market grew by 2% indicating that global economic factors are not the main cause of this contraction in roaming revenues.

We urge the Commission to recognise that the data roaming market is nascent and characterized by high growth and falling prices. Early and inappropriate regulation could seriously hamper its further development

In particular for data roaming, we do not believe that retail price regulation is necessary or appropriate. The market is evolving rapidly and is still to mature. Its dynamism is clearly demonstrated by traffic growth, falling prices and device innovation etc. Any unnecessary regulation risks stifling this development. Data roaming traffic is growing at 52% p.a. (from a low usage base) whilst retail prices have fallen at 31% p.a. since 2007 due to strong competition and extensive tariff innovation, a trend that is expected to continue.

In addition to the rapid development of the data roaming market, ongoing investment in complementary and substitute technologies indicates that the European public network data market is still in a dynamic, evolving state. For example, Wi-Fi hotspot penetration is growing at 20% p.a.

We also believe that imposing a uniform price cap is not an appropriate regulatory approach for high-speed data services. Different mobile services have different characteristics, and any regulation of data services in particular should account for different devices, content and usage patterns.

The GSMA considers that regulatory intervention that aims to closely align domestic and roaming prices could severely disrupt domestic markets and insufficiently recognises genuine differences in input costs across the EU

The regulatory options considered by the Commission – both price interventions and structural reforms – require significant further analysis and a full Impact Assessment before any recommendations can be made. In our response, we have highlighted concerns about the options presented in the consultation.

We agree with BEREC's analysis on many points concerning the pricing interventions identified in the consultation. In particular, we believe that the Digital Agenda for Europe (DAE[1]) target of closely aligning roaming and domestic prices (by whichever measure is used) by 2015 is questionable. Any linkage between domestic and roaming prices must include a sufficient margin to account for roaming-specific costs that operators incur on top of domestic costs.

Even accounting for roaming-specific costs, the current variation in domestic market prices across Europe makes any attempt to link roaming and domestic prices unworkable, a view supported by BEREC. Price differences are a common fact for many services across Europe and are a consequence of normal economic factors. For example, the difference between the highest and lowest average wage rates for a sample of European countries varies by over 700%[2]. Any attempt to link roaming and domestic prices across Europe risks causing significant market disruption, creating confusion among customers and under some scenarios causing severe margin squeeze for operators.

The Commission's identified structural reforms could have significant consequences for operators, consumers and the whole European mobile market

Any structural reform of the roaming market must balance consumer and industry benefit. We believe that the implementation of some of the Commission's identified structural reforms could disproportionately affect operators due to high implementation costs of up to €250-300m, plus potentially significant other commercial costs depending on the implementation method chosen (e.g. opt-in versus opt-out). In addition, certain identified reforms would negatively affect customer experience due to increased complexity and limit innovative pricing offers in the long term.

The Commission's proposals to increase market access, whilst initially appearing an attractive way to increase competition, are unlikely to fully meet the Commission's aims. Regulation of the wholesale roaming rate available to MVNOs is an unnecessary and potentially disruptive intervention into the commercial agreements between MNOs and MVNOs. Going further than this and providing full MVNO access to all European markets is highly disproportionate to regulate the roaming sub-market and could significantly disrupt domestic markets across Europe.

[1] Also abbreviated to "EDA" by BEREC and others
[2] The Economist Intelligence Unit Market Indicators

Adopting complex combinations of different regulatory approaches could burden the industry with significant implementation costs and impact on the customer experience. This should not be imposed on the industry lightly or as a "try-it-and-see" approach to regulation

A full Impact Assessment is required for any combined approaches to ensure that any unintended consequences of complex regulatory frameworks are well understood. We believe that the potential for unintended consequences is high, and the risk of this increases with the complexity of the regulatory framework.

We urge the Commission not to pursue a complex framework of structural reforms lightly or without taking due account of the principle of proportionality. All the implications of such approaches need to be rigorously scrutinised and consulted on before being implemented.

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

In terms of the long term evolution of the roaming market, continued investment and deployment of advanced network technologies (especially LTE) indicates that European domestic and roaming services are evolving to compete with substitutes such as Wi-Fi and VoIP services. This too raises questions about the need for long-term regulation of the mobile roaming market in Europe.

3 The Roaming Regulation

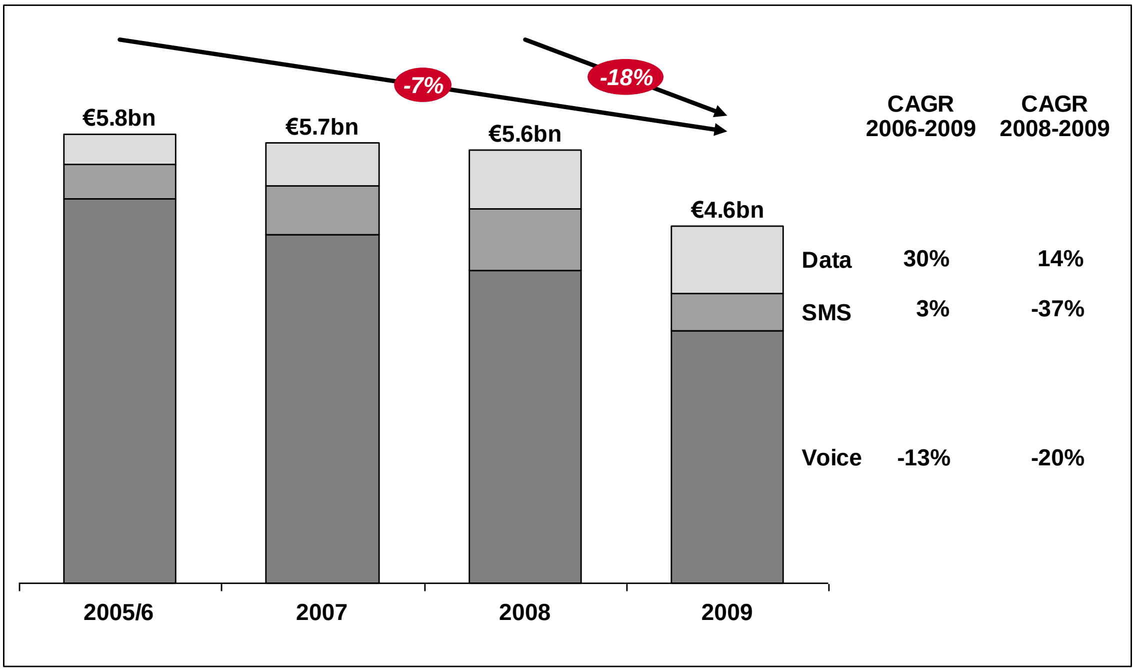
This section addresses questions 1-3 of the European Commission Consultation

Prior to regulation, prices for roaming services were declining under normal competitive pressures

Prior to regulation, domestic mobile prices were declining at 13% p.a. from 2004-2006.[3] However the 'sub-market' of roaming was evolving more dynamically, as evidenced by innovative tariffs such as Vodafone "Passport", T-Mobile's "Relax Holiday", Orange's "Europe Sans Frontières" and Telefonica/O2's "My Europe". The average price for an outbound roaming call fell by 24% p.a. from 2005 to Q3 2007 (from €1.06 to €0.62 per minute).[4] Since the introduction of regulated price caps in Q3 2007, prices have declined in line with the movement of the caps each year.

Although the European mobile market grew by 2% p.a. following introduction of regulation, from 2006 to 2009, the roaming market shrank by 7% p.a. over this period, with up to 18% decline during 2009 due in part to declines in travel during the financial crisis (See Figure 1). Beneath this high level trend, the regulated voice market declined at 13% p.a., whilst the unregulated data market grew at 30% p.a. between 2006 and 2009.

Figure 1. Evolution of retail roaming market, 2006-2009[5]



The industry has argued on many occasions that demand for voice roaming services is price inelastic[6] contrary to the Commission's view.[7] BEREC has confirmed the industry view in its latest report,

[3] Report for the European Commission on Telecoms Price Developments from 1998 to 2006, Teligen (2006)

[4] GSMA Voice Price Index; ERG Benchmark Report (Jan 2008). Not inflation adjusted. Operator samples might not be identical for the GSMA Voice Price Index and the BEREC/ERG data. The GSMA Voice Price Index (Q1 2006 to Q1 2007) is based on a representative sample of operators across the EU.

[5] From confidential operator data, A.T. Kearney analysis

[6] For example, see "Review of the Commission's Impact Assessment" September 2006, prepared by A.T. Kearney and CRA International on behalf of the GSMA

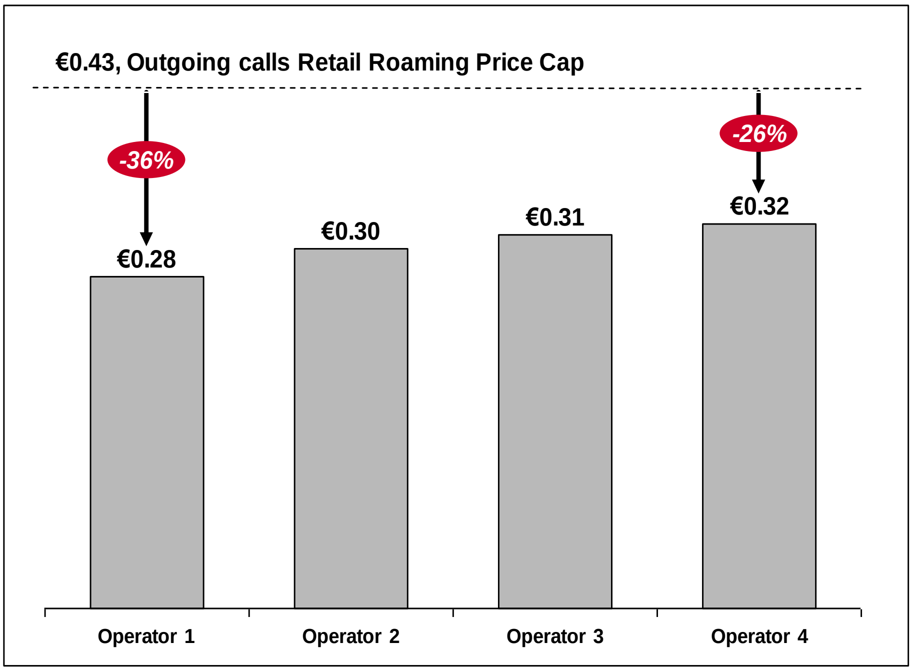
stating: "Demand for roaming has not increased in light of reduced prices introduced by the regulation".[8] The current regulatory framework applied to the roaming market has resulted in a net reduction in welfare with little benefit to consumers and has led to substantial financial pressure on some operators.

Retail prices have continued to fall below the current price caps due to strong competition in Non-Eurotariffs outside the regulation

Voice Non-Eurotariff retail rates were on average 11% and 14% below the Q1 and Q2 2010 caps for calls made and received respectively. However, the lowest country average was 44% below the price cap for calls made.[9]

Figure 2 shows a sample of operators' retail roaming prices for calls made within the Member States. As shown, many operators across Europe are offering considerably cheaper non-Eurotariffs than BEREC's published benchmarks suggest, with voice calls up to 36% cheaper than the price cap. This evidence indicates that strong competition exists outside of the regulated Eurotariffs.

