

Exercise 4

Regulation of (mobile) Telecommunications

Mobile Business II (SS 2016)

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Exercise 1:

Provide a short definition (in your own words) of what regulation means for a mobile communication market.

Dictionary Definitions of “Regulation”

Main Entry: ¹reg·u·la·tion

- Pronunciation: \,re-gyə-'lā-shən, ,re-gə- *also* ,rā-\
- Function: *noun*
- 1: the act of [regulating](#) : the state of being [regulated](#)
- 2 a: an authoritative rule dealing with details or procedure <safety *regulations*> ; b: a rule or order issued by an executive authority or [regulatory](#) agency of a government and having the force of law
- 3 a: the process of redistributing material (as in an embryo) to restore a damaged or lost part independent of new tissue growth; b: the mechanism by which an early embryo maintains normal development

Main Entry: ²regulation

- Function: *adjective* Date:
- : conforming to [regulations](#) : [official](#)

[Merriam-Webster 2008]

- Public intervention into markets
 - Limits/enables action scope of market players as to e.g.
 - Market entry
 - Pricing
 - Offerings
 - Limits/enables action scope of individuals
 - Limits/enables application of new technologies
 - Modifies general laws with regard to a certain industry
 - Often owing to market failure
 - Has a long history in telecommunications and broadcast

- Market Failure as a reason for regulation
 - The market price does not reflect the real costs of the system
- Consequence:
 - Hampered competition, innovation, society progress.

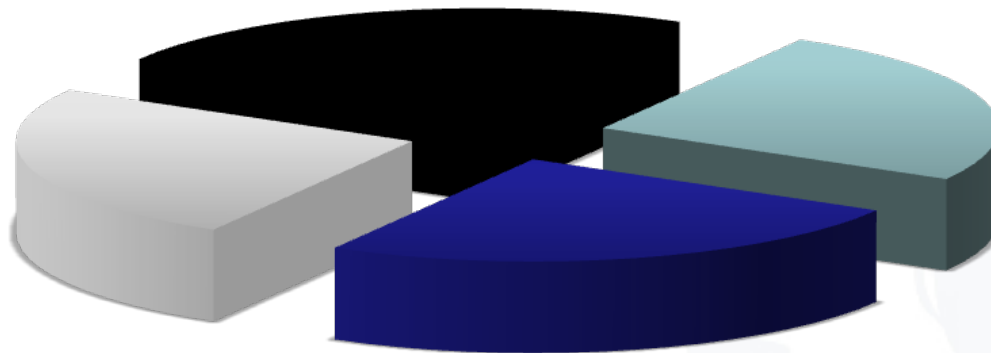
- Telephone monopoly:
 - Formerly high prices and inflexible service, little customer orientation
- DSL flatrate:
 - Higher costs for competitors, advantages for the former monopolist
- Microsoft trial:
 - Exploitation of market power against other web browser providers
- Postal monopoly:
 - Volatile service quality and high prices for international delivery of mail

Exercise 2:

What are the types of market failures that make regulation necessary? Give a short description of their impacts on the market.

Types of Market Failures

- 1. External Effects
- 2. Natural Monopolies
- 3. Dominant Supplier
- 4. Political Failure



- Actors and beneficiaries are different:
“Investment does not pay off.”.
- Examples:
 - State subsidizes infrastructure for the benefit of the public since private efforts do not pay off.
 - New infrastructures: One Market player invests into a new infrastructure, others shave off the benefits.

- In industries with high fixed costs or limited market potential,
- One (monopoly) supplier may produce at lower costs than several suppliers in competition.
- Prices and services need to be regulated.

- If a supplier
 - dominates a market and
 - harms competition and innovation
- Competition surveillance may
 - foster market entries or
 - limit the market power of the dominant supplier.

- Political goals are not achieved.
 - E.g. employment goals or social goals are not achieved by the market itself.
- Then, state intervention may be necessary.

- Purpose of regulation
 - Encourage more national and international competition
 - Foster innovation through competition
 - Let price competition drive new technologies into the mass market

Regulation is

“ ... justified and accepted in case of market failures, i.e. when the market fails to allocate resources in a welfare maximizing way.” [Drücke 1999]

Give an example for regulation in the (mobile) telecommunication market in the last (five) years (in any country).

