

**INTUG**

# **Mobile telecommunications issues for users**

**Ewan Sutherland**

Executive Director

**International Telecommunications  
Users Group**

ewan@intug.net

**FCC, DC 25 April 2003**

**www.INTUG.net**

# INTUG contents

- successes of mobile
- market abuses
- fixed-to-mobile rates
- international mobile roaming
- SMS
- expensive data rates
- conclusions

# INTUG what is INTUG?

- members
  - national associations
  - corporations
  - individuals
- activities
  - ITU and WTO
  - OECD
  - APEC TEL, CITEL and EU

# INTUG our aims

- real and effective competition
- genuine choice for users
- lower prices
- higher quality
- more innovative services
- constructive co-operation with
  - international bodies
  - governments
  - regulators

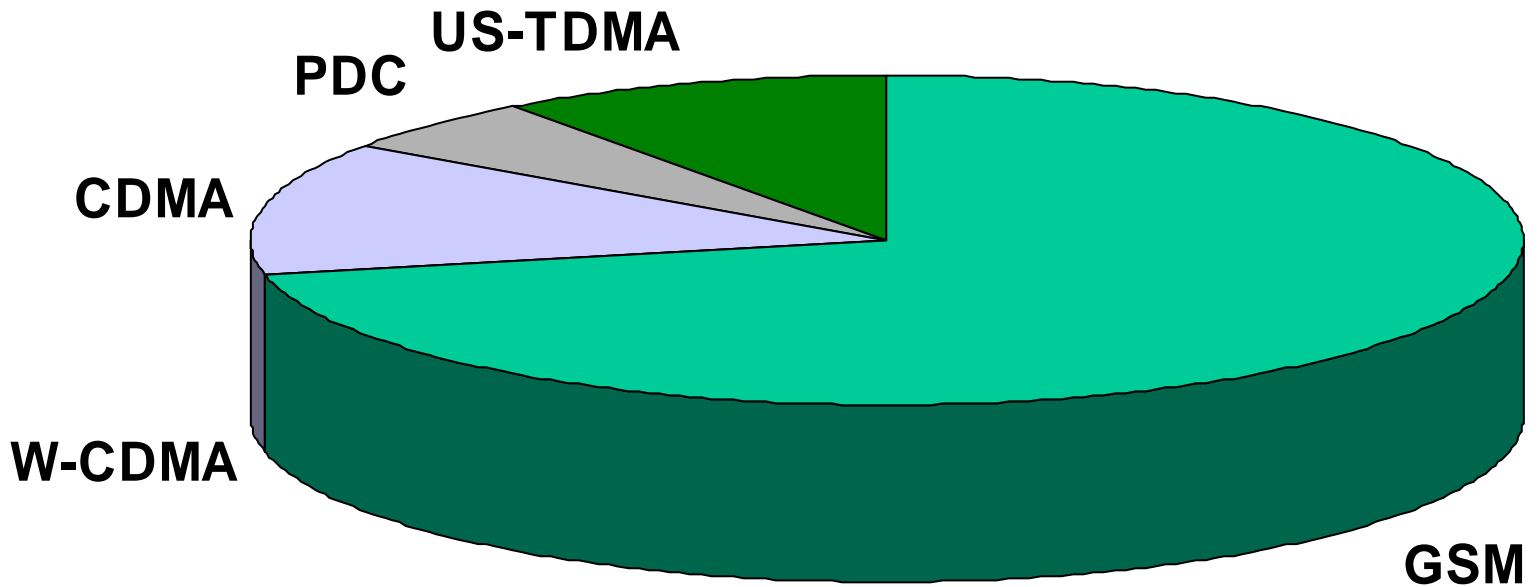
# INTUG priorities

1. open access to global mobile networks
2. regulatory best practice
3. liberalization
4. leased lines
5. IP telephony
6. digital divide
7. universal access
8. numbering

# INTUG successes of mobile

- expanding access
  - especially pre-paid
  - especially developing/emerging markets
- employment
- manufacturing
- new markets
- creation of a European high-tech “success” story