Figure 2. Sample of retail voice roaming prices (per billed minute) for calls made within the EU, Q2 2010[10]



Operators have continued to innovate and provide valuable offers to consumers. Competition has evolved with many operators recently launching new tariffs or promotions, or refreshing existing

[7] In its 2008 Impact Assessment, the Commission assumed price elasticity of demand would be in the broad range from -0.55 ("industry scenario") to -1.2 ("optimistic scenario"). Analysis of the data by Europe Economics on behalf of the European Parliament in December 2008 suggested that the likely level of price elasticity is much weaker, between -0.35 and -0.44. Organic growth in both customer numbers and tourist traffic, would account for some traffic growth and therefore reduce the elasticity figure further. Operators have in particular indicated that business traffic has not increased as a result of the lower prices

[8] International Mobile Roaming Regulation, BEREC, December 2010, page 45

[9] International Roaming, BEREC Benchmark Data Report for January-June 2010

[10] From confidential operator data

offers to meet customers' changing needs and offer greater value. A sample of new, innovative tariffs is shown in Table 1.

Table 1. Examples of recent voice and SMS roaming tariff innovations

Type of Tariff	Selected Examples
Conventional fixed roaming bundle: fixed number of minutes/SMS for a fixed fee	• SFR France's 'Pack Séjour'. A flat fee for a number of free minutes, e.g. 30 mins for €9 (€0.30/min), valid for 15 days • Telenor Sweden's "MinutPass Europa". Offers 30 or 60 minutes of voice calls for €0.22/min
Roaming bundles: tariff plan with a fixed fee/one-off activation fee	• Orange UK's 'Europe Traveller'. £5.10 as a one-off fee to get 25% off 200 mins outgoing calls, and 200 mins free incoming calls for 30 days • Vodafone Europe's 'Passport'. Each call has a set up fee of €1 and is charged at home national rates thereafter (or deducted from bundled minutes if applicable) • T-Mobile Germany's "Smart Traveller": Customers can use their domestic minutes from bundles plus a set up fee of €0.75 for each outgoing call. For an incoming call customers pay the same set up fee and then have 60 minutes free of charge
Roaming: Daily/Weekly bundles	• Orange Spain's 'Viaja y Habla diaria'. Daily fee of €1 to get 50% discount on all calls
Roaming: Monthly Subscriptions	• Orange Austria's 'Hallo Deutschland'. €25/month for 1000 free minutes and 100 SMS within Austria and Germany and between the two countries • SFR France: monthly fee (from €46.60/month for a 2h bundle) for all calls within Europe charged at home rates. Includes free calls and data within France • Orange France's 'Favourite country': €5/month for unlimited calls at domestic tariff when in one selected country
Corporate non-published tariffs that provide a discount based on a certain level of total revenues	• Offered by most operators
Other	• EMT Estonia's 'Call Back'. Allows users to request an incoming call rather than making an outgoing call

The industry has always been committed to customer protection and has gone beyond the requirements of the regulation to ensure customers are protected from unexpected charges for roaming services

In a recent BEREC Report, it was stated that operators had a high level of compliance in implementing transparency and bill control provisions, and noted a positive impact on consumer awareness and the incidence of bill shock.[11] As the GSMA has highlighted in previous consultations,

[11] International Mobile Roaming Regulation, BEREC, December 2010, page 162

operators' commitment to customer protection was evident prior to the regulatory provisions introduced in 2007 and 2009, and continues to be evident today.[12]

The industry has invested considerable effort to relieve customer concerns over "bill shock", which was an issue that operators considered important to resolve in order to gain customer acceptance and confidence – especially in data roaming services. Comprehensive warning systems have been developed to ensure consumers understand their usage, and data roaming services are blocked as per regulation when a data usage limit is reached. In addition, further usage thresholds and warning systems have been developed to further protect consumers (See Table 2). Easy access to up-to-date personalised tariff and usage information allows consumers to quickly understand the range of options available in the market. Appendix 1 provides more examples of the industry's roaming services transparency initiatives.

Table 2. Sample of recent bill control measures

Operator	Bill Control Measures
SFR (France)	Option Multi-Alerting Monde for data provides an additional advisory service for roamers. Customers will receive free alerts by SMS for each €20 of spend up to €100.
Orange Romania	Data Traffic Control establishes a threshold for data usage and informs the customer when they reach it. In addition, a choice of thresholds is available, with 12MB as the default.
O2 UK	Provides a system that sends alerts at £20 and £40 before cutting off access when spending reaches £50. Higher price caps are also available.
Mtel (Bulgaria)	Applies a default limit of BGN 117, with additional provision of further limits of 240, 360, 480 or unlimited BGN.
Vodafone Italy	Warning and blocking system is in place that informs the roamer on nearing and reaching the threshold of €60 via two SMS, and blocks usage over €60. Option to remove the threshold is available through the Vodafone website.
T-Mobile Germany	Warning system of 3 SMS, followed by an automatic block of data roaming services. The first one when data usage starts, second one at €47.60 and final one at €59.50. The final text contains a link to a free website where the customer can choose to opt-out of the blocking of data roaming services.
O2 Czech Republic	SMS warning system followed by automatic blocking of data roaming services. Access is revoked when spend reaches CZK 1,512. To activate/deactivate a free phone number is available.
T-Mobile Hungary	Internet access is turned off when usage exceeds 28MB. SMS are sent when usage reaches 80% and 100% of that amount. Access can be switched back on, along with an additional warning system, by sending an SMS or calling the operator.
Vodafone Ireland	2 types of roaming caps are offered depending on the roamers' contract: - Pre pay: €60.50 - Contract: €50 and €300 (depending on usage and price plan) Notices are sent at 50%, 80% and when the cap is reached, and information to extend the cap are included in each of the texts.
Telenor Sweden	Notifies customers of opt-in data roaming products via SMS when their bundles are 80% and 100% used.

[12] As highlighted in the GSMA response to the public consultation for the Review of the functioning of the Regulation (EC) No 717/2007 (the "Roaming Regulation") and of its possible extension to SMS and data roaming services, July 2nd 2008

The industry continues to work hard to provide better information to consumers as part of its normal customer relationship-building activities and strongly supports the Commission's transparency efforts. The industry agrees that tariff transparency is paramount, especially to the growth of the data roaming market. As such, the transparency provisions of the regulation have been actively adopted by the industry as its modus operandi. The industry's record of compliance and continued investment in consumer protection measures demonstrates the industry's commitment to ensuring the highest levels of tariff transparency and consumer education.

Not only has the industry implemented all the regulation's transparency requirements, but it has taken the initiative to launch additional measures to ensure the highest levels of tariff transparency. To this end, the GSMA believes that additional transparency regulation is unnecessary.

The current conditions in the roaming market suggests that the need for significant further regulatory intervention is highly questionable, especially for the data retail market

The GSMA continues to assert that there is no basis to assume that withdrawal of the pricing regulation would somehow reverse the longstanding trend of tariff decreases. Prices for all types of services have been falling consistently over the past decade and for non-roaming calls this has been without regulatory intervention. Operators will continue to offer a range of price plans, including those targeted at frequent roaming users. It would be reasonable to assume, given the current market conditions (especially in the data market), that prices should continue to fall.

Given the competitive nature of the industry, the availability of offers priced below the cap, and the efforts of operators to drive transparency, the need for retail price regulation appears questionable. This is even more the case regarding the data market, whose current evolution, driven notably by the huge increase of traffic, should not be put at risk by new regulation.

The Commission's objective of a single European market for roaming services should not be interpreted as requiring convergence of roaming and domestic prices, nor of alignment of domestic prices across Europe. A single market is one in which competitive conditions prevail. As such, we strongly believe that many of the measures identified by the Commission could be excessive to achieve the single market objective.

Different mobile services have different characteristics; the current approach used for regulation of voice and SMS services is not applicable to data services The GSMA believes that there are clear differences that apply to the pricing mechanisms for voice, SMS and data markets. The application of a flat-rate price cap to all services would not adequately reflect these differences. The use of caps is particularly inappropriate for data services, where device types, content downloaded and usage patterns could result in huge variations in price if a flat per-megabyte price cap were to be applied. We provide more details on this point on page 16.

4 Data roaming Regulation

This section addresses questions 6 and 7 of the European Commission Consultation

The data roaming market is evolving rapidly and unnecessary regulation risks stifling its development

Growth rates and absolute market size are evidence that the data roaming market is still relatively immature. Technological developments and highly competitive substitutes prove innovation and investment is rapidly evolving. Pricing is undergoing realignment, yet retail prices maintain a significant downward trend. Business models at domestic levels are still evolving, confirming that the overall data market is far from being mature yet. This evidence makes a strong case that retail price caps would not only hinder the development of the data roaming market but are also inappropriate. Instead, market forces should be allowed to shape the industry's progression in this market.

Data roaming traffic is growing rapidly from a low base of usage

There is strong evidence that data roaming traffic is still rapidly growing. Based on confidential operator data, roaming data traffic experienced growth of 52% from 2008-2009, in line with domestic traffic growth. A.T. Kearney estimates that the European retail data roaming market has grown from 10% of the total retail roaming market in 2007 to 20% in 2010.

The continued and increasing popularity of high-speed-data-enabled handsets and mobile-broadband dongles can in part account for the growth in traffic volumes. Equally, the rapidly growing European smartphone market and recent advent of media tablets, driven by evolving operating systems and increasingly attractive applications and design factors, is likely to continue this trend. The EU5[13] smartphone market grew by 41% in 2010 to around 61 million subscribers.[14] In Q1 2010, smartphone penetration in the EU5 was only 23%,[15] with the number of smartphone shipments in Western Europe forecast to grow by 137% by 2014,[16] smartphone penetration – and hence data traffic - is expected to grow rapidly in the EU.

This trend in data traffic growth is expected to continue, driven by a host of new and existing data services which are particularly valuable to travelling consumers. These include location-based services, web-based tourist information and sending/receiving emails whilst away from fixed internet access points.

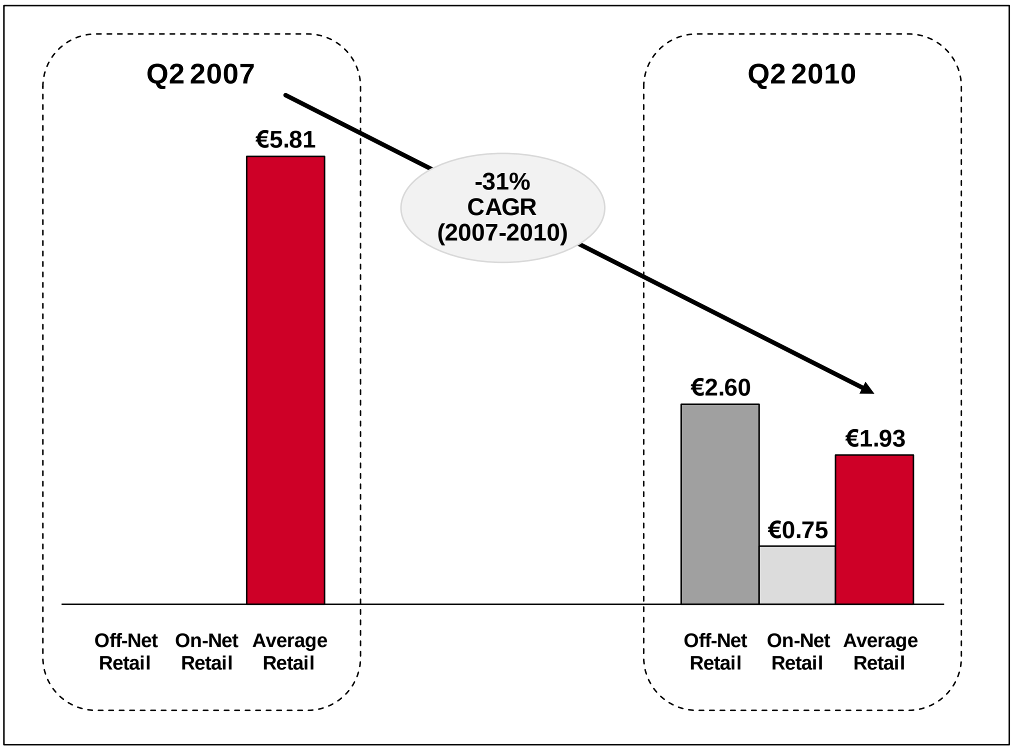
Supporting this increasing consumer demand, further improvements in network quality and performance, and competitive bilateral agreements will continue to allow operators to provide their customers with a more seamless service across the EU.