- What was the scope of regulation?
- Which factors led to regulation in that case?
- Did the regulation have any impact on the mobile telecommunication market?

What is Roaming?

→ *Traditional GSM Roaming is defined (cf. GSM Association Permanent Reference Document AA.39) as the ability [...] to automatically make and receive voice calls, send and receive data, or access other services, [...], when travelling outside the geographical coverage area of the home network, by means of using a visited network.*

- What is the problem? A lack of internal market in telecoms services.
 - There is no justification in a competitive market for charging customers considerably higher prices for roaming services.
- Why is EU action (regulation) necessary?
 - All Europeans need to benefit from an internal market for roaming. One of the Commission's priorities is to create an internal market for roaming services and eliminate the excessive charges.

Regulation of Roaming Fees: A Case History

July 2005	European Commission warns consumers on cost of using mobile phone abroad and targets lack of price transparency
October 2005	Commission launches consumer website on the costs of mobile roaming in Europe
March 2006	Commissioner Reding outlines proposal for an EU regulation to bring down prices and presents new figures
July 2006	Press Fact Sheet - The proposed EU Roaming Regulation - what are the benefits for customers
July 2006	Commission proposes to cap the high cost of using mobiles when travelling within the EU
November 2006	Eurobarometer survey - Prices still far too high say many Europeans
April 2007	"Roaming Vote in the European Parliament: "The bell is now tolling for international roaming charges in Europe" (Commissioner Viviane Reding)

Regulation of Roaming Fees: A Case History

May 2007	Commission welcomes political agreement to cap mobile roaming charges in Europe as from summer
June 30, 2007	Main changes introduced by the 2007 regulation; new EU rules on roaming (roaming regulation) entered into force
July 2008	"Texting without borders": Commission plans ending roaming rip-offs for text messages abroad
September 2008	Commission acts to cut cost of texting and mobile data services abroad
July 2010	„Cut off“ mechanism for data roaming within the EU
...	Regulation of cost for data roaming threatened.
July 2012	„Eurotariff“ regulation introduced

Main provisions of the current Roaming regulation

- Eurotariffs introduced: from 1st of July 2012, making a call cannot cost more than 29 cents and receiving a call cannot cost more than 8 cents (excluding VAT).
- Euro-SMS tariff introduced: from 1 July 2012, sending an SMS from abroad costs no more than 9 cents (excluding VAT). Receiving an SMS in another EU country will remain free of charge.
- Euro-data tariff introduced: from 1 July 2012, using mobile internet costs no more than 70 cents per MegaByte (excluding VAT).
- Wholesale charges capped: prices that operators charge each other (wholesale charges) are also capped.
- More transparency of roaming charges for consumers: customers receive an SMS, pop-up window, etc when they are crossing borders within the EU and outside the EU to inform them of the price they are expected to pay for making and receiving calls or for using mobile internet.
- Measures to counter data roaming bill shocks: as of 1 July 2012, travellers' data-roaming limit will be automatically set at 50€ also when they travel outside the EU (unless they have chosen another limit - higher or lower).

- Initial plan: The difference between roaming and national tariffs should approach zero by 2015!
- The results on roaming tariffs speak for themselves:
 - The EU has achieved retail price reductions across calls, SMS and data of over 80% since 2007;
 - Data roaming 2010 up to 91% cheaper compared to 2007;
 - 2007-2010, the volume of the data roaming market has grown by 630%;



Roaming in the European Union

Let's take the example of a domestic mobile subscription as a bundled volume of 1 hour of calls/100 SMS/100 MB of data for a given monthly price.

Before 30 April 2016

Your roaming consumption is NOT deducted from your domestic volume. You pay for your roaming consumption maximum:

€0.19 (+VAT) for 1 min of voice call

€0.06 (+VAT) for 1 SMS

€0.20 (+VAT) for data (per MB)

An operator may of course always charge less than these caps.

As of 30 April 2016

Your roaming consumption is deducted from your domestic volume, and small roaming charges are added:

€0.05 (+VAT) for 1 min of voice call

€0.02 (+VAT) for 1 SMS

€0.05 (+VAT) for data (per MB)

An operator may of course always charge less than these caps.

