

**ITU Regional Seminar on Costs and Tariffs and Meeting of  
the Study Group 3 Regional Group for Asia and  
Oceania (SG3RG - AO)  
28-30 May 2012, Bali, Indonesia**

**Session 7: International Mobile Roaming and  
Tariff issues for cross-border  
connectivity for mobile**

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# Agenda

- International Roaming
  - Regulatory and political problem
  - Market failure?
  - IR Markets
  - First Summary
- Cases
  - The EU Case
  - Lessons Learnt?
  - Next Steps
  - New Zealand/Australia
  - Saudi Arabia and others

# International Roaming

- International Roaming is an electronic communication service, which allows subscribers of a mobile network in one country to send and receive voice and/or data in another country in the mobile network of a roaming partner.
- The service is delivered based on roaming contracts between the roaming partners networks specifying technical and commercial conditions of international roaming.

# IR as an economic and political problem

- International roaming services were and still are perceived as very expensive
- Prices for IR services do not properly reflect the underlying cost relations
- In the EU these high roaming tariffs are seen as a major obstacle towards an internal electronic communications markets
- No surprise that consumer protection agencies, politicians and regulators seek to reduce roaming tariffs.

# Market failure?

- What are the markets involved with IR (voice telephony)?
  - Retail market for IR services in home country:
    - MNOs and MVNOs supplying IR services to their subscribers
    - Subscribers demanding IR services
  - Wholesale market for IR services:
    - Domestic MNOs supplying IR wholesale services to MNO and MVNOs of other countries
- These markets are shown in following picture (2-country example)

# IR Markets

**COUNTRY A:**  
**MNOs:  $A_1, A_2, A_3$**

**COUNTRY B:**  
**MNOs:  $B_1, B_2$**

**Country A**  
**IR Retail market:**  
 **$A_1, A_2, A_3$**   
**Subscribers of  $A_1, A_2, A_3$**

**Country B**  
**IR Retail market:**  
 **$B_1, B_2, B_3$**   
**Subscribers of  $B_1, B_2, B_3$**

**Country A**  
**IR Wholesale market:**  
**Supply:  $A_1, A_2, A_3$**   
**Demand:  $B_1, B_2$**

**Country B**  
**IR Wholesale market:**  
**Supply:  $B_1, B_2$**   
**Demand:  $A_1, A_2, A_3$**

# IR Markets

- Remarks:
  - Retail markets: subscribers of a certain MNO can only buy IR services from his MNO; „bundled“ service
  - Contracts on the wholesale markets are normally reciprocal:
    - If  $A_n$  buys wholesale IR services from  $B_m$ ,  $B_m$  will buy wholesale IR from  $A_n$
  - Regulation of retail market in Country A depends on results of the market process of wholesale market in Country B and vice versa
  - Regulation of wholesale market in Country A creates benefits only for subscribers in Country B. Which regulator would like to regulate a market without creating benefits for domestic customers?

# IR Markets

- Remarks:
  - If retail prices are excessive in the sense of Art 102 EU-Treaty (Abuse of a dominant market position) competition authorities have to prove this. Two procedures before the EC failed here, neither single nor joint dominance could be proved.
  - If wholesale prices (**I**nter **O**perator **T**ariff) appear excessive, again dominance and abuse has to be proved on each single wholesale IR market.
  - Close organizational links between MNOs in alliances, GSM Association acting as clearing house for IR Contracts and MNOs covering several countries of a region create a climate for implicit collusion.



# IR Markets

- **Remarks:**

- Competition intensity on the wholesale level is dependent on the ability of home MNOs to control subscriber behaviour in the host country, if the home MNO has concluded wholesale IR contracts with many or all MNOs of the host country.
  - Upon entry into the host country the network with the strongest signal is selected unless traffic management (determination of the preferred network or by SIM programming) overrides the selection based on signal strength.
  - In such cases subscribers of a given MNO are with a very high probability directed towards the preferred wholesale IR services supplier in the host country.
  - This could lead to a stronger position in the price negotiations, but is in fact mitigated by multiple IR contracts with MNOs of the host countries.