[13] EU5 includes UK, Germany, France, Spain and Italy
[14] comScore Press Release, 14th September 2010
[15] comScore Press Release, 31st March 2010
[16] IDC, Worldwide Smartphone 2010-2014 Forecast Update, December 2010

Retail prices are continuing to fall due to strong competition and rapid tariff innovation, an increasing trend that is expected to continue for the next few years

Competition at a domestic retail level in data services is fierce, leading to aggressive prices. This trend is now passing to roaming services, as can be seen by the decline in prices from Q2 2007 to Q2 2010. The latest BEREC benchmark data shows that the average off-net retail data price was €2.60 per megabyte in Q2 2010 and goes on to note that "on-net is considerably cheaper". Later in the report, BEREC indicates that the on-net cost is approximately €0.75 per megabyte. Using an extensive sample of operator data previously submitted to BEREC, A.T. Kearney has calculated the traffic weighting for Q2 2010 to be approximately one-third on-net. This provides a weighted average cost per megabyte of €1.93. As shown in Figure 3, comparing this to ERG data from 2008 indicates that prices per megabyte have declined by 31% p.a. between 2007 and 2010.

Figure 3. Decline in average retail data price per megabyte from 2007 to 2010[17]



Having considered the aggregate decline in data prices, it is also interesting to consider a sample of individual tariffs, since competition is defined by the offers available to a consumer looking to make a purchase today. Not surprisingly given the lead time for new tariffs to penetrate the market, prices available in current tariff plans demonstrate a more rapid decline than the average of 31% p.a. and a lower level than even the on-net average price. For example, in February 2008 T-Mobile's standard data roaming tariff was €2 per megabyte. Current data roaming tariffs available for customers of T-Mobile UK[18] charge €0.39 per megabyte,[19] a price reduction of 42% p.a. There are many more

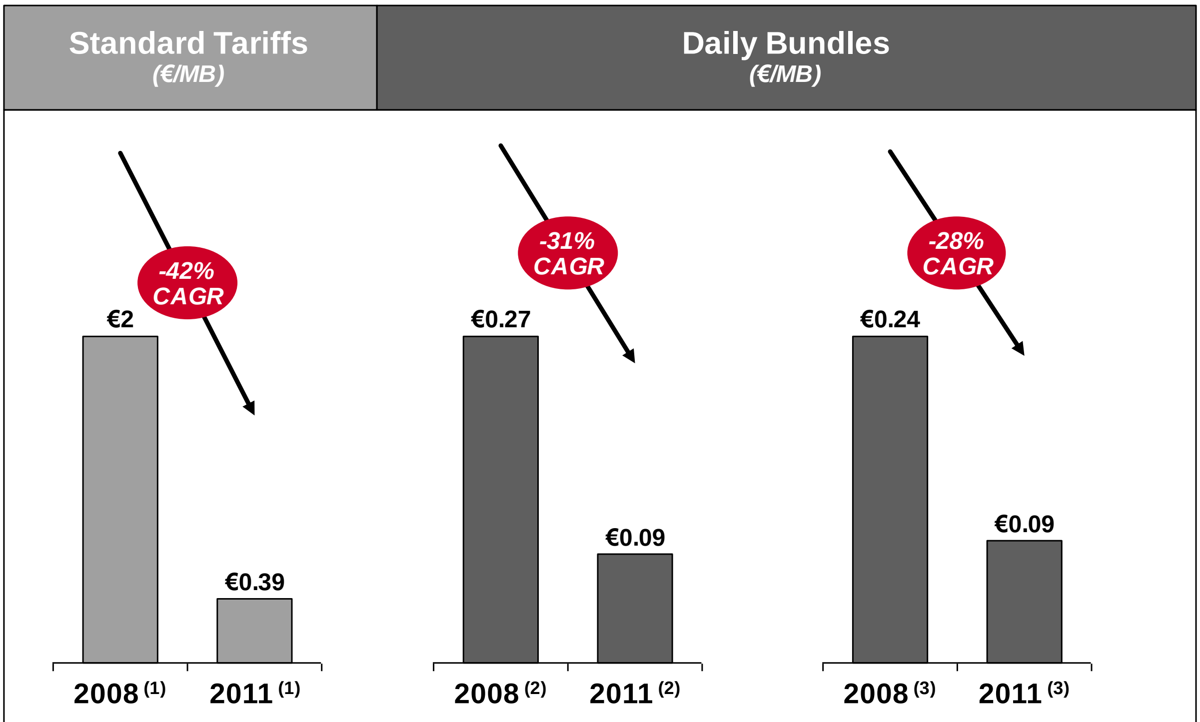
[17] ERG benchmark data report for April to September 2007, January 2008; BEREC Benchmark Data Report for January 2010 – June 2010, October 2010; confidential operator data; A.T. Kearney analysis

[18] T-Mobile UK now part of Everything Everywhere

[19] Conventional fixed tariff of €1.18 for 3 megabytes, Source: Operator's website

examples of declines in data roaming retail prices that support the average numbers shown in Figure 3, a sample of which can be seen in Figure 4.

Figure 4. Sample of data roaming tariffs available in the market in 2008 and 2011[20]



(1) 2008 T-Mobile UK conventional tariff of €2 per MB, 2011 T-Mobile conventional tariff of 3MB for €1.18
(2) 2008 'Travel Data Daily' bundle of 50MB for €12-15 (incl. VAT), 2011 bundles from Orange Slovakia ('Hello Austria Data', 'Hello Hungary Data', 'Hi Czech Data) of 100MB for €9.99
(3) 2008 Vodafone daily €12 tariff for 50MB, 2011 Vodafone 'Data Traveller' - daily €2.36 tariff for 25MB

Innovative and better-value retail pricing packages are regularly announced by European operators, proving that competitive offers are constantly available in the market. Operators continuously update tariffs with a wide variety of data roaming offers that cater to different customer segments and devices (See Table 3 for a sample).

Price reductions and tariff innovations show an ongoing trend towards daily, weekly and monthly bundles, as can be seen in the selection of new tariff announcements. Tariff innovation is also characterised by a strong market segmentation aiming to address specific customer needs, taking into account different types of usage and services (M2M, web browsing on a handset or via laptop/dongle). With favourable flat-rate bundles for a variety of customer segments, such as Telecom Italia's 'Data Roaming Europa' for low usage roamers who travel for a week or less, it is clear that data roaming is a healthy and competitive market. Such segmentation is key for end users and for competition with differential pricing.

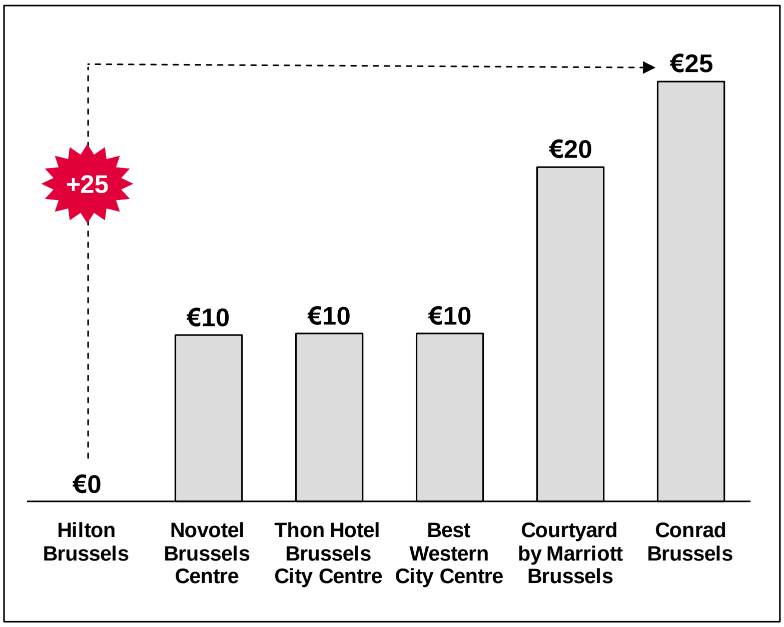
[20] Examples shown may be applicable to certain devices only and in the countries/regions highlighted in the figure. Source: Operator websites

Table 3. Examples of recent data roaming tariff innovations

Type of Tariff	Selected Examples
Conventional fixed roaming bundle: fixed number of megabytes for a fixed fee	• T-Mobile's 'Euro Internet Boosters': £1 for 3MB, £5 for 20MB, £10 for 50MB, and £40 for 200MB
Roaming bundles: tariff plan with a fixed fee/one-off activation fee	• Orange's Europe Travel Data bundles: £5.10 for 4MB as a one-off fee for 30 days. Monthly data bundles available for heavy users and frequent travellers
Roaming: Daily/Weekly/Monthly bundles	• Orange UK's 'Travel Data Daily': £8.68 for 50MB • Orange Romania's 'Travel Data Daily' and 'Smart Travel Data Daily': €2.08 for 2MB and €5.21 for 10MB • Telecom Italia's 'Data Roaming Europa': €5 per week for 10MB • SFR France's 'Pack Jour Mobilité Europe': €17.90 for 50MB (€0.36/MB) • Vodafone Italy's 'Passport Mobile Internet': Equates to €2 per day for up to 50MB in selected countries (100MB if subscribed before 31st May 2011) • Vodafone UK's 'Data Traveller': £2 per day for up to 25MB in selected countries. • Orange Slovakia's 'Hallo Austria Data': €9.99 per month for 100MB (€0.09/MB) of data if roaming with Orange Austria. Also available for Czech Republic and Hungary • Orange Austria's 'Hallo Deutschland': Similar to 'Hallo Austria Data'
Corporate non-published tariffs that provide a discount based on a certain level of total revenues	• Offered by most operators

This pattern of differential pricing is also seen within the adjacent, highly competitive, public Wi-Fi market. Bundles that vary significantly in price can be found within Member States. A sample of hotels in Brussels, for instance, currently offers daily Wi-Fi bundles that vary from free to €25 (See Figure 5). This example illustrates an important point: that in a competitive market such as data roaming, the presence of a large range of bundled tariff prices is evidence of retail market dynamics that are also visible in substitute markets.

Figure 5. Example of Wi-Fi charges for a sample of hotels in Brussels (€/day)[21]



Ongoing investment in complementary and substitute technologies indicates that the European public network data market is still in a dynamic evolving state

As previously noted by the GSMA,[22] the data market is still in the investment and innovation stage of the industry lifecycle, as can be seen by constant innovation in terms of smartphones or tablets. Rapid mobile data traffic growth is driving operators to deploy LTE as quickly as possible, as seen with the LTE roll-out plans within Europe (see Figure 14 on page 30). In addition, there are many substitute product offerings for roaming that provide strong competition (e.g. Wi-Fi, VoIP etc). In combination, fast technological evolution and widespread availability of substitute services indicates the dynamic, highly competitive nature of the data roaming market, therefore negating the rationale for data roaming retail regulation.