In the new system, your domestic volume gets reduced by the roaming consumption, while in the old system, your domestic volume remains untouched and you pay higher additional costs.

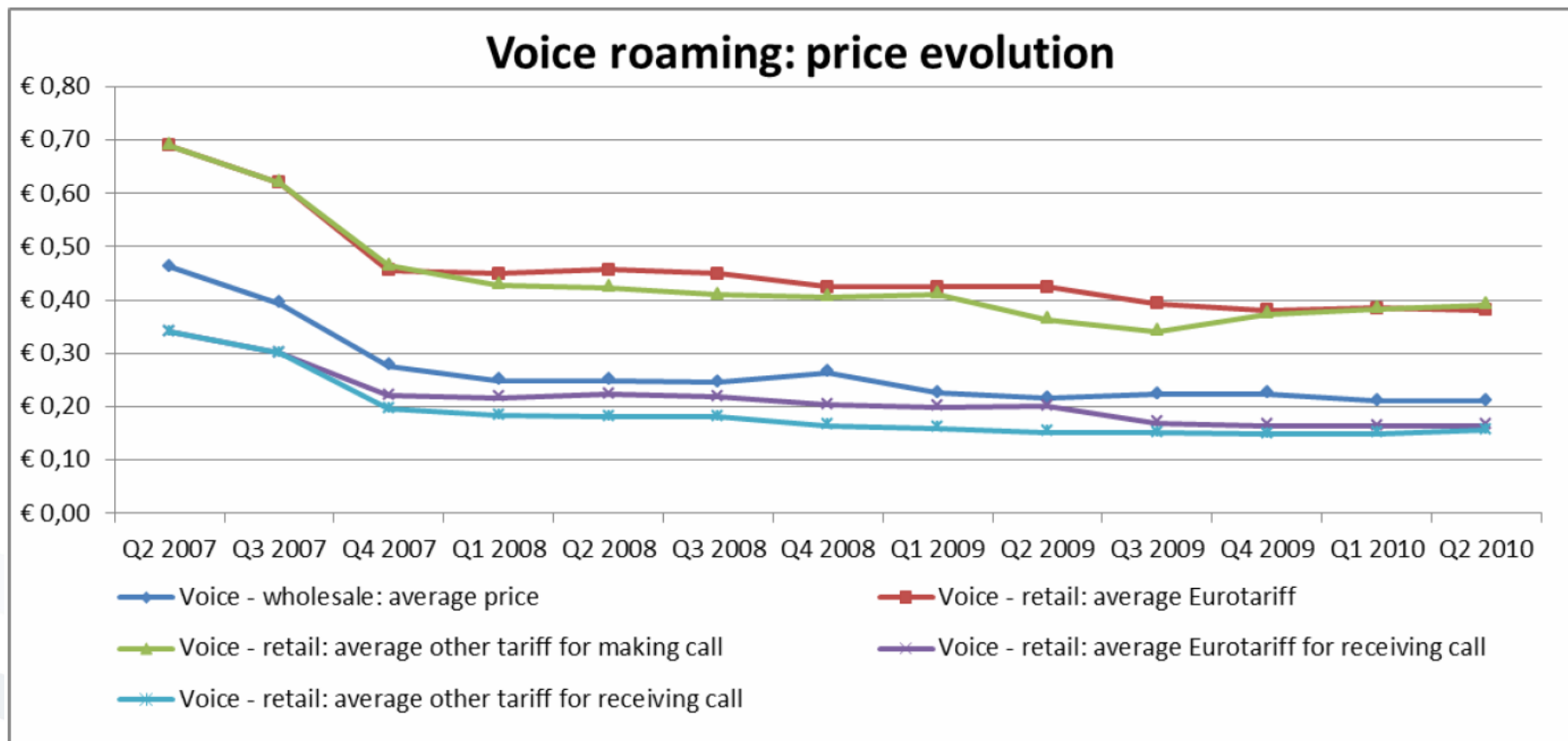
As of 15 June 2017

