

# International Mobile Roaming Policy and Regulatory Actions: Theory and Practice

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- Economic roots of the roaming problem
- Roaming challenges in many regions of the world
- The European Roaming Regulations of 2007, 2009, 2012, and the Commission's Single Market proposal of 13 September 2013
- Effects on wholesale and retail pricing

# The root causes of the roaming problem

- In many countries of the world, governments have been concerned over excessively high international mobile roaming (IMR) charges at the retail level to consumers, but also at the wholesale level, i.e. as regards payments made between mobile operators.
- The actual underlying cost of e.g. an IMR call made or received bears little relation to the retail charge that the home network charges the consumer for roaming on a visited network.
- Root causes include:
  - Quasi-oligopolistic market structure.
  - Cross-border nature of the IMR service.
  - Insufficient attention on the part of the consumer.
  - Low demand elasticity for IMR voice services.

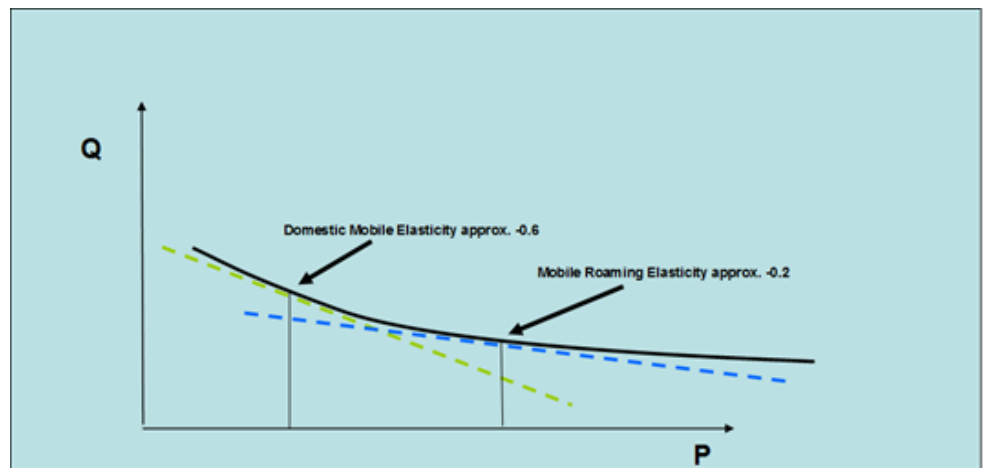


# Roaming and socio-economic welfare

- Demand for roaming voice services is not very elastic at all.
- Demand form roaming data appears to be highly elastic.
- Experience in the US demonstrates that roaming data and domestic data are not really different services. They are *perceived differently because they are priced differently*.
- If roaming voice prices were lower, then demand elasticity of roaming voice services would be higher.

ECONOMETRIC ESTIMATES			
Price of calls made	Price of calls received	Price of SMS	Price of data
-0.27			0.05
	-0.24		-0.09
		-0.24	
0.21	-0.13		-1.23

Source: Steffen Hoernig (2011). All figures 95% significant.



# Roaming is an important regulatory issue in Europe and the GCC Region...

## Europe

- Discussions and market assessments started in 2000, regulations came into force in 2007, amended in 2009 and in 2012 (in effect until June 2022) -> price caps (retail and wholesale) and transparency requirements, structural solutions (decoupling and LBO).
- Regulatory uncertainty due to new European Commission proposals.
- The Roaming Regulation has led to reduced wholesale and retail roaming charges, societal gains (reduced deadweight loss), socio-economic benefits (with regard to a Single Market); however, no competitive market dynamic has yet emerged.

## GCC Region

- Regulatory concern since 2005, in 2007 AREGNET decided for a self-regulation approach with the industry, further work was done in 2008 and 2009.
- In 2010 GCC telecom ministers agreed on setting a maximum cap on mobile roaming tariffs. In 2012, regulation was implemented for calls made.
- A new study has just been launched to evaluate how these arrangements are working, and whether further actions are called for.

# Roaming prices declines driven by commercial developments in the US and Africa...

## North America

- Domestic Roaming was an issue in the US (14% MNO revenue).
- Commercial offer of AT&T (“Digital One Rate” launched in 1996 - nationwide flat rate package at an affordable price) changed the market overnight.
- Domestic roaming as a service nearly disappeared.