Refer to Section 5 for a detailed explanation of technological developments and substitutes.

Imposing a uniform price cap is not the most appropriate regulatory approach for high-speed data services

There is an ongoing process of pricing realignment across Europe, which is expected to continue evolving in line with network infrastructure development. As previously stated by the GSMA,[22] a flat per-megabyte price cap does not take into account the device type, content or usage and is inappropriate for the evolving data market. It would restrict the ability of operators to innovate and offer suitable tariffs based on customer usage patterns in each country.

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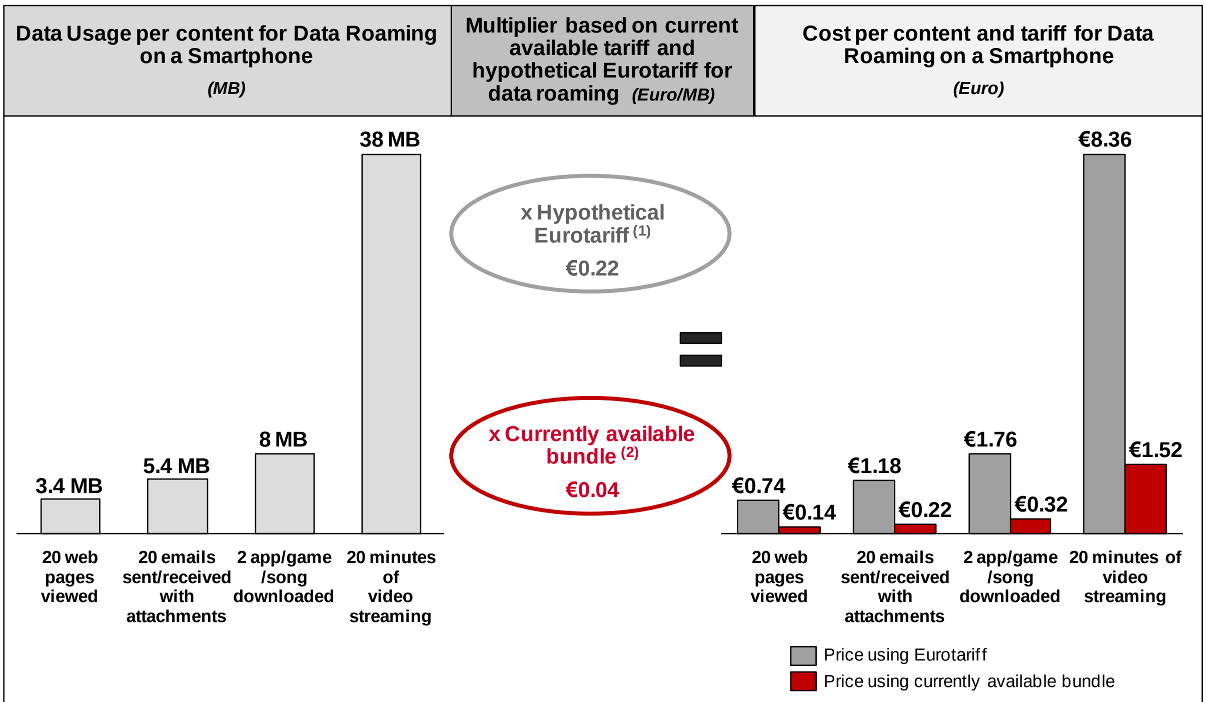
[21] Rates as of 26th January 2011. Sample includes 10 hotels. Additional hotels that quoted WiFi as free for guests: Sofitel Brussels Europe, Hotel a la Grande Cloche, & The Residence Les Ecrins.Source: Hotel websites, A.T. Kearney analysis

[22] GSMA response to the public consultation for the Review of the functioning of Regulation (EC) No 717/2007, July 2nd 2008

The bandwidth efficiency of the mobile device and applications used can lead to vastly different costs for consumers with a similar usage profile. Considering the variation in data used to access different content (as shown in Figure 6), it is clear that applying a flat per-megabyte cap at a level equal to BEREC's estimated costs would result in a large difference in prices across different content. This might result in higher prices to consumers than are available from bundles in the market today. Additionally, a recent study on data-enabled handsets measured the amount of data used for typical activities. This suggests that a typical weekly usage scenario for a medium-intensity iPhone user[23] could potentially lead to traffic volumes almost four times higher than a Blackberry user and thus to a similar cost differential based on flat, per megabyte pricing.[24]

Figure 6. Data usage for different content and the resulting consumer cost for a hypothetical Eurotariff and a currently available tariff



(1) Price cap used is based on BEREC's estimated retail data roaming costs; International Mobile Roaming Regulation, BEREC Report, December 2010. Note: The GSMA do not endorse such an approach, nor the level evaluated by the BEREC, the example is purely hypothetical
(2) Bundle used is Vodafone Italy's 'Passport Mobile Internet'. Equates to €2 per day for up to 50MB in selected countries. Price per MB assumes full bundle consumption

In addition to the problems of flat per-megabyte pricing illustrated above, pricing of data roaming bundles would become more complicated, and restrict the ability of operators to develop innovative pricing schemes that meet customer needs and challenge substitutes.

[23] 450 emails (10% of messages have attachments); 300 web pages; The following activity on Google Talk IM: 600 messages, 300 emoticons, and 60 status changes; The following activity on social network site Facebook: 100 actions, 33 photo views, and 17 photo uploads

[24] Rysavy Research, Smartphone Efficiency Report, 2nd August 2010

5 Regulatory Options

This section addresses questions 8-10 and 12 of the European Commission Consultation

Most of the regulatory options considered by the Commission in their consultation aim to align domestic and roaming prices either directly (as in the case of price caps and the "Roam like at Home" or "Roam like a Local" approaches) or indirectly (as in the case of decoupling and access-based approaches). The GSMA has multiple concerns about this objective (most of which are shared by BEREC in their report)[25]. Whilst the industry welcomes competition and transparency in the roaming market, there could be many unintended consequences of pursuing approaches aimed at harmonising domestic and roaming prices. Whichever regulatory option is chosen by the Commission, it will require a thorough Impact Assessment of all consequences on both roaming and domestic markets. The Commission must ensure that the regulatory framework adopted for the period from 2012 is proportionate.

The Commission has already been provided with a review of the roaming market by BEREC in which it has made recommendations on most of the questions included in this consultation. In its report, BEREC provides a high-level evaluation of some of the options available for roaming regulation. Neither the Commission nor BEREC have, at this stage, provided a complete Impact Assessment of the options suggested. The evaluation is qualitative and based on broad assumptions, the details of which are not sufficient to warrant a recommendation. Similarly, this submission, has not attempted to quantify the full impact of the options identified in the consultation since they are not sufficiently defined to allow this. However, where possible, certain aspects of each approach suggested in the consultation have been evaluated.

5.1 Options linked to domestic markets

The DAE target of closely aligning roaming and domestic prices by 2015 (by whichever measure is used) is questionable and should not be pursued[26]

The GSMA believe that the introduction of regulation that directly brings domestic and roaming prices to similar levels could disrupt domestic markets and have significant unintended consequences for the entire industry and its consumers. Whilst this convergence is a stated objective of the Digital Agenda for Europe (DAE)[27], the GSMA continues to believe that direct price intervention to achieve close alignment between roaming and domestic prices by 2015 is a questionable aim. The next sections provide evidence of the challenges inherent in this target and

[25] International Mobile Roaming Regulation, BEREC report, December 2010

[26] There is significant lack of clarity regarding the DAE target of very close alignment of roaming prices with domestic prices, as there is no definition of which domestic prices would be selected (e.g. European average, highest European tariffs,...) and what would be the provision for roaming specific costs. Given the wide range of tariffs and price structures available across the different European markets, a definition of "domestic prices" is crucial, particularly with regards to the inclusion of the following elements: Pricing structures, such as: peak/off-peak, in-bundle/out-of-bundle, on-net/off-net, handset subsidies, monthly or one-off charges etc; Type of calls e.g. to mobile, to fixed or to international; Type of customer e.g. pre-paid, post-paid and business users

[27] http://ec.europa.eu/information_society/digital-agenda/documents/digital-agenda-communication-en.pdf

the unintended consequences of trying to meet the DAE target, in accordance with the three criteria outlined by the Commission for interventions – effectiveness, efficiency and coherence.[28]

Any linkage between domestic and roaming prices must include a sufficient margin to account for roaming-specific costs

In their latest report, BEREC acknowledges that there should be an allowance in roaming prices to account for the differences in cost to provide domestic and roaming services. Expecting roaming prices to converge with domestic prices is therefore unrealistic, and, as BEREC says "would require [operators] to sell roaming services at levels that do not allow them to earn an adequate return on their activities (and possibly sell below incremental costs)."[29]

In its report, BEREC does not make a definitive estimate of roaming-specific costs but does provide initial estimates of the total cost to provide roaming services. We have concerns about BEREC's analysis and believe that their approach, and several key assumptions, materially underestimates the costs of providing roaming services. Consequently, any price caps set by reference to the current BEREC cost assessment would be significantly underestimated.

The GSMA has argued before that there are significant differences in the cost structures between roaming and domestic services.[30] For example, while some of the roaming infrastructure is shared with domestic services, (retail billing, customer acquisition and retention, radio network for visitors), other elements are specific to roaming (e.g. implementation, management and operations of an international signalling network and international call termination using international carrier services; dedicated roaming teams for maintenance of the "network" of European and non-European roaming partners and the periodic commercial and technical negotiations, trouble shooting, fraud prevention; management and operations of the roaming billing chain including relationships with clearing houses; network expansion in targeted areas with high visitor concentration, roaming specific communication and marketing costs (e.g. billboards at all major airports, etc.)).

In addition, operator costs due to roaming and non-roaming customers differ due to their different calling patterns. For example, circa 90% of roaming calls are international calls and only very few calls are on-net, this is significantly different to the usage pattern of domestic consumers with consequently different impact on operator costs.