# IR Markets

## Remarks:

- These remarks indicate that there is indeed a market failure on the wholesale IR markets, which cannot be cured by competition authorities and NRAs individually.
- One problem is the proof of abuse of dominant positions. Very delicate issue in case of joint dominance.
- The other problem is the fact that intervention in the wholesale markets will not directly create benefits for the mobile users of a country. NRAs and NCAs of different countries must cooperate to create benefits for all subscribers of the region

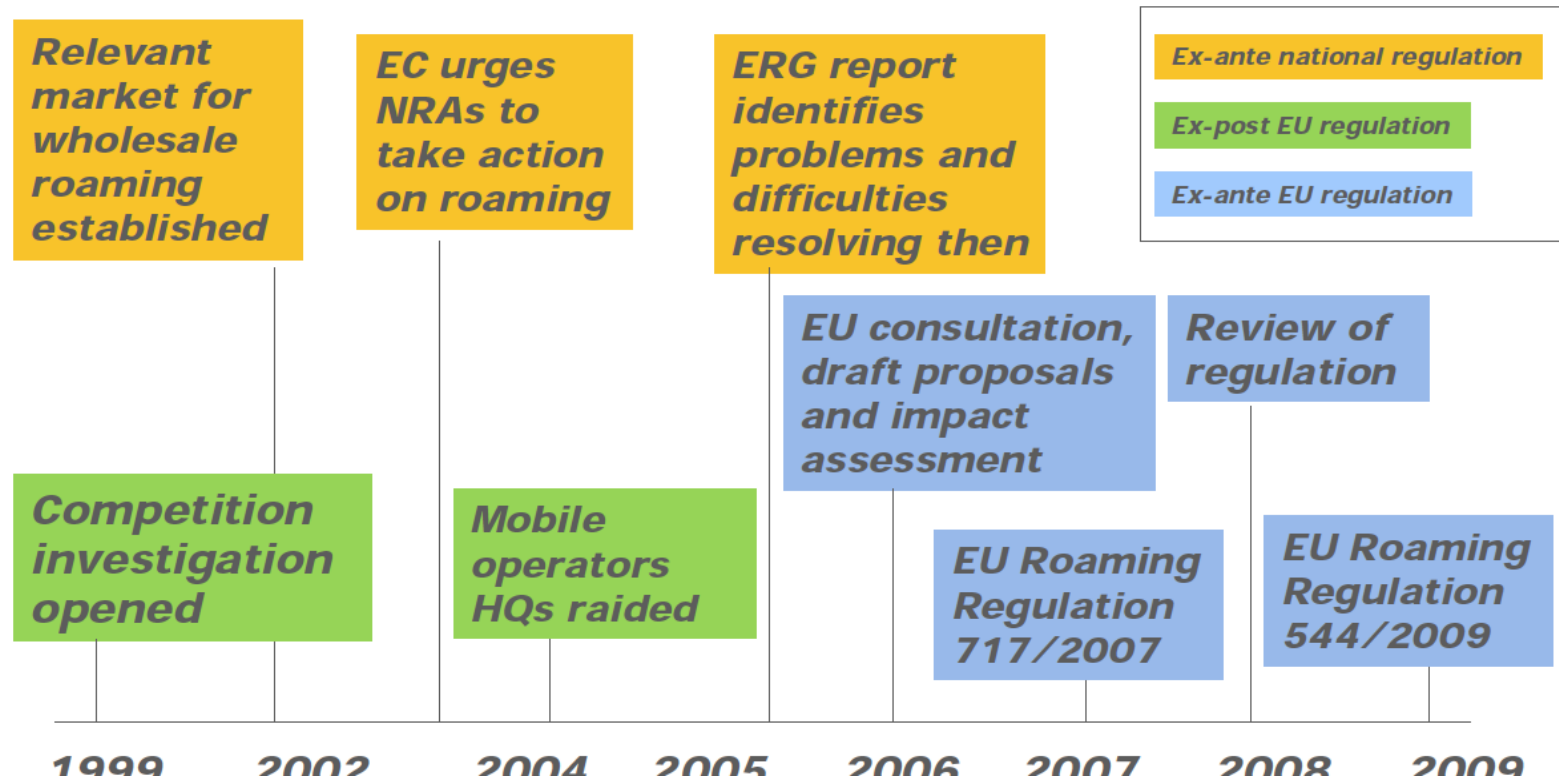
# First Summary

- IR may lead to a situation of market failure on wholesale and in some cases also on retail IR markets
- Intervention by NCAs and NRAs are of limited effect