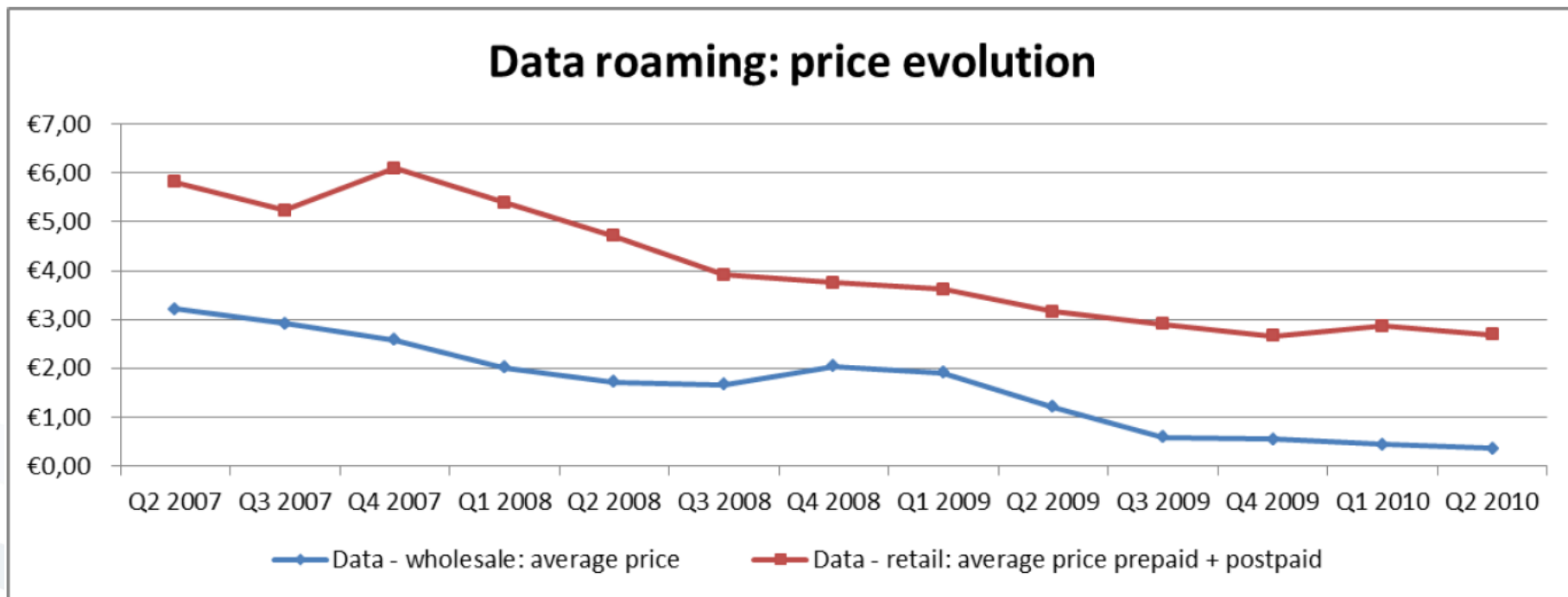
Your roaming consumption is deducted from your domestic volume.

If you roam 20 min/10 SMS/50 MB, your remaining domestic volume becomes 40 min/90 SMS/50 MB.

You pay no extra charge for that roaming consumption.