We believe that the current variation in domestic market prices across Europe makes any attempt to link roaming and domestic prices unworkable

BEREC is very clear in stating that close alignment between domestic and roaming prices will not be achievable in the near-term.[31] According to BEREC, in Q2 2009, the highest domestic average for

[28] Public Consultation on a Review of the functioning of Regulation (EC) No 544/2009 (the "Roaming Regulation"), page 5

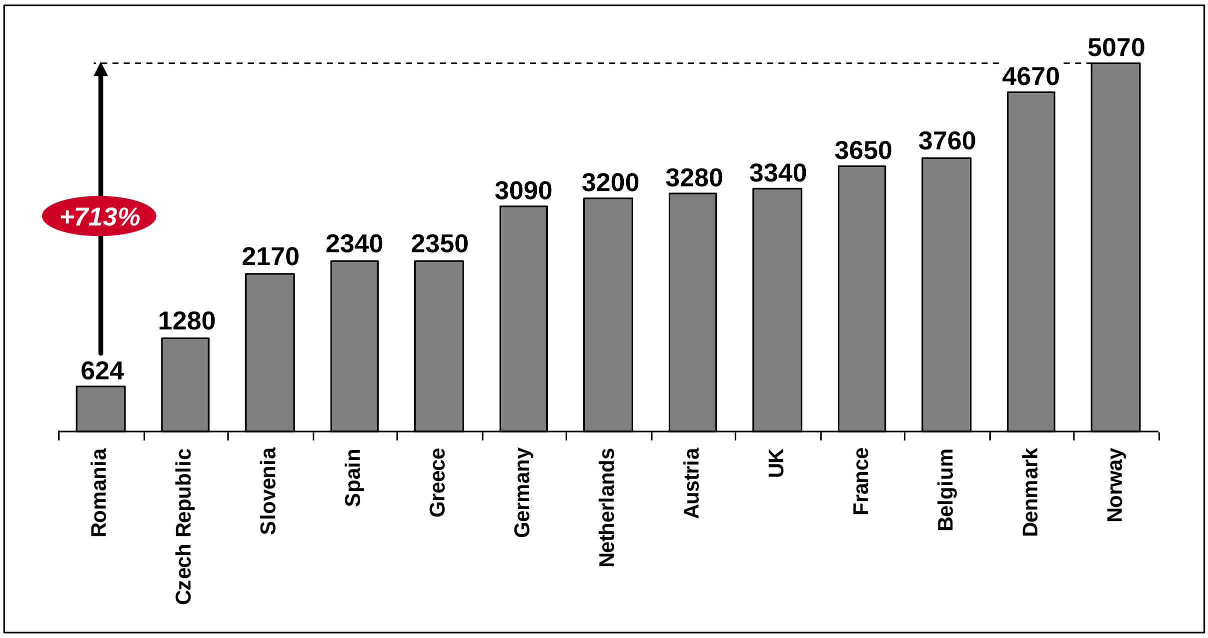
[29] International Mobile Roaming Regulation, BEREC Report 2010, page 28

[30] For example: Proposed retail mark-up and allocation of actual industry average retail costs, GSMA and A.T. Kearney, November 2006

[31] BEREC reports that: "Very close alignment of roaming prices with domestic prices (whatever domestic price is chosen as a reference – i.e. home country, visited country or European average) will cause disruption to the

outgoing calls in Europe was in the Netherlands at €0.174 per minute vs. the lowest in Lithuania at €0.032 per minute.[32] Some of the differences can be accounted for by the different business models that operators adopt in the different countries (e.g. the Netherlands tariffs reflect up-front handset subsidies) while others are due to differences in input costs between the different countries or scale effects. For example, as shown in Figure 7, wage costs across the sample countries considered by BEREC vary significantly. Wage costs are just one of the variables that need to be considered when accounting for domestic market prices in Member States. However, they illustrate that price differences (driven by cost variations) across Member States are likely to remain for the foreseeable future. Therefore, whilst consumers would continue to pay different prices depending on their country of origin, any attempt to link roaming prices to domestic prices may have severe long-term effects. This approach may lead to market distortions such as arbitrage opportunities and margin squeeze for certain operators.

Figure 7. Variation in average gross income rates across the sample of countries considered by BEREC ($)[33]



Pricing models linked to domestic markets could cause significant market disruption and introduce arbitrage opportunities

Regulatory options linked to domestic markets are distortive to both the European roaming and domestic markets and are not in line with the Commission's principle of coherent regulatory policy. The implementation of pricing models such as "Roam like at Home", with the current price

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market (margin squeeze at retail level and/or requirement to sell below cost at wholesale level) unless ... average domestic retail prices are not significantly different throughout Europe... it is not clear whether or when [this] condition will be satisfied". Source: International Mobile Roaming Regulation, BEREC Report 2010, page 30

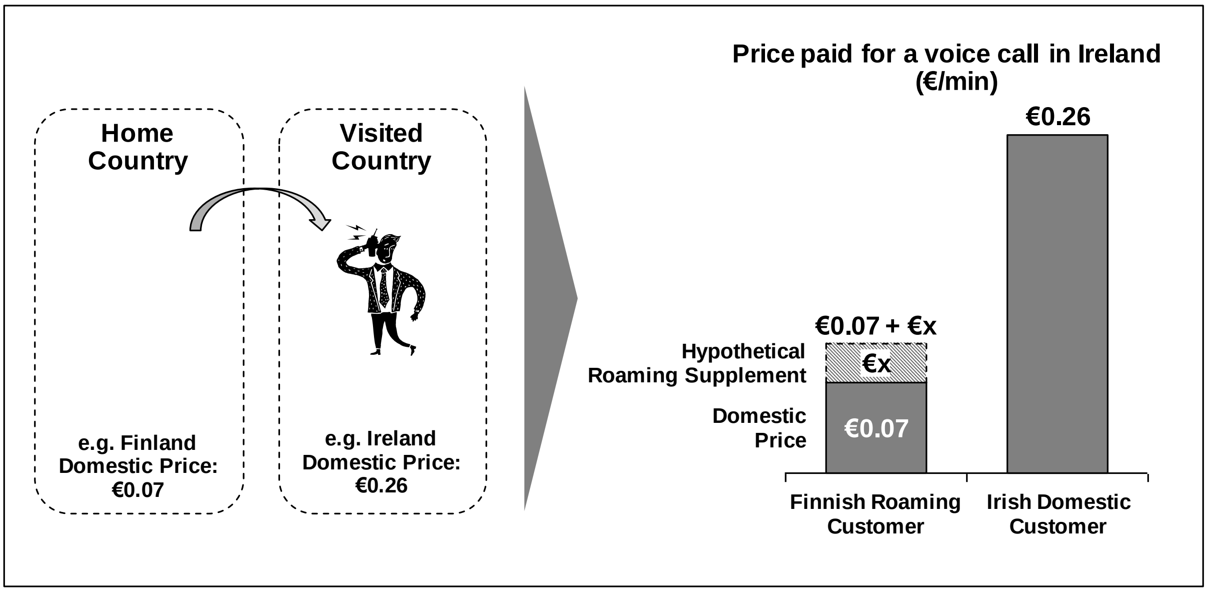
[32] Numbers quoted by BEREC. Figures for the Netherlands include handset subsidies where they are part of the monthly subscription (as opposed to an initial payment). This may unduly affect the figures for countries where recovery of handset subsidies accounts for a significant portion of the monthly subscription. Source: International Mobile Roaming Regulation, BEREC Report 2010, page 8

[33] The Economist Intelligence Unit Market Indicators

differences across EU countries, could provide arbitrage opportunities which could considerably disrupt the business models of many European operators, as in the example illustrated in Figure 8 of Finland-Ireland roaming. Even including an extra charge or supplement on top of the domestic tariff, Finnish roamers could enjoy prices in Ireland that are much cheaper than domestic prices in Ireland, encouraging Irish customers to benefit from signing-up to a Finnish rather than an Irish tariff in their home market. Given the variety of tariffs and bundles in domestic markets, the definition of the roaming supplement could further accentuate the price differences across countries and hence increase arbitrage opportunities.

To avoid arbitrage opportunities in the example shown in Figure 8, a hypothetical roaming supplement would need to add €0.19/min to the domestic price (the difference between the Finnish and Irish domestic price per minute). However, adding such a margin to the Irish domestic cost (€0.26/min) would result in a regulated cost for residents of Ireland while roaming in Finland or elsewhere of €0.45/min, which is above the current regulated price cap for outbound calls.

Figure 8. Example of arbitrage opportunities in the "Roam like at Home" model[34]



Pricing models linked to domestic markets could create confusion among customers and cause severe margin squeeze for operators

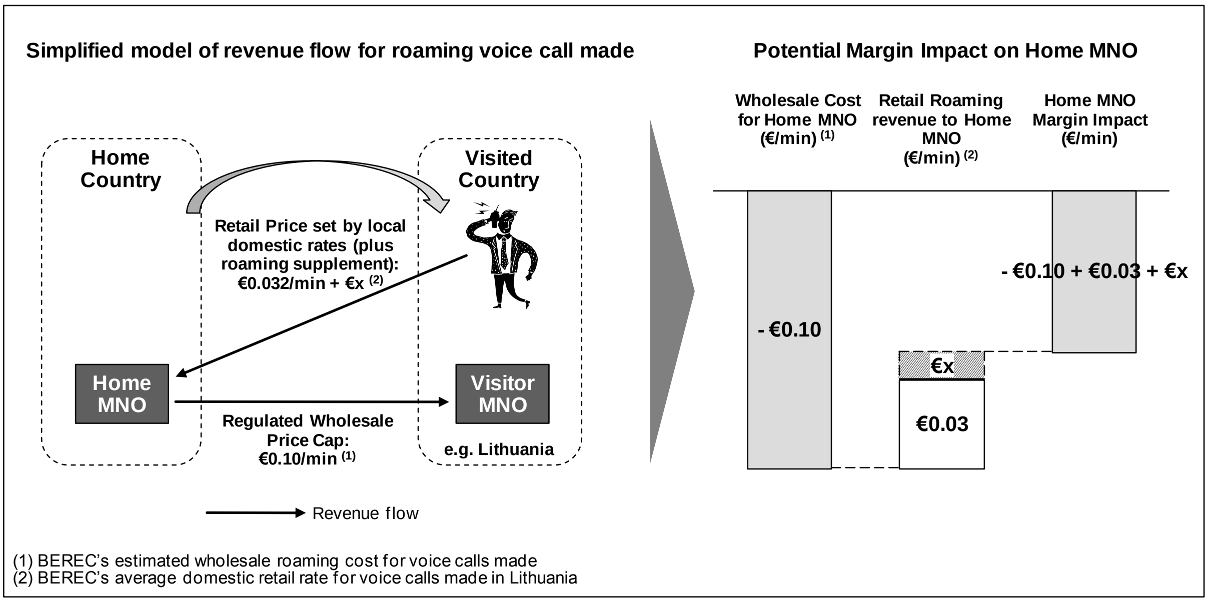
In terms of commercial feasibility, some roaming pricing models linked to domestic prices could impact the customer experience since the customer would need to understand the different prices applying across Europe. This particularly applies to the "Roam like a Local" model, which is clearly ineffective as a 'user friendly' regulatory framework. Complex tariff mechanisms would need to be developed in order to determine the price of tariffs at the time required by the roamer. Equally there would be limited price transparency for consumers since they will usually be unfamiliar with prices in the visited county. None of these requirements would aid the creation of a single market for roaming services or build consumer confidence. So, whilst some consumers may benefit from

[34] Based on tariffs for medium usage (300 minutes per month), Examples of domestic Post-Paid Monthly Tariffs (total cost/min). Source: Tarifica, BEREC International Mobile Roaming Regulation Report December 2010, A.T. Kearney analysis

lower prices, ultimately, market distortions and deterioration in customer experience may result in a net decline in consumer welfare.

Under the criteria specified by the Commission for assessing regulatory models, roaming prices linked to local prices are inefficient since they can result in severe margin squeeze for some operators. As illustrated in Figure 9, using the “Roam like a Local” model, operators incurring higher roaming specific costs than the domestic retail price in the visited countries may be forced to make a net loss when their customers roam, or in the extreme may seek to disable some roaming services.

Figure 9. Scenario where roaming services would potentially cause margin squeeze for operators in the “Roam like a Local” model[35]



Setting price caps at the average of European domestic prices by 2015 could result in similar market disruption to that expected due to linking roaming prices to home or visited market domestic prices

An alternative approach, raised by BEREC, to achieve the DAE target would be to impose roaming price caps at a much lower level than currently in place, such that the roaming price cap was equal to some measure (still to be defined) of average European domestic prices by 2015.[36] In reality, any price cap using this approach would still need to cover roaming costs, and ensure that investment incentives were maintained.