## Africa

- Strong regional differences.
- Commercial offers have driven down roaming prices (Zain “One Network” and others) in parts of Africa.
- In the Southern African Development Community (SADC), regulators have been evaluating the roaming situation and are evaluating possible roaming regulation.

# Roaming is also a concern in Australia/New Zealand, Asia-Pacific, and Latin America...

## Australia and New Zealand

- Regulatory discussions started in 2010.
- Regulators investigated trans-tasman mobile roaming in 2011/2012.
- The Australian Communications and Media Authority (ACMA) developed a “Telecommunications (International Mobile Roaming) Industry Standard 2013” that will become valid on 27 September 2013. It will operate in conjunction with the Telecommunications Consumer Protection Code, and focuses on transparency and consumer awareness.
- Some operators in Australia and New Zealand (e.g. Vodafone, SingTel Optus, Telecom New Zealand) launched new offers to lower roaming rates.

## Asia-Pacific

- Roaming is perceived as a problem and has been examined by different organisations (e.g. APEC TEL, APT, ATRC).
- Bilateral agreements in place, but no regulatory measures are in place.
- Commercial offers are available (reduced roaming charges, roaming alternatives), e.g. by China Mobile.

## Latin America

- The number of roamers is strongly growing.
- They intend to improve price transparency, but it is not yet implemented.
- An study for Regulatel is ongoing.



# Roaming Regulation in Europe

## Background

- A 2006 Eurobarometer Survey found that consumer concerns over high mobile roaming prices.
- The Roaming Regulation was proposed in 2006 by the European Commission following concerns expressed by National Regulatory Authorities (NRAs) through the European Regulators Group (ERG) that the 2002 Regulatory Framework prevented regulators from adequately addressing the issue of high roaming charges.
- The Roaming Regulation came into effect on 29 June 2007, and imposed retail and wholesale price caps as well as transparency measures.
- The Roaming Regulation was amended in 2009.
- It was amended again in 2012 following thorough review, with a commitment to keep arrangements in place until 30 June 2022.
- The European Commission nonetheless proposed a Single Market Regulation on 11 September 2013 that potentially massively revises arrangements; however, prospects for passage before elections in May 2014 are negligible.

# Roaming Regulation in Europe

## 2007 Regulation

- Circa 2002, retail roaming prices averaged about €1,30. and wholesale prices (often referred to as IOTs) about €1,00 per minute (source: Stumpf (2002)).
- The 2007 Regulation placed a retail and wholesale price cap on roaming calls while roaming in the European Union, and thus reduced roaming charges up to 70%.
- The **retail price cap** was initially set at a maximum for calls placed of €0.49 (excl. VAT) and for calls received at €0.24 (excl. VAT).
- The **wholesale cap** for the prices that operators charge each other for roaming (IOTs) for the first 12 months was initially set at €0.30.
- Wholesale and retail prices were progressively lowered from these levels (more later).
- It was expected that operators would compete below these caps; however, effective competition has never emerged.
- The 2007 Regulation also placed a number of **transparency measures** with clear and customized information on the retail price of international roaming, helping to ensure that consumers were well informed in relation to roaming in the EU.

# Roaming Regulation in Europe

## 2007 Regulation

- An important positive feature is that both wholesale and retail prices were regulated in a coordinate way.
- Retail regulation only?
  - Risk that retail prices exceed wholesale prices (costs to MNOs).
  - Risk that some roaming services might no longer be offered.
- Wholesale regulation only?
  - Risk that MNOs would not pass on cost savings to users in the form of lower prices.
  - Potentially alters WHICH MNOs benefit from excessive profits, without however benefitting consumers or the broader society.

# Roaming Regulation in Europe

## 2007 Regulation

- The EuroTariff is the default retail plan, but users may “opt out” in favour of other retail plans.
- A range of multi-country plans are available, such as Vodafone Passport.
- This accords with the general principle that firms should retain as much retail pricing flexibility as possible.
- Some of these plans represent average cost slightly in excess of the EuroTariff; which has been a source of consternation to European regulators.
- In my opinion, this concern is misplaced. If consumers value other factors such as convenience over price, why should the regulator’s judgment be preferred over that of the customer?