- Even in the EU at European level the EC as the competent competition authority for cases with European dimension could not prove abuse of market power of Vodafone and T-Mobile.
- The ERG as the body of European telecom regulators asked the EC in a letter of 2005 to intervene on the EU level, indicating that the market failure on wholesale IR markets cannot be cured by NRAs individually.

# The EU Case



## A rough guide to EU roaming history

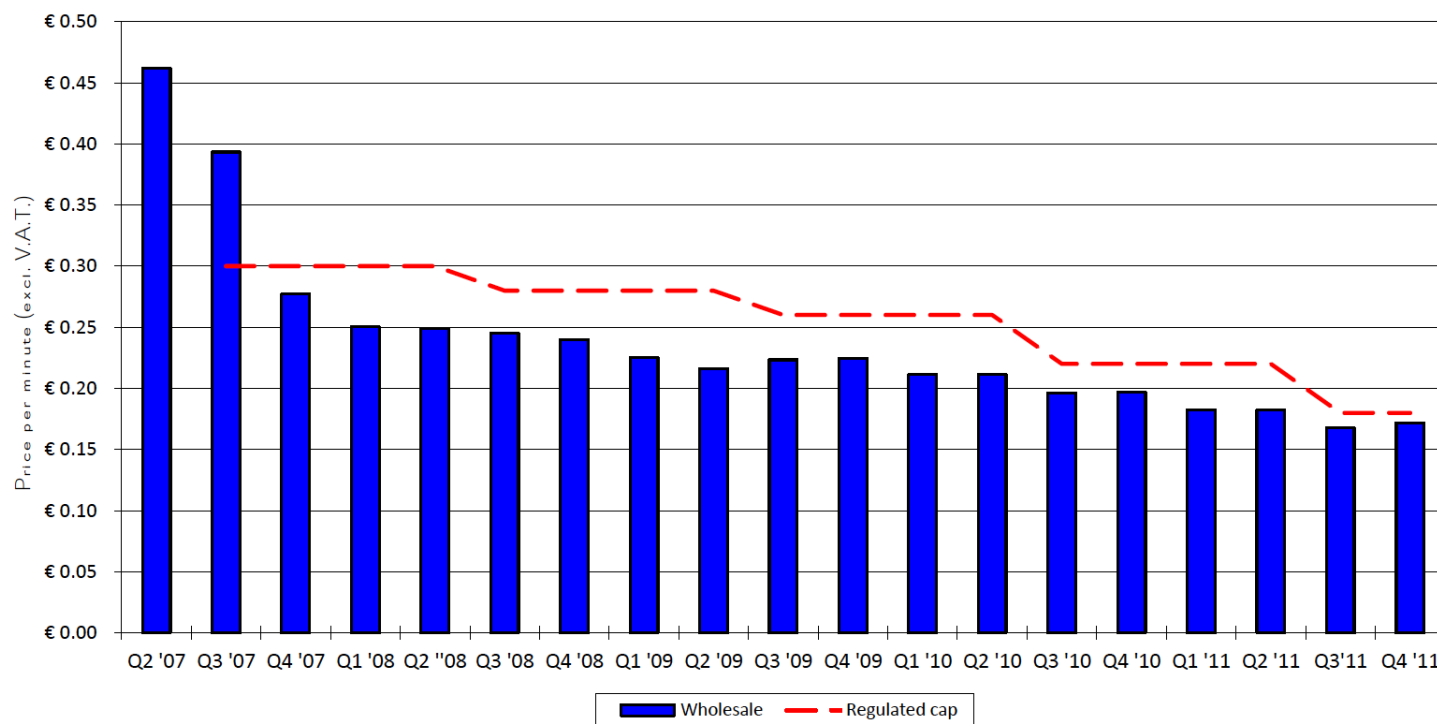


# The EU Case

- Basic approach of the „Roaming Regulation“:
  - EU wide regulation by direct EU legislation based on single market competences
  - Price ceilings for wholesale and retail IR tariffs, implying that there is market failure at both levels of the value chain
  - Voice and SMS
  - Later ceiling for data
  - Information and transparency
  - Glide path