Whilst some customers would benefit from lower prices in the short-term, the GSMA believes that the introduction of materially lower price caps could cause significant disruption in the European market, which fails the test of efficiency and coherence established by the Commission. It could generate arbitrage opportunities and/or margin squeeze in some countries, similar to those described elsewhere in this section. We have illustrated the potential impact of this on the European market in Exhibit 1.

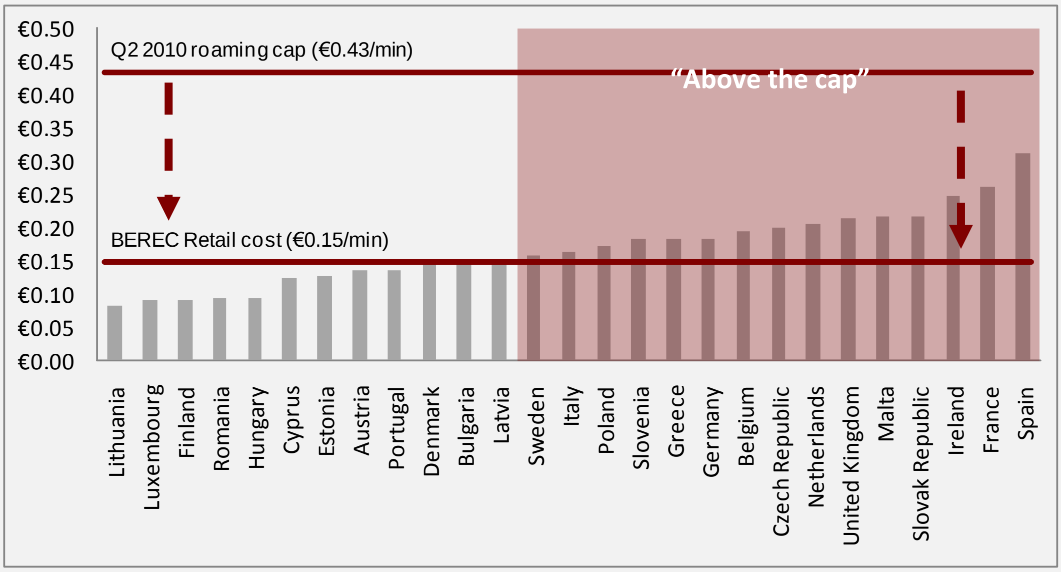
[35] BEREC International Mobile Roaming Regulation Report December 2010

[36] There is significant lack of clarity regarding the DAE target of very close alignment of roaming prices with domestic prices as outlined in footnote 31

Exhibit 1. Illustration of the impact of price caps at significantly lower levels than are applied today

Since the actual value of an "average" European price is currently unclear, for the purpose of illustrating the potential market disruption we have considered the impact of imposing a price cap equal to BEREC's preliminary estimate of the "upper bound" of costs (€0.15/min for retail outbound voice). Figure 10 illustrates the impact across Europe of imposing such a price cap: around 15 countries would have average domestic post-paid prices above the roaming price cap (prepaid prices are higher still).

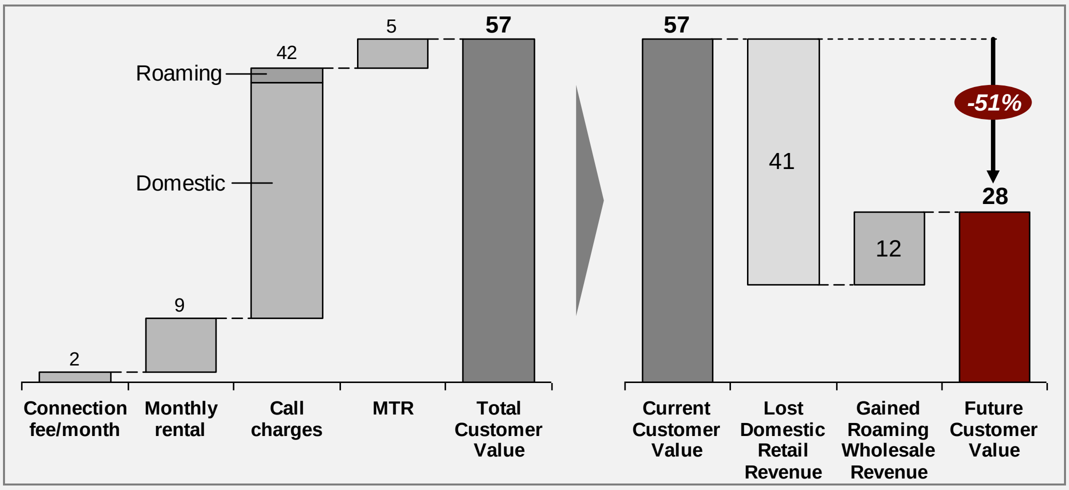
Figure 10. Average price per minute of sampled post-paid domestic tariffs in EU27 at Q2 2010[37]



The scenario shown in Figure 10 could result in significant disruption to domestic markets in "above the cap" countries due to the clear arbitrage opportunities. Consider as an example a Spanish subscriber who takes advantage of these opportunities. Based on a scenario where this subscriber keeps their domestic subscription to receive incoming calls, but uses a foreign roaming subscription to make 80% of outgoing calls, the total customer value would fall by 51% for the Spanish operator (as shown in Figure 11).

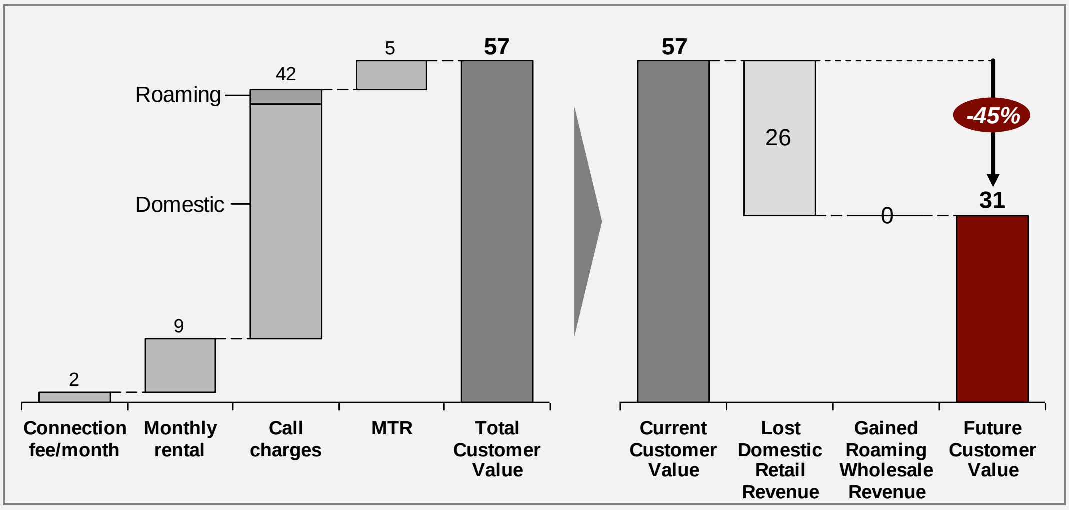
[37] Analysis based on a basket of usage including connection fee, monthly rental, peak/off-peak minutes, call type (mobile-to-mobile both on-net and off-net, mobile-to-fixed) and, in-bundle/out-of-bundle minutes. Data from Tarifica Mobile Tariff Benchmarks, Q2 2010. Source: A.T. Kearney analysis

Figure 11. Example of current monthly customer value and net loss of monthly revenue for an example subscriber in an "above the cap" country (€)[38]



This shift of customer subscription decisions and usage patterns could result in a significant net loss of domestic retail revenues that would only be partially offset by increasing roaming wholesale revenues. Given the consequences of this scenario, operators are likely to face pressure to reduce domestic prices below the level currently set by competitive dynamics. As can be seen in Figure 12, reducing domestic prices is likely to result in a smaller net-loss of revenue than the "do nothing" scenario of Figure 11 (€26/month versus €29/month). Clearly, this is still a significant loss of revenue amounting to €468 per user over the life of an 18 month contract. In this second scenario, we assume that the subscriber does not switch their provider, but that the revenue lost is due to reduced domestic retail prices to match the regulated roaming cap. Hence, the regulated roaming price cap would become the defacto domestic price cap in Spain and all other affected countries.

Figure 12. Example of current monthly customer value and net loss of monthly revenue for a subscriber in an "above the cap" country where domestic prices are lowered to equal the new roaming price cap (€)[39]



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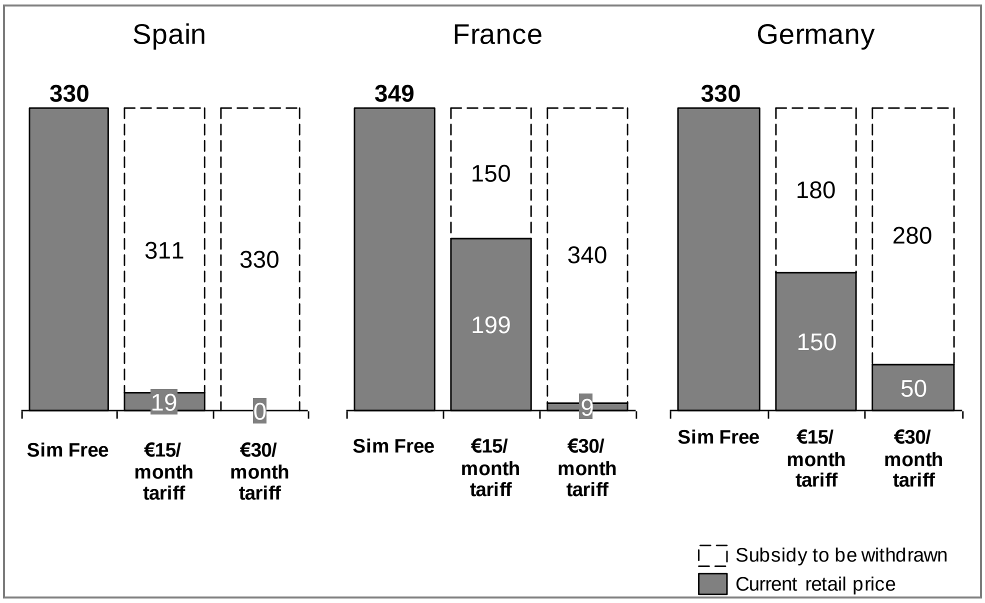
[38] All calculations of wholesale revenues use the same assumption regarding 2012 MTR and IOT values as used by BEREC (i.e. they are linked to LRIC estimates of incremental direct costs). Example shown is for a subscriber that keeps a domestic number to receive incoming calls, but uses a foreign roaming handset to make outgoing calls. Assumes 150 minutes per month in line with the average usage for Spain. Source: A.T. Kearney analysis

[39] A.T. Kearney analysis

The resulting margin squeeze in the domestic markets is likely to lead to further disruption in those markets as operators seek to maintain financial performance. This could include reduction of future investments, direct price increases for other mobile services or the reduction of device subsidies. In many markets today, these device subsidies provide substantial benefits to consumers and the associated device vendors and retailers. Figure 13 illustrates the size of the potential impact on consumers if operators are forced to withdraw device subsidies to the unintended disruption of domestic markets.