# Roaming Regulation in Europe

## 2009 Regulation

- In 2009 the roaming Regulation was amended in scope and duration.
- The 2009 amendments to the Roaming Regulation included
  - further reductions to the wholesale and retail “Eurotariff” (voice calls),
  - the introduction of a wholesale and retail Euro SMS price cap,
  - a wholesale data price cap, and
  - a number of new measures in relation to pricing transparency were introduced.
- The 2009 Regulation includes an Anti-Bill-Shock cut-off mechanism, which kicks in once the bill reaches €50, unless a different limit is chosen by the customer.
- It also requires per-second billing after the first 30 seconds for roaming calls placed, and from the first second for calls received while roaming.

# Roaming Regulation in Europe

## Regulatory Changes in 2012

- The Roaming Regulation was again revised effective 1 July 2012.
  - **Price Caps for Voice, SMS and Data** were further reduced, and are to remain in place until 30 June 2017.
  - **Transparency SMS** - When a consumer roams in the EU, their MNO must send an SMS explaining the costs of cost of calls made and received, the cost of sending an SMS/MMS, the cost per Megabyte (MB) of data, how to find out more information, and how to reach the European emergency number 112.
  - **Data Usage (“bill shock”) Alert** – The usage cap is €50 excl. VAT unless the consumer chooses otherwise. The consumer must be advised when he or she reaches 80% of the data usage cap, and again at 100 % of the data usage cap. The consumer can then decide to continue to data roam or not.
  - **“Structural Measures”** were imposed, effective 1 July 2014, with the expectation that they would introduce competition that would ultimately obviate the need for regulation.

# Roaming Regulation in Europe

## The Roaming Regulation of 2012 – Structural Solutions

- From 1 July 2014, customers will have the option to sign up with an **Alternative Roaming Provider (ARP)**, which may be different from their domestic mobile provider, for a separate mobile contract for roaming whilst keeping the same phone number (“**single IMSI**” plan).
- MVNOs and resellers will have the right to access other EU/EEA mobile network operators' networks at regulated wholesale prices in order to provide roaming services (together with national services) to their customers.
- Neither domestic nor roaming providers may prevent customers from accessing regulated data roaming services provided directly on a visited network by an alternative roaming provider. This data-only alternative is known as **Local Break-Out (LBO)**. In other words, providers in a visited Member State cannot be prevented from offering data roaming services to consumers with a subscription in a different Member State.
- The ARP/single IMSI arrangements might reduce the spread between wholesale and retail prices, but have no effect at all on wholesale prices. They are not a game changer.
- LBO might possibly be a game changer (but only for data) if multi-country plans emerge; however, there has been no attempt to facilitate multi-country operation.
- In its 13 September 2013 proposal, the Commission effectively acknowledges that it no longer has high expectations for the 2012 not-yet-implemented structural solutions.

# Roaming Regulation in Europe

## The new proposed Single Market Regulation

- The Commission's new proposed Single Market Regulation encourages MNOs to **form alliances** so as to provide roaming services in all Member States at prices no greater than domestic prices.
- In exchange for doing so, the MNO would receive various benefits:
  - Freedom from implementing the otherwise required price caps.
  - Freedom from the need to implement ARP and LBO.
  - In effect, freedom from the competition that ARP and LBO provide.
- There are a few minor but highly obvious problems with this approach.



# Roaming Regulation in Europe

## The new proposed Single Market Regulation

- All Member States: no European MNO does business in anything like all Member States. The transaction costs of forming the needed alliances are quite high.
- Determining the “applicable domestic service rate” is a far more complicated exercise than has been assumed.
- Those prices are probably **less than cost** for some Member States.
- Substantial risk that the application is rejected by DG COMP.
- Benefits are dubious.
  - Avoidance of costs that will have already been incurred.
  - Avoidance of ARP/LBO competition that is unlikely to be effective.

# Roaming Regulation in Europe

## The new proposed Single Market Regulation

- **UNCERTAINTY:** Is it even possible to enact any of the Commission proposals before European Parliamentary elections in May 2014?
- **PREDICTION:** No MNOs will apply for the new provisions (assuming that the plan is enacted as proposed).
- **OBSERVATION:** In making the proposal, the Commission has undermined the slim possibility that LBO competition might be made effective.
- **OVERALL ASSESSMENT:** The Commission proposes to replace one set of possibly ineffective “feel good” measures with another set of even less effective “feel good” measures.