# The EU Case: Wholesale IOTs

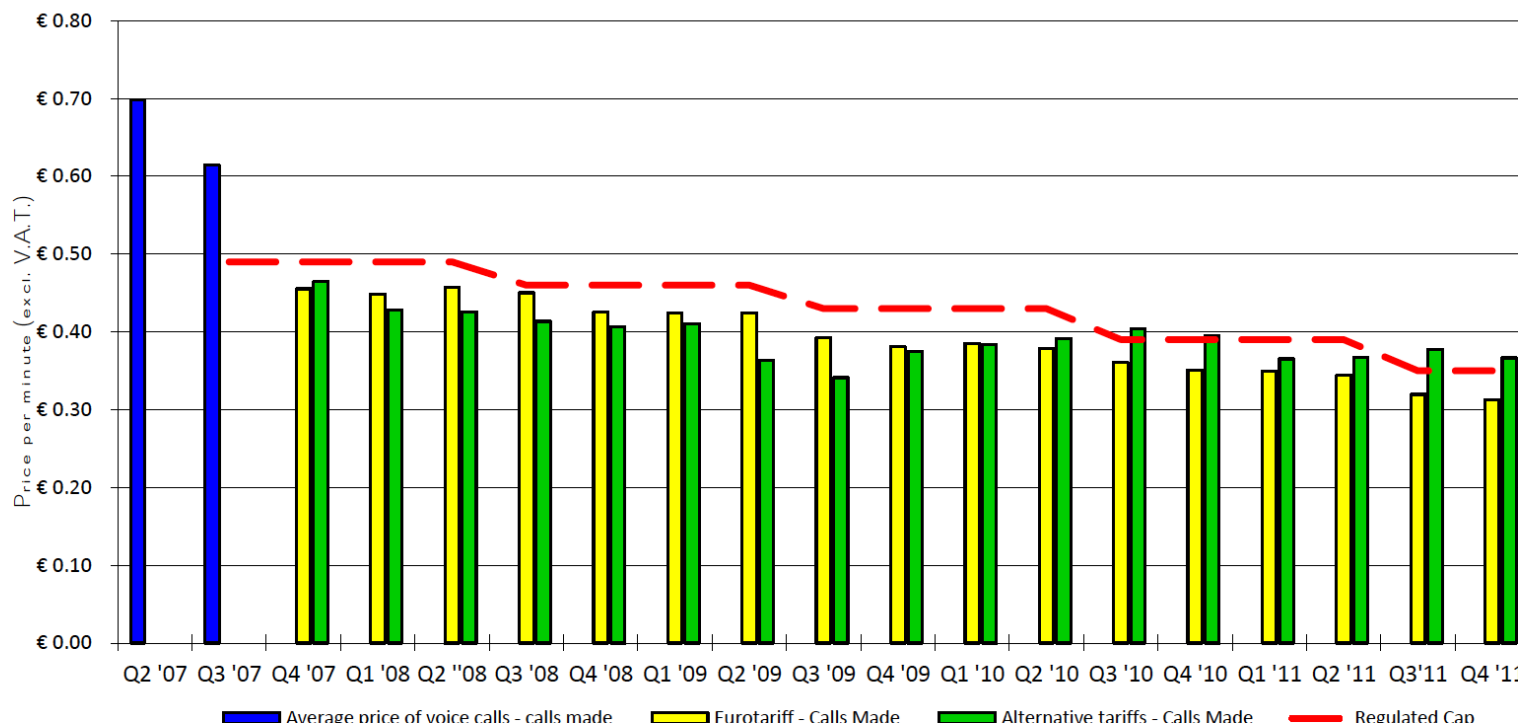
Figure 14: EEA average price per minute for wholesale non-group roaming voice calls  
(EU only for Q2 2009 - Q1 2010)