The other side of the process of regulation

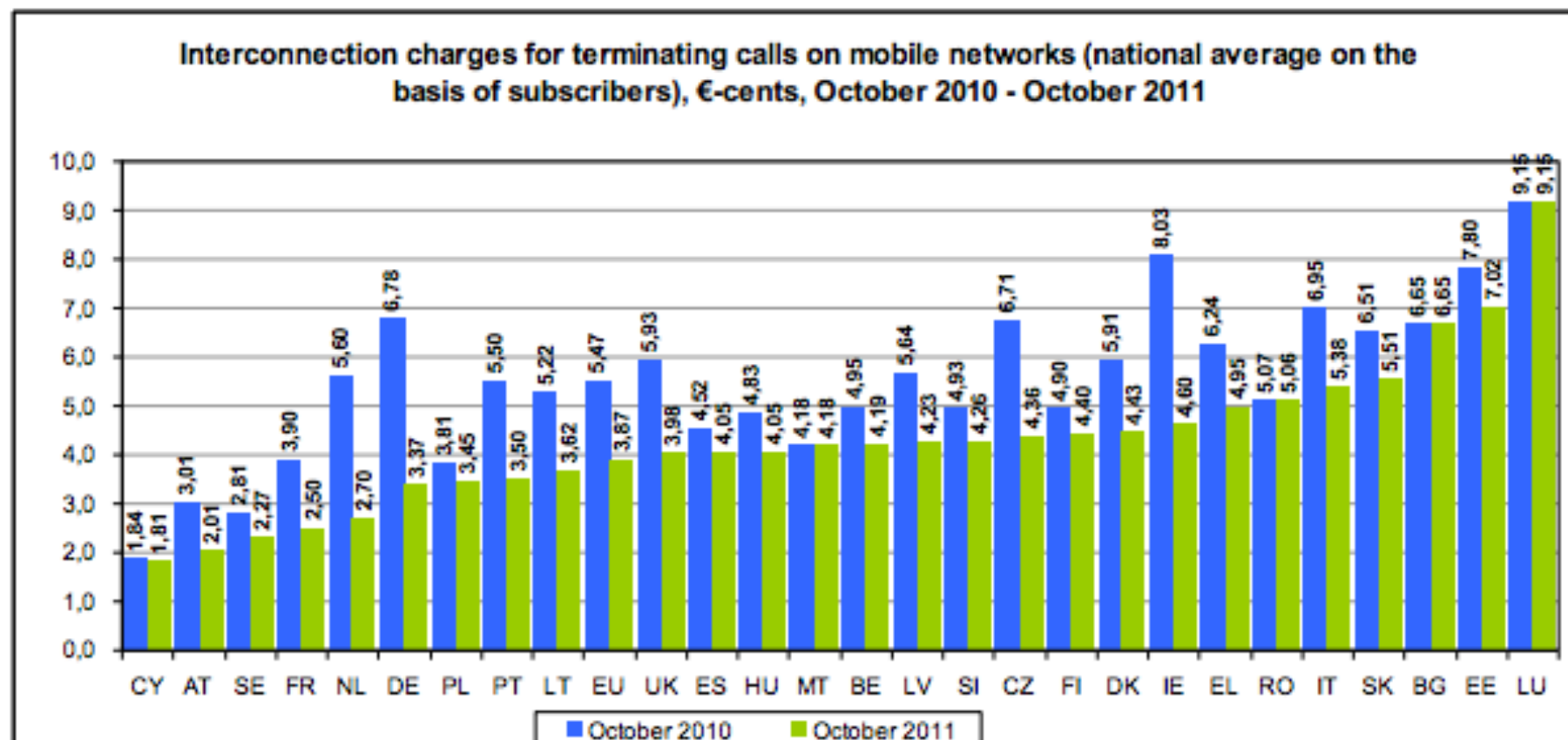
- With no roaming fees, officials believe the single market will mean foreign operators will be able to compete for British customers, and vice-versa. They are likely to form airline-style alliances that will lead to mergers, it is hoped.
- The plans **set up a clash between Brussels and telecoms** bosses such as Vodafone chief executive Vittorio Colao, who in February called for a "*moratorium on regulation*" in telecoms. He said **industry had been a target for too long and it threatened employment**. Neelie Kroes, the Commisisoner behind the reforms, told Mr Colao she would "call your bluff".
- "Consolidation is not the aim. The aim is a single market, but if it means we get fewer, stronger operators, that's good."

Example 2: “Terminierungsentgelte” (Interconnection (termination) Fees)

What is this?

→ Fees that (mobile) telco A has to pay for interconnection of the two networks during a call into network of telco B.

Exercise 4 - Interconnection fees (1)



Source: Commission services

Regulation of Interconnection fees: A Case History

April 2005	Study on mobile communication market shows that the four German MNOs have a remarkable market power against the fixed line operators
November 2005	Bundesnetzagentur considers regulation of IC fees
August 2006	First regulation on German mobile communication market: ex ante regulation for IC fees
April 2008	Federal Administrative Court (Bundesverwaltungsgericht) decides that Bundesnetzagentur is allowed to regulate the German mobile communication market.