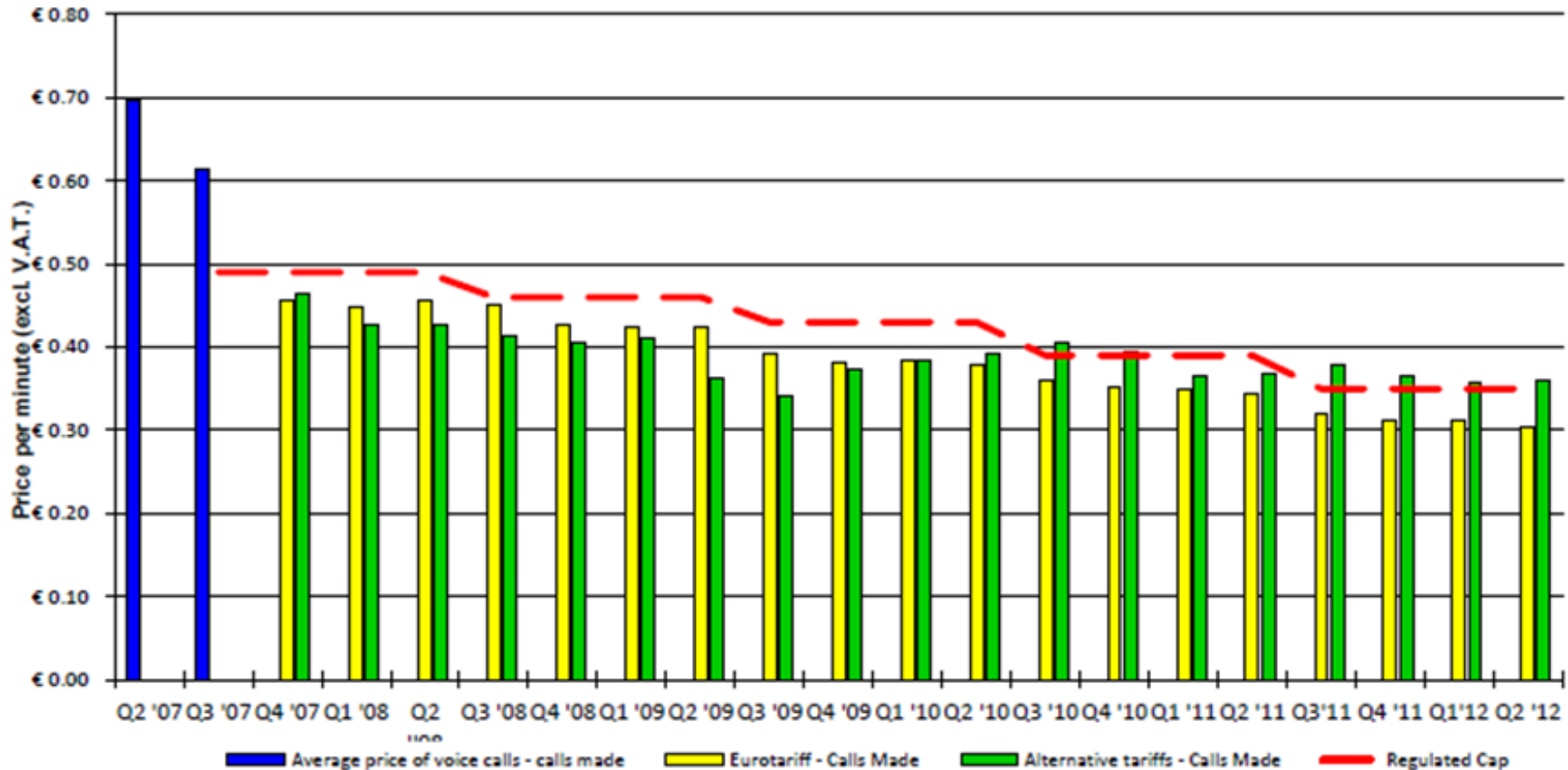
# Roaming Regulation in Europe

## Impact on Prices

- The wholesale and retail pricing mechanisms of the Roaming Regulations of 2007, 2009 and 2012 have been highly effective in reducing wholesale and retail prices of roaming in the EU/EEA. This has produced societal gains in the form of reduction of deadweight loss – modest in the case of voice calls made, probably larger for other services. More significantly, they have produced socio-economic benefits by furthering the overall evolution of the Single Market.
- The Roaming Regulations have not created a competitive dynamic that would make further regulation unnecessary. Nobody, obviously including the Commission, knows today how to do that.