Source: BEREC

# IR Retail Prices

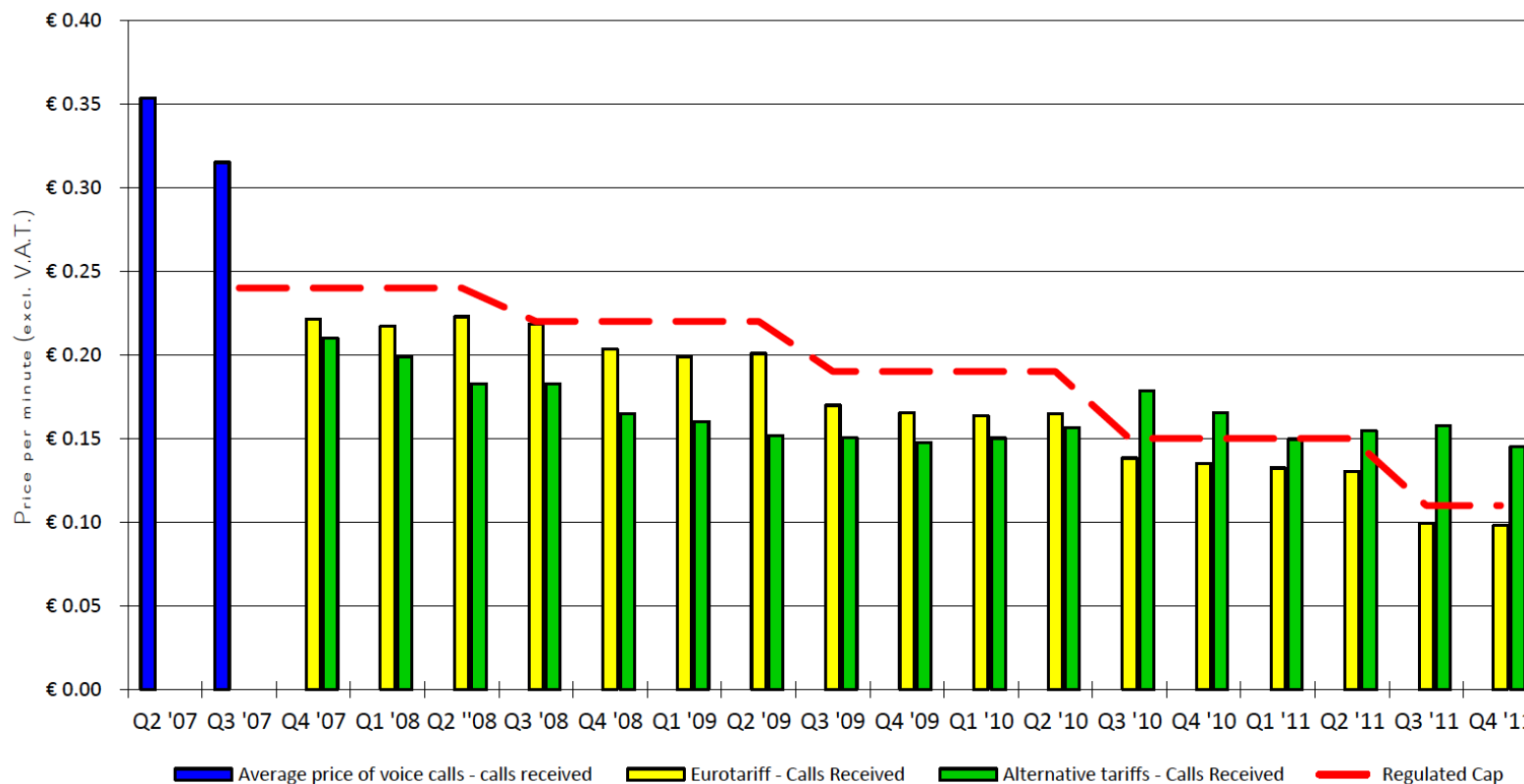
Figure 5: EEA average retail price per minute for intra-EEA roaming voice calls made:  
Eurotariff and alternative tariffs (EU only for Q2 2009 - Q1 2010)