Exercise 3 - Interconnection fees (3)

May 2009	The European Parliament established the Body of European Regulators for Electronic Communications (BEREC). The EU wants the IC fees harmonized and drastically lowered (1-2 ct./min.).
November 2012	Decision of the Bundesnetzagentur regarding mobile termination rates, valid for two years (1.85 ct./minute).
June 2013	The European Commission has requested the German telecoms regulator (BNetzA) to amend or withdraw its plans which would result in German mobile termination rates (MTRs) more than 80% higher than in most other Member States. The Recommendation addressed to the German regulator requires it to either withdraw its proposals or amend them in order to bring them in line with the approach recommended by the Commission.

- IC fees in Germany:

	IC fees per minute (valid until November 2010):			
Valid until	T-Mobile/ Telekom	Vodafone	E-Plus	O ₂
30/11/2010	6,59 Cent	6,59 Cent	7,14 Cent	7,14 Cent
30/11/2012	3,38 Cent	3,36 Cent	3,36 Cent	3,39 Cent
30/11/2013*	1,85 Cent			
30/11/2014*	1,79 Cent			

- Mobile termination rates symmetric in Germany since 1st of December 2012.
- *Disputed by the EC!



EUROPÄISCHE KOMMISSION
PRESSEMITTEILUNG

Brüssel, 20. Oktober 2014

Telekommunikation: Bundesnetzagentur Mobilfunktarife

**Kommission
zum fünften
Mal fordert
von
niedrigere**

Die Europäische Kommission hat die deutsche Regulierungsbehörde für Telekommunikation (Bundesnetzagentur, BNetzA) zum fünften Mal zur Änderung oder Rücknahme eines Vorschlags zu Mobilfunk-Zustellungsentgelten (MTR) aufgefordert. Die BNetzA will für den Betreiber sipgate Wireless bis zu 80 % höhere MTR genehmigen, als sie in den meisten anderen EU-Mitgliedstaaten angewandt werden – Kosten, die letztlich von den Mobilfunkkunden getragen würden.

Neelie Kroes (@NeelieKroesEU), Vizepräsidentin der Kommission, erklärte dazu: „Ich halte es für sehr bedenklich, dass Deutschland nach wie vor die vernünftigen Forderungen der Europäischen Kommission ignoriert – und sich damit von allen anderen Mitgliedstaaten absetzt. Die deutsche Praxis bei den Mobilfunk-Zustellungsentgelten steht im krassen Widerspruch zum Binnenmarkt und schadet den Verbrauchern.“

Zustellungsentgelte sind die Gebühren, die sich die Telekommunikationsnetzbetreiber gegenseitig für die Anrufzustellung zwischen ihren Netzen in Rechnung stellen, wobei jeder Netzbetreiber im Hinblick auf den Zugang zu den Kunden in seinem eigenen Netz eine marktbeherrschende Stellung innehat. Diese Kosten schlagen sich letztlich in den Preisen nieder, die Verbraucher und Unternehmen zahlen müssen.

Im Mai 2014 wurde eine Untersuchung eingeleitet. Während dieser Untersuchung (siehe [Meldung](#)) konnte die deutsche Regulierungsbehörde nicht rechtfertigen, warum sie eine Sonderbehandlung beansprucht und es ihr gestattet werden sollte, von der im EU-Telekommunikationsrecht vorgesehenen Berechnungsmethode für MTR abzuweichen (siehe [IP/09/710](#) und [MEMO/09/222](#)). Das Gremium europäischer Regulierungsstellen für elektronische Kommunikation (GEREK) hat sich dem Standpunkt der Kommission elektronisch angeschlossen.

Exercise 3

Interconnection fees (5)

http://europa.eu/rapid/press-release_IP-14-1180_de.htm



- Are the two regulations just discussed here (roaming vs. termination fees) interconnected or separate issues from each other?
- What other issues do you think should be regulated in the mobile telco market?

Answers to **Exercise 4 (Regulation by Licensing)** were developed and the issues discussed only orally during the session on 21 June 2016. You may refer to the respective lecture notes and/or your personal notes.