Figure 13. Examples of current and potential future market prices in selected European markets for Blackberry Curve 9300 if handset subsidies are withdrawn (€)[40]



The GSMA agrees with BEREC[41] that imposing a price cap at the level of approximately the average EU price today would cause significant market disruption without ultimately benefiting consumers. This is neither coherent with Commission objectives, nor efficient due to the loss of overall industry revenues and consumer value.

Linking roaming prices to domestic prices by 2015 could impact product and pricing innovation, discouraging competition in Member States

Linking roaming and domestic prices (either to home, visited or EU average prices) is likely to affect the business models of some operators, particularly in the areas of product and pricing innovation. Device subsidies might disappear in some markets due to the downward pressure on domestic call charges. Additionally, the pricing of bundles could be affected. Currently, operators offer a number of services under bundles to satisfy different customer profiles. In some cases, some of the services within the bundle are cross-subsidised by other services included in the bundle. This practice could be disrupted if operators' margins are squeezed due to the downward pressure on prices for individual bundle elements.

[40] Current prices correct at January 2011 for sample operators. Source: Operator websites

[41] See Footnote 31

5.2 Decoupling Approaches

The Commission has initiated a debate on structural options that aim to increase competition in the market rather than relying on price regulation to achieve its DAE objectives. The "decoupling" approaches suggested to date have the potential to negatively impact both consumers and operators. The challenge of high implementation costs for operators and a lack of user friendliness for consumers could result in a relatively low number of consumers benefitting from the identified measures. Whilst these approaches are likely to provide benefits to some individual operators through normal competitive processes, across the industry as a whole these decoupling options could impose a net-cost which – depending on the implementation method – may be substantial.

Operators will be disproportionately affected due to the high implementation costs of these structural changes, while outcome at retail level for residential customers remains unclear

The implementation of these options would incur significant costs for the operators in terms of the infrastructure changes and sales and marketing costs. New process and system adjustments for billing, credit and collection would need to be implemented in order to support the decoupling. Operators could also incur considerable sales and marketing expenses in marketing and advertising in order to inform customers of the new structure.

For example, to provide the carrier-pre-select in the home country option, the total implementation cost is estimated at €250-€300m across Europe.[42] A substantial proportion of these implementation costs are fixed and would disproportionately affect the ability of small operators to offer roaming services. The changes required to implement these structural reforms are technically complex, and will require solutions for currently unresolved technical challenges. For example, the introduction of a new HLR/HLR interface could require at least 12-24 months to implement with high (but difficult to quantify) cost to operators. The actual implementation time and cost will depend upon individual operators' existing technical architecture and system complexity.

In addition to the technical implementation costs, the commercial costs could be substantial and will depend on the precise implementation method. For an opt-out implementation, the additional costs could be very large due to additional customer (re)acquisition costs. For an opt-in approach, in which consumers have to opt for an unbundled roaming provider, the total commercial costs for the industry would be lower. Therefore, this approach should only be considered on an opt-in basis. Even those new market entrants wishing to take advantage of decoupling would need to amortise roaming-specific distribution costs/commissions and customer service costs across what might be fairly low volumes of spend per roaming customer.

Imposing decoupling on European operators could result in only a sub-set of customers gaining access to new tariffs. Given the high cost of implementation and providing the service, operators might be forced to focus on high-value customers since the cost of serving occasional users would be too high.

[42] Confidential Operator Data, A.T. Kearney analysis

Decoupling roaming services is likely to negatively affect customer experience due to increased complexity

Customer experience is likely to be impacted through the implementation of decoupling approaches. The current roaming system complements the single market, is user friendly and practical. The roaming experience is simple and clearly understood by consumers. When travelling abroad consumers only need to switch their mobile device on to automatically connect to a foreign network. The entire process of network selection and charges is transparent to them.[43] Under the different decoupling approaches suggested to date, the complexity of choosing roaming services is likely to increase and customers would need to be much more proactive with regards to their usage of mobile services abroad.

The drawbacks are slightly different for each of the models suggested. However, in all cases they require significant levels of interaction from the consumer which not all consumers would welcome. For example, for the “carrier pre-select in the visited network” model, the customer would have to use two different phone numbers,[44] the consumer’s home number plus an allocated local number. Consumers must then be proactive about giving the local number to their friends/family and/or business partners since the savings would only apply when the local number is used for both making and receiving calls. In practice, there is little difference between this option and acquiring a local SIM – an option already available today.

Decoupling roaming services would result in a number of issues depending on whether the decoupling is in the home or visited market. These issues could include many of the following drawbacks: consumers could receive two or more bills, from different operators, and would need to understand local prices in order to compare the bills with other tariffs on offer (and thus be ‘hands-on’ in seeking information on destination currencies and operators); customers would need to understand which operator to contact if they have customer services queries as this would vary depending on location, leading to confusion - potentially exacerbated by language barriers. There are considerable questions around the implementation of these regulatory models and their benefits. For example, it is unclear how consumers would receive information regarding the roaming prices available at other operators. The current solution to this suggested by the Commission, is based on communicating the prices to customers via SMS. While effective, this could raise the risks of consumers being bombarded with information via SMS, which might not be appreciated by many roaming customers. There may be some mitigation mechanisms to reduce any impact on customer experience under these approaches. For example, in the CPS at home option, operators could issue customers with a Dual-SIM or introduce temporary number portability to allow them to keep their home phone number whilst using a foreign tariff. These measures have technical constraints of their own but are being considered by some operators.

In addition to potential inconvenience, the risk of more serious consequences such as fraud could also be increased by adopting these measures. There are already complex fraud issues based on billing mechanisms with only two stakeholders (the home and visited network operators). One can

[43] The network is automatically selected on arrival to a foreign country. Subscribers have the choice of staying with the automatically selected network or to move to a different provider

[44] This mainly applies to voice and SMS services

expect that those billing mechanisms would become even more complex with the arrival of a third stakeholder, which in turn would leave more potential loopholes for fraudsters. For example, decoupling in the visited country could increase the risk of credit card fraud, since there is no way of checking international credit cards through an Interactive Voice Response. These cases could also prove difficult to investigate, since providing to law enforcement authorities access to call details would become more complicated.

5.3 MVNO Access-Based Approaches

Regulation of the wholesale roaming rate available to MVNOs represents an unnecessary intervention

Roaming services are part of the total package of wholesale services an MVNO secures from its partner MNO. MVNOs negotiate the rates for all the services they require based on the strategic importance of each service to the customer segments they wish to attract. MVNOs negotiate strongly and do not hesitate to put MNOs under intense competition; regulating a wholesale price cap for roaming services between MNOs and MVNOs would reduce the flexibility in these negotiations. Any MVNO wishing to attract roaming customers is already free to negotiate wholesale rates at or below the current wholesale roaming price cap as part of a total package. Imposing a wholesale price cap for MVNOs buying wholesale roaming may result in a water-bed effect whereby MVNOs are forced to buy services that they do not value at a lower price, only to pay a higher price for other services on which they place greater value.

Equally, in the free market prevailing in the EU, there is nothing to prevent an MVNO entering into multiple cross-border agreements with multiple MNOs. Indeed, specialist operators such as Truphone do this today. In this scenario, the MVNO negotiates separately with each MNO for the provision of services as outlined above.

Finally, since the role of an MVNO is based on MNO network services, they do not share the infrastructure or licenses costs required in Europe to run a mobile operator. Therefore, regulation to provide MVNOs with access to wholesale prices could unbalance the way negotiations are currently conducted. It could also provide MVNOs with opportunities to generate profits at a level above those available to MNOs - the latter bearing all the risk of investments. This is likely to discourage investment and cause margin squeeze in some markets. Additionally, such an introduction would not guarantee faster price decreases across all EU Member States, hence would not necessarily achieve the desired consumer benefit.

Providing full MVNO access to all European markets (Commission option (iii)) is highly disproportionate to regulate the roaming sub-market and could significantly disrupt domestic markets across Europe

Full regulated wholesale access for MNOs and MVNOs across Europe, as identified by the EC (option (iii), is a disproportionate proposal to meet the Commission's objective of ensuring a well-functioning roaming market by 2015. Taking this step would significantly disrupt all domestic markets across Europe and would go far beyond roaming regulation's objective. Hence, the GSMA believes that this option should not be considered further within the scope of the current roaming consultation.

5.4 Combined Approaches

Adopting complex combinations of different regulatory approaches could burden the industry with significant implementation costs and impact on the customer experience. This should not be imposed on the industry lightly or as a "try-it-and-see" approach to regulation

In question 12 of the consultation, the Commission implies that it may consider a combination of multiple regulatory approaches to reach its objectives. We are keen to ensure that any complex combination of regulatory approaches is not imposed lightly. The Commission should carefully consider – following a full Impact Assessment – the implications of any complex structural reform on consumers and the industry.

The implementation costs to industry of combined approaches could be significant, with operators incurring the combined costs of simultaneously implementing several complex technical and commercial changes. There is also the potential for negative consequences for consumers who may have to manage a more complex framework of prices – in domestic and/or foreign markets – and receive a less seamless service than is available today. Furthermore, such approaches risk denying consumers the mid to longer term benefit of developing innovation in prices and service.

A full Impact Assessment with input from industry is required for any combined approaches to ensure that any unintended consequences of complex regulatory frameworks are well understood. As described already in this report, we believe that the potential for unintended consequences is high, and the risk of this increases with the complexity of the regulatory framework.

6 Medium to Long Term View

This section addresses questions 13 and 14 of the European Commission Consultation

Continued investment and deployment of advanced network technologies indicates that European domestic and roaming services are evolving to compete with substitutes

The industry is committed to continuing the investment cycle and improving consumer offers available in the market. Investment and innovation in network infrastructure is vital for mobile roaming services to remain competitive within the EU, as can be recognised by the resources that operators are devoting to network development.

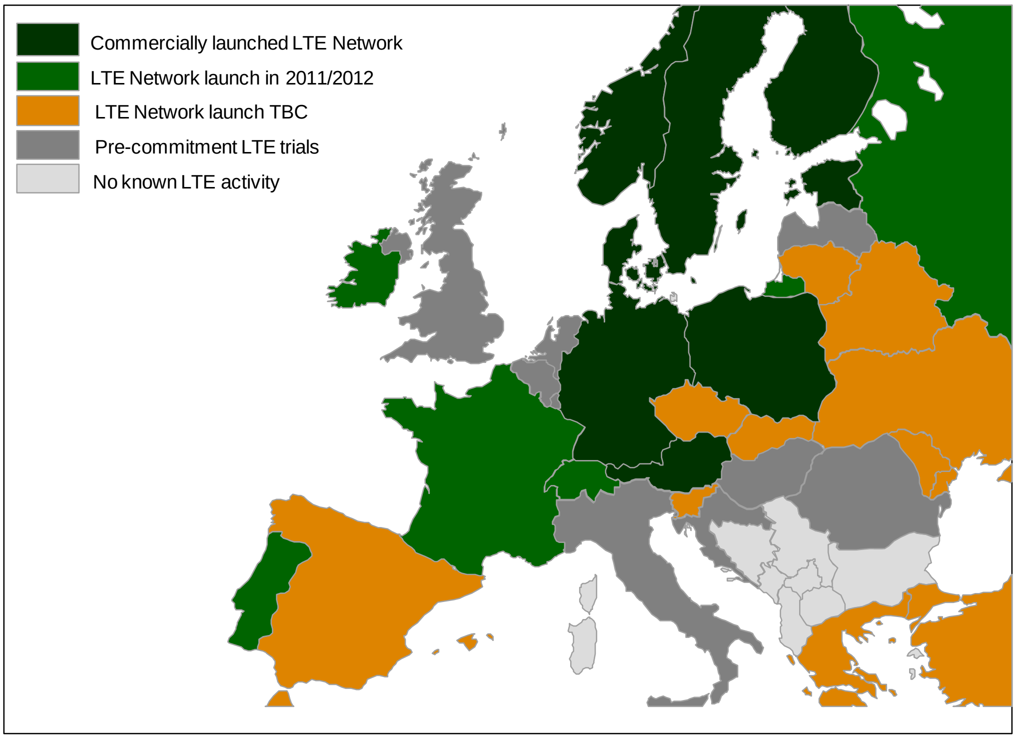
With data traffic expected to account for just over 90% of total global wireless network traffic by 2015,[45] 3G/W-CDMA networks are expected to reach their capacity and throughput limits in the next 3 to 5 years. This magnitude of mobile growth is driving investment in advanced network technologies, which is evident from the state of development of LTE infrastructure throughout Europe. Over the last year, the number of operators investing in LTE deployments or trials has increased by more than 140%.[46] As of today, 11 operators have already commercially launched LTE network systems in 8 European countries.[45] With a further 31 LTE network operator commitments for 2011/2012 and numerous pre-commitment LTE trials already in progress, there will be