Source: BEREC

# The EU Case: Retail Roaming Prices

Eurotariff and alternative tariffs (EU only for Q2 2009 - Q1 2010)

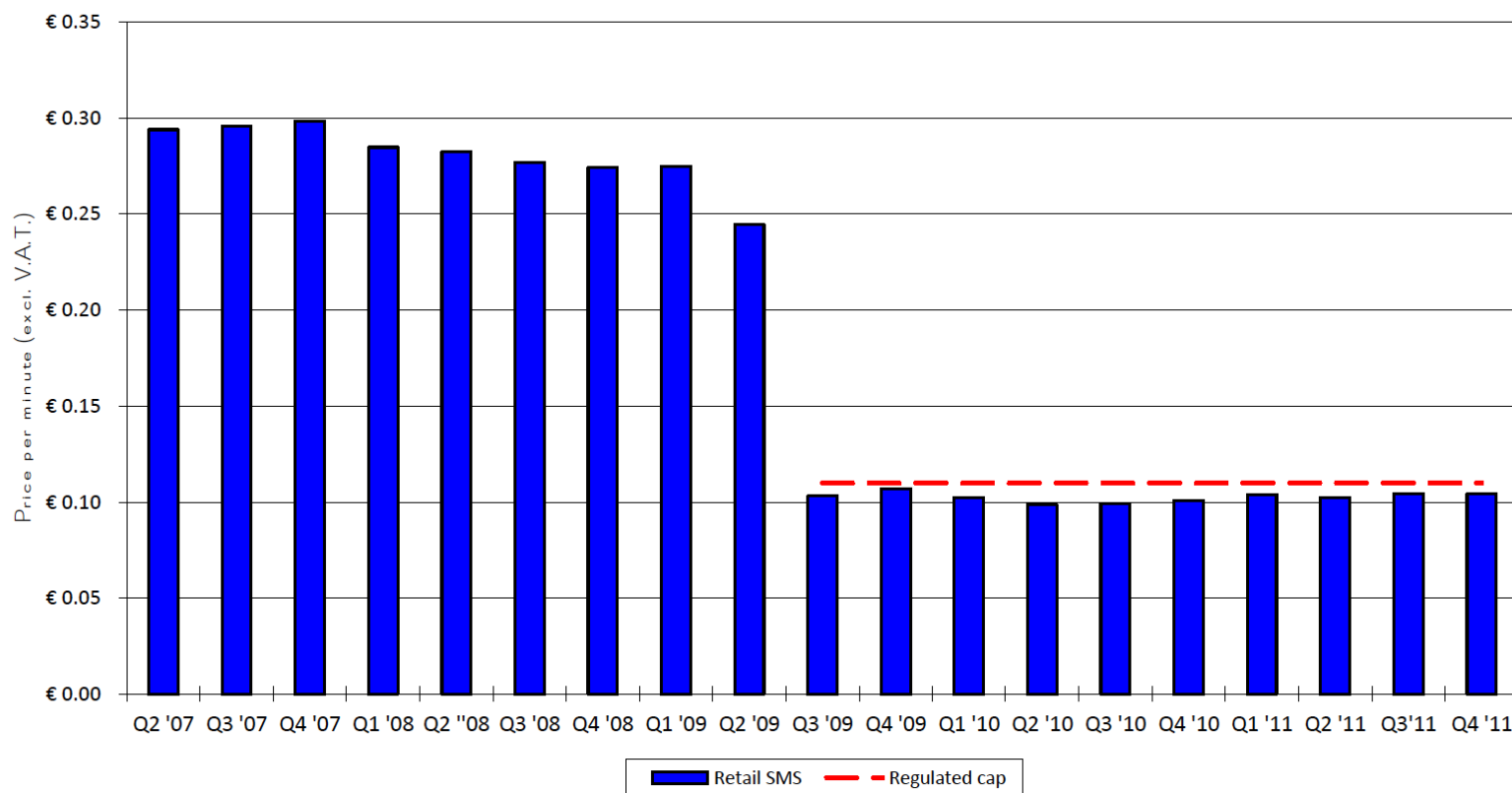


Source: BEREC



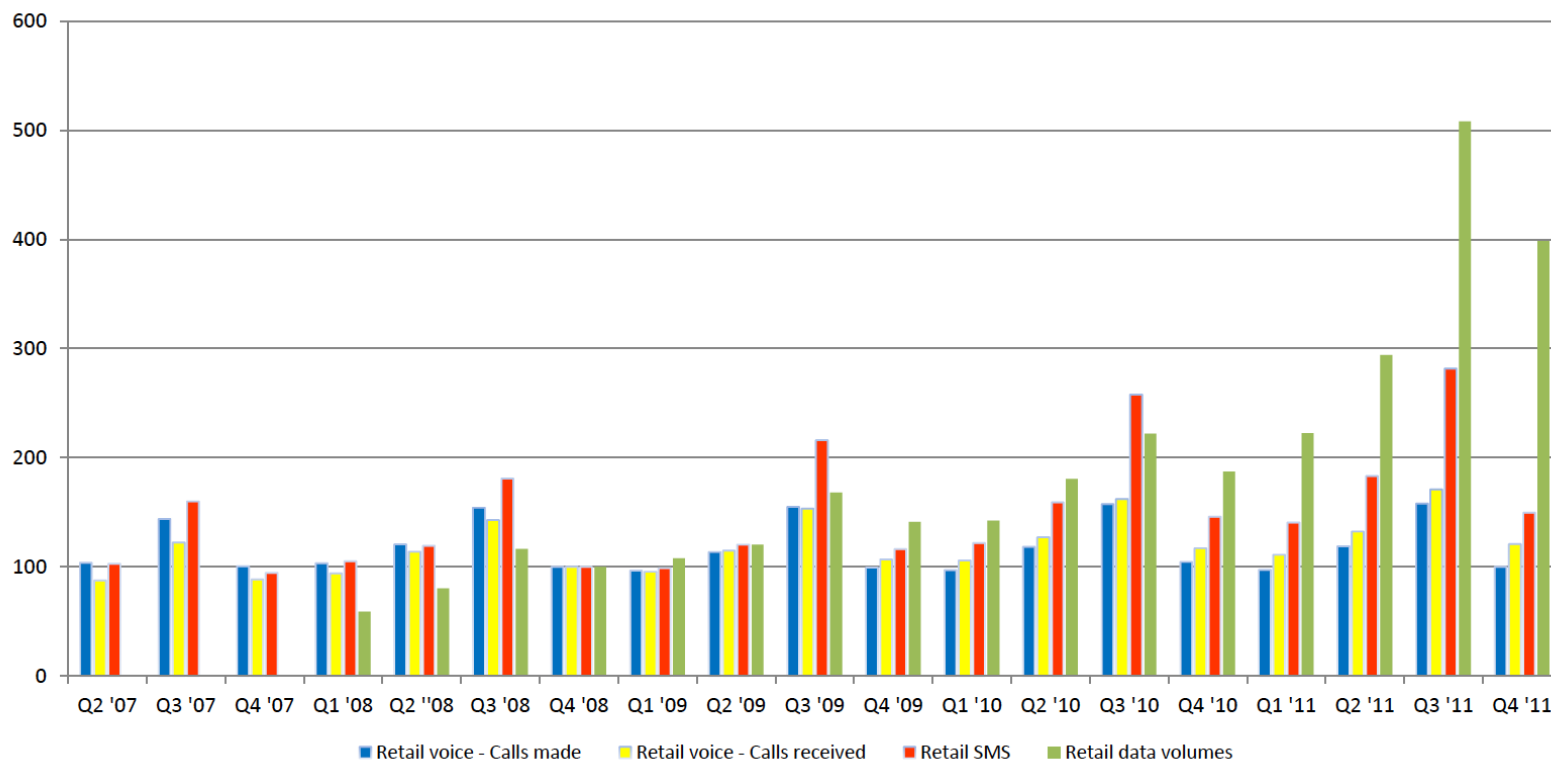
# The EU Case: SMS

## Average price for Intra EU SMS



# The EU Case: Volumes

Figure 19: Trends in volume for retail intra - EEA roaming voice calls, SMS and data  
(Q4 2008 = 100)