# Roaming Regulation in Europe

## Voice Calls made



Source: BEREC

EEA average retail price per minute for intra-EEA roaming voice calls made and indexed average EU roaming volumes for retail calls made in minutes (2008 Q1 = 100)

# Roaming Regulation in Europe

## SMS

Figure 16: Average price per retail SMS (Euro + Non Euro SMS tariffs)  
(EU only for Q2 2009 - Q1 2010)

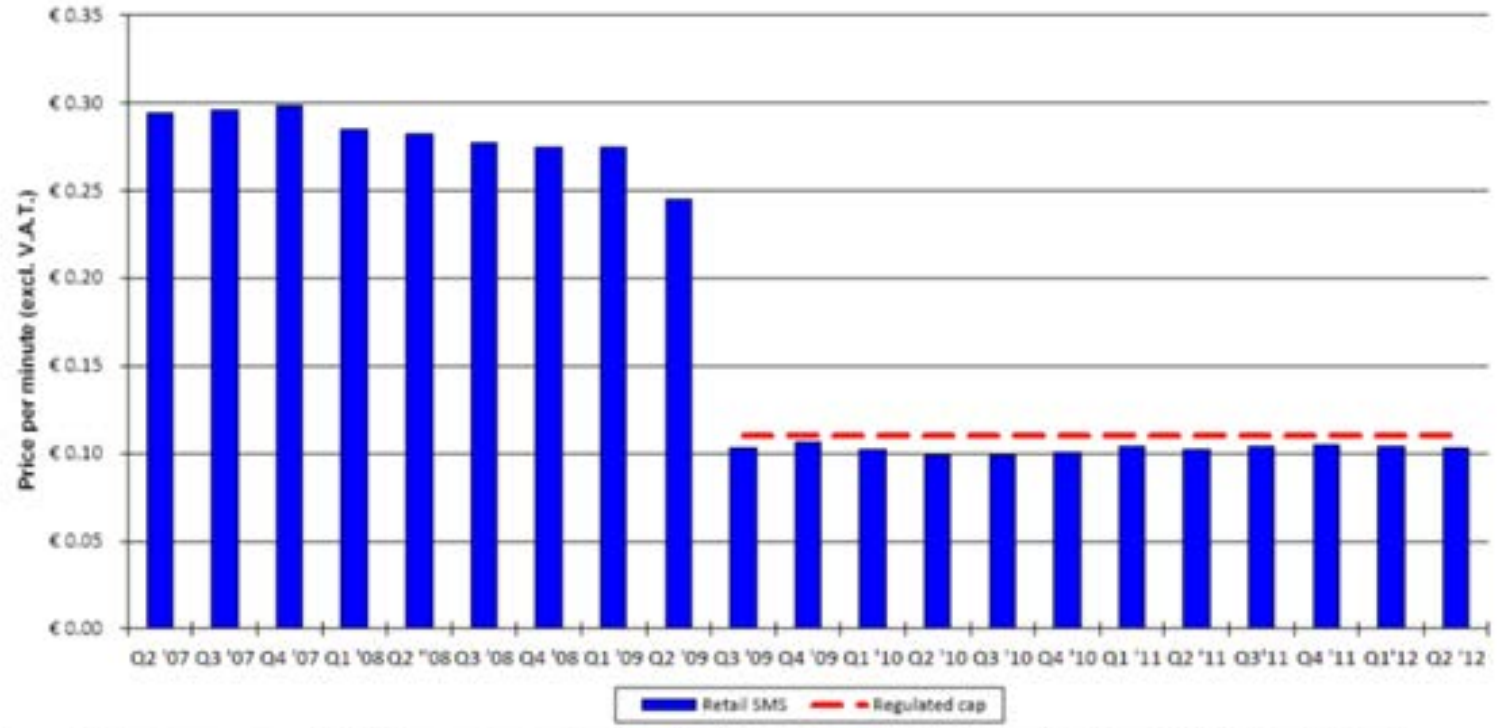


Figure 16 gives an overview of the EEA average price for all retail SMS messages, covering the regulated Euro-SMS tariff and alternative tariffs from Q3 2009 (EU only for Q2 2009 – Q1 2010).