[45] GSA Evolution to LTE Report, 12th January 2011

[46] http://www.fiercewireless.com/europe/story/lte-fastest-developing-system-history-telecoms/2011-01-14

widespread deployments of LTE networks from the majority of Western and Central European operators by 2014 (See Figure 14), with LTE-Advanced deployments expected in late 2012.[47]

Figure 14. LTE Network Operator Commitments in Europe[45]



Europe continues to be at the technical forefront with TeliaSonera in Sweden being the first network operator to have launched an LTE network in December 2009. LTE provides higher data throughput from the same spectrum, so operational cost per unit will be lower than 2G / 3G.

In addition to lowering operating costs by deploying new technology, operators are adopting network infrastructure sharing to reduce up-front capital investments. There are already two cases of European operators sharing LTE network infrastructure: Polish operators CenterNet and Mobyland, and Tele2 and Telenor in Sweden.[47] LTE base station costs are expected to follow the trends of 3G equipment and decline further, offering additional cost saving opportunities. Given the competitiveness of the market, we expect that the benefits of deploying this technology will be passed on to the consumers.

LTE networks are one of the many technological developments having a dramatic effect on the European data market. Roaming regulation based only on current market conditions risks unnecessarily intervening in the market before the full benefits for consumers have emerged.

The competition from strong substitutes for roaming services has intensified across all European markets and is impacting the roaming market now

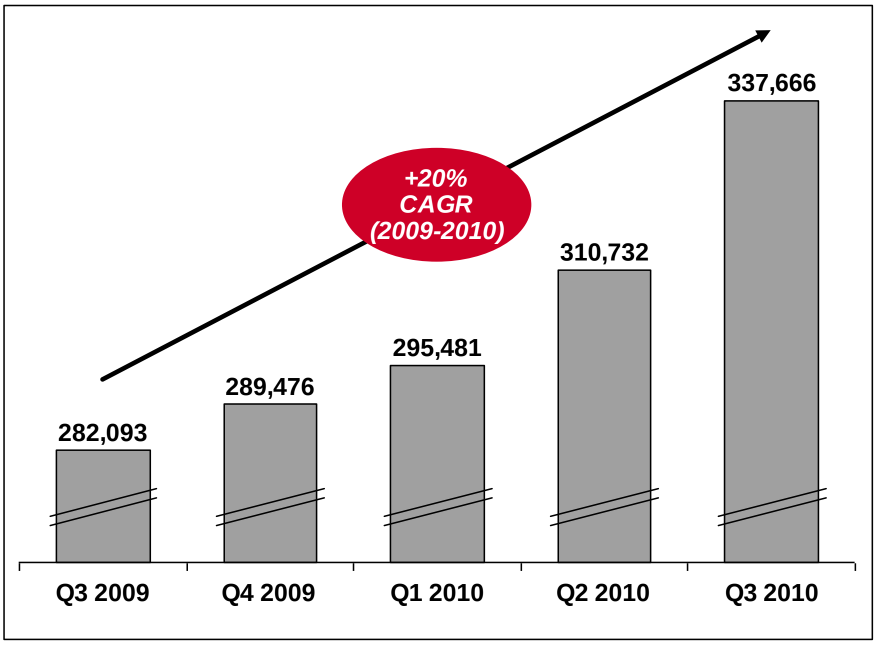
[47] White paper for the GSMA: The momentum behind LTE worldwide, January 2011

Today, there are multiple substitutes available for roaming services and technologies in these areas continue to evolve rapidly. Wi-Fi has grown as a strong substitute for an increasing number of customers and operators alike in both the domestic and roaming market.

Operators are contributing to a shift in data traffic by encouraging customers to use Wi-Fi networks when possible. This is driven by rapid growth in demand and congestion of the mobile networks. For this purpose, there has been a strong push from manufacturers and service providers to increase the availability and penetration of Wi-Fi-enabled handsets. Today all major smartphone manufacturers include Wi-Fi capability in their handsets; this feature allows consumers to use Wi-Fi hotspots both at home and abroad. As previously mentioned, the smartphone market is forecast to grow rapidly, and by 2012 handheld devices are expected to account for 50% of all hotspot sessions.[48]

Complementary to the increase of devices with Wi-Fi capability is the rollout of Wi-Fi access hotspots. The world hotspot market has grown over 150% since 2006, and was estimated to be about 340,000 locations in Q3 2010, a 20% increase over the previous year (See Figure 15). Europe is at the forefront of development with the UK, France and Germany accounting for 22% of the global market.[49] This number is continuously increasing, for example O2 recently announced the intention to create 15,000 new hotspots in the UK market by 2013, offering free internet to customers of all networks through selected partners such as shops and restaurants. Starbucks has also announced that Wi-Fi in their outlets in US and UK will be free of charge. With so many venues increasingly offering Wi-Fi at competitive prices or for free, competition with roaming services is a reality today.

Figure 15. Global growth in public Wi-Fi locations[50]

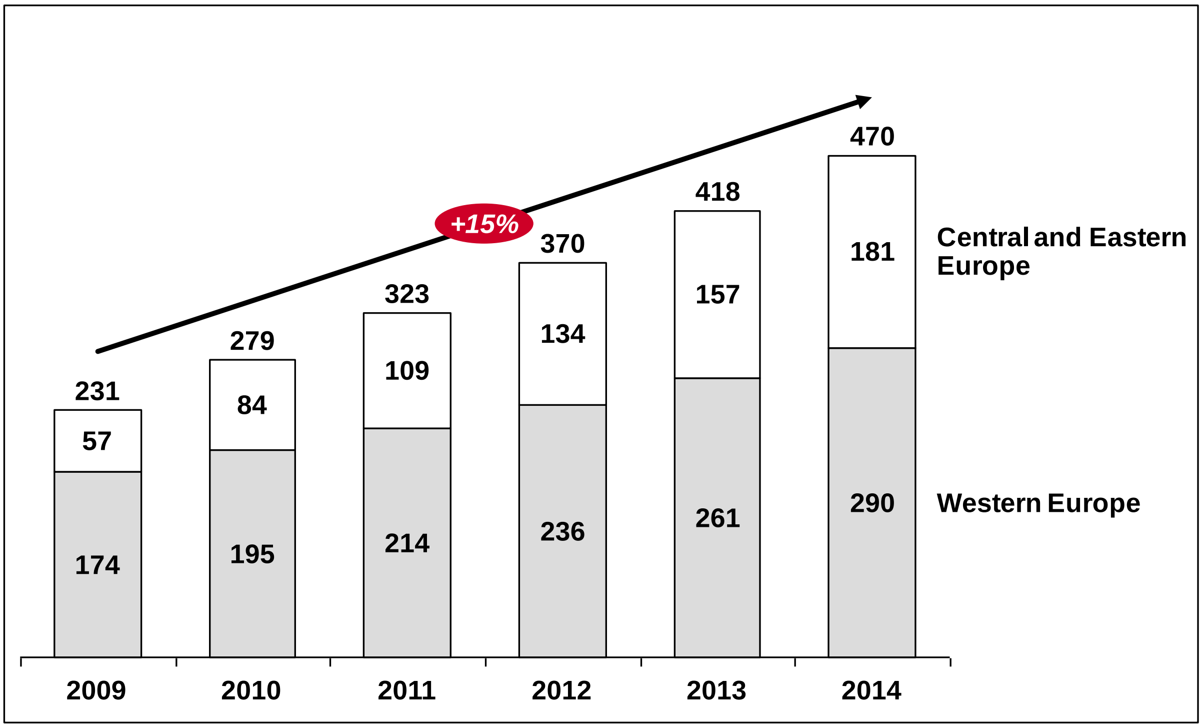


In addition to supporting data services, both 3G and Wi-Fi networks can support mobile voice-over-IP (VoIP) applications and several mobile operators are developing relationships with mobile VoIP

[48] GigaOM: http://gigaom.com/2010/12/30/wi-fi-hotspots-only-going-to-get-hotter/
[49] JiWire research, Q3 2010
[50] JiWire, Q3 2010

players such as Skype. The traffic growth of VoIP platforms has been significant, and European mobile VoIP minutes are forecast to rise to 470 billion by 2014, a growth rate of 15% p.a. (see Figure 16). With strong growth projected in Western and Eastern Europe, it is clear that both domestic and roaming users will continue to use VoIP applications and Wi-Fi services as a substitute for roaming voice, SMS and data services.

Figure 16. Growth in VoIP traffic for Western and Central Eastern Europe (billions of minutes)[51]



Other roaming alternatives continue to be the acquisition of a local SIM card for all mobile services. The prepaid market has evolved significantly, particularly for laptop dongles (where keeping a phone number is not important to consumers), with a multitude of tariff plans available today. Local SIMs have always been an important substitute for roaming voice and SMS services for those staying for longer periods in a country (regular visitors, migrant workers etc). Now they also offer an especially attractive substitute for data roaming given that the customer does not have any attachment to a phone number.

Recent announcements of innovative technologies, such as the world's first "attocell" by Ubiquisys, are adding to the level of competition faced by traditional mobile roaming services. Ubiquisys' "attocell" plugs into internet-connected laptops via a USB port, allowing 3G mobiles to connect to the home network for making and receiving calls whilst abroad.[52]

The rapid evolution of technologies and substitute product offerings is evidence that roaming services are highly dynamic, questioning the rationale for further roaming regulation

In summary, there are already many credible substitutes for all roaming services already available and growing in the market. We expect the number and variety of substitutes to continue to rapidly

[51] Includes both consumer and business traffic. Source: IDC, October 2010

[52] Fierce Wireless Europe

evolve, especially with respect to the data market, as the telecommunications sector has experienced fast evolution of technical platforms and high growth in existing technologies globally. Stiff competition is being offered from these substitute technologies, the impact of which is already being felt in both domestic and roaming services. We believe that technology innovation is already providing the true “structural alternative” that the Commission is seeking for the European roaming market and that this will intensify in the years ahead. Additional roaming regulation at this stage is both unnecessary and could even undermine the impact of such innovation.

Appendix 1. Operator Tariff Transparency

Operators have continued to invest a great deal into improving their websites to improve consumer tariff transparency and simplicity. Detailed explanations of personalised tariff information, bill control measures relating to the data roaming usage limit, and examples of data roaming applications are also easy to find on operator websites. These examples are extracts from operator data roaming tariff websites.