Source: BEREC

# The EU Case: Lessons learnt?

- Significant price drops in regulated segments, prices of IR with non-EU countries stayed rather constant
- High degree of compliance on the side of MNOs
- Disappointing reaction of volumes except for data and SMS
  - Calls volumes have practically stagnated, only slight increases, although prices were dropping by 50% between 2007 and 2011
  - Implied elasticity of demand close to -0,22, which is much lower than expected and at first sight destroys the economic case of the Roaming Regulation.
  - What is wrong? The EU is still recovering from the financial crisis starting in 2007. The business traveling sector is still far below the values before the financial crises and tourism has not yet reached the same levels as in 2007/2008. In other words: the income elasticity has been overlooked in most reactions on the results of the Roaming Regulation.

## The EU Case: Lessons learnt?

- Expectations of intensified competition below the ceiling rates were not fulfilled: still no significant competition on retail and wholesale markets.
- Setting ceilings by itself cannot solve the underlying competition problem
- New approach seems required.

# The EU Case: Next steps

- After intensive consultations and discussions with the industry and NRAs the EC proposed in July 2011 a revised version of the Roaming Regulation 2009.
- The proposed Roaming Regulation 2012 has already passed the Council and the European Parliament (10 May 2012)
- The EU continues to regulate wholesale and retail IR services, definite goal is to remove the difference between “national” and roamed calls and SMS by 2015 according to i2010
- The EU introduces two “structural” measures to create more intensive competition on the IR-Markets:
  - Unbundling of IR services from subscriptions, which means any customer will have the right to chose his/her IR provider independently from existing subscriptions
  - MNOs will have the obligation to provide for wholesale services for resale by third parties and to publish a Reference Offer containing all necessary conditions for wholesale access to IR services

# The EU Case: Next steps

- Unbundling IR from other mobile services:
  - IR is in many cases only a rather unimportant part of the communications budget of residential and business customers. Therefore, subscribers do not place much weight when deciding on mobile subscriptions.
  - Introducing IR as an independent service, which could be provided by a different operator might help to create more awareness for prices of IR services.
  - There are still some unsolved technical problems with the implementation of this additional feature. Solutions will be found on the basis of the IMSI and remodelled SIM cards.
  - These services must be offered by 01.07.2014

# The EU Case: Next steps

- Access to wholesale IR services
  - The supply side of IR wholesale markets is more or less limited to MNOs of the respective host country.
  - This access obligation has been introduced, to allow MNOs a broader choice
  - In addition, each MNO can act also as MVNO and resell IR services to his own and other customers
  - This measure is targeted against too high IOTs and in combination with the unbundling of IR services against too high margins between wholesale and retail prices for IR services.
- These measures have a long term perspective, no quick fix!!

# New Zealand/Australia

- The New Zealand and Australian governments commenced an investigation of roaming in April 2011:
  - to determine whether there was limited competition in the relevant wholesale markets, if so,
  - whether this was affecting end-users
  - whether coordinated legislative intervention was appropriate.
- A draft report for consultation is to be published in June 2012. A final report is due by December 2012.

It will then be up to the two Ministers to decide whether to act on the proposals (if any) set out in the final report.

- Implementing such proposals may require the signing of a protocol to the free trade agreement between New Zealand and Australia, the CER, followed by the adoption of appropriate legislation in each country.
- A significant drop in IR tariffs was reported after the initiation of this project.



## Other cases

- Discussion between NRAs in Central America and the Caribbean Islands on International Roaming issues.
- SA's NRA CITC introduced a floor on roaming prices to prevent unfair competition by ZAIN, no "ONE NETWORK" in SA
- Etc.....

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**Thank you very much for your  
questions, comments and ideas**

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