Source: BEREC

# Roaming Regulation in Europe

## Data

Figure 23: Average price per Mb for retail and wholesale intra-EEA roaming data (EU only for Q2 2009 - Q1 2010)

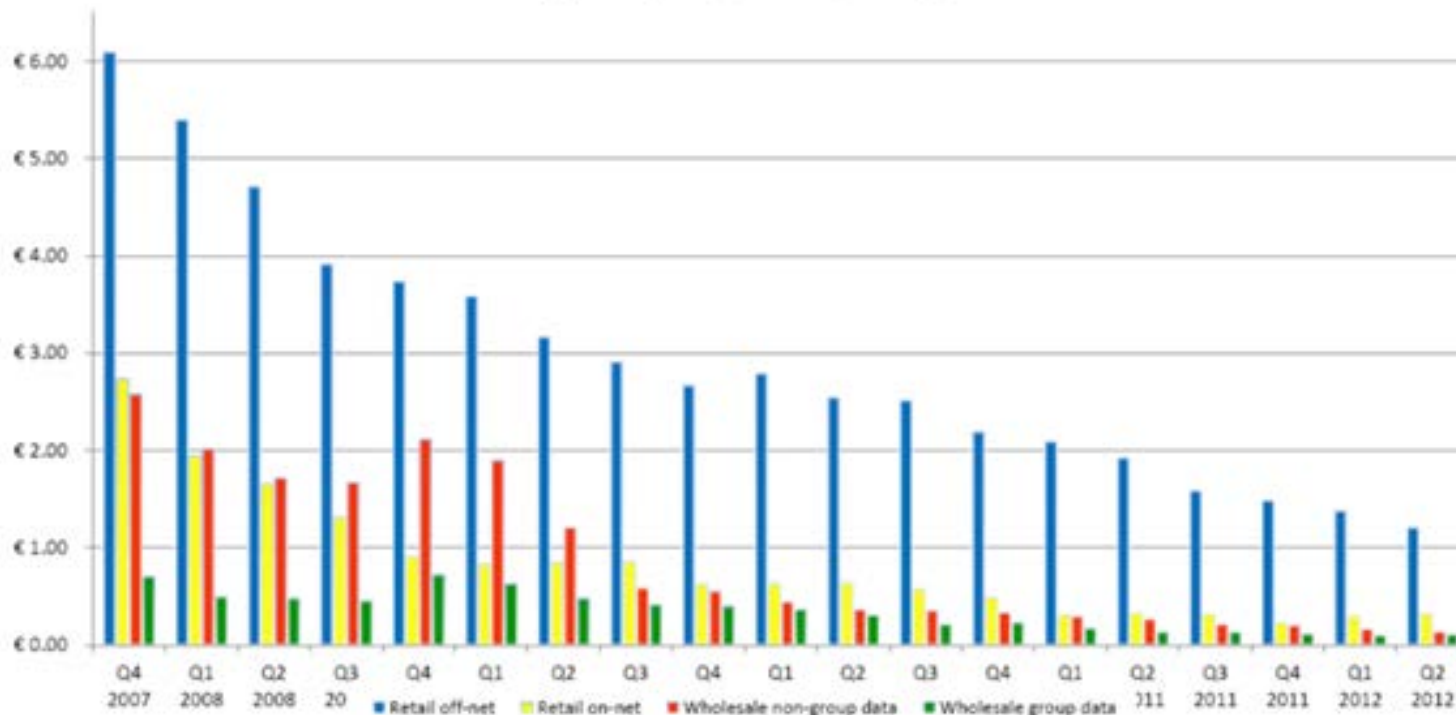


Figure 24 compares the average EEA price trends for retail and wholesale data services (EU-only averages were used for Q2 2009 – Q1 2010). It shows the continued downward trend in the average price for data services at both the retail and wholesale levels. The impact of the 2009 Regulation on wholesale non-group data prices is clearly visible. However, the retail margin for off-net traffic has always been large and has increased significantly in relative terms since Q4 2007. In Q2 and Q2 2012, it was more than 778% of the average non-group wholesale price.

Source: BEREC

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