# INTUG a market of many technologies

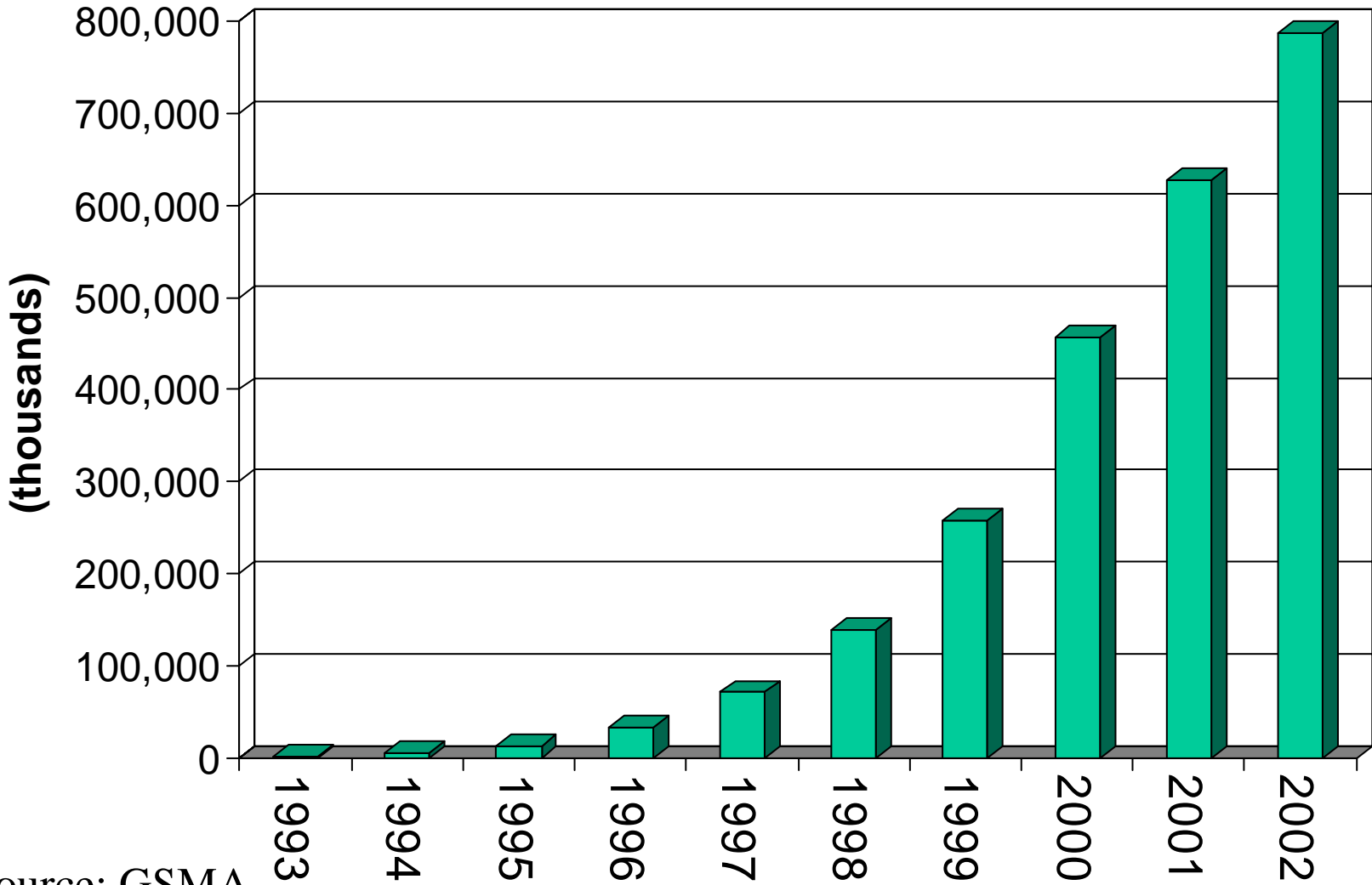


Source: GSMA.

FCC, DC 25 April 2003

[www.INTUG.net](http://www.INTUG.net)

# INTUG GSM global subscribers



Source: GSMA.

FCC, DC 25 April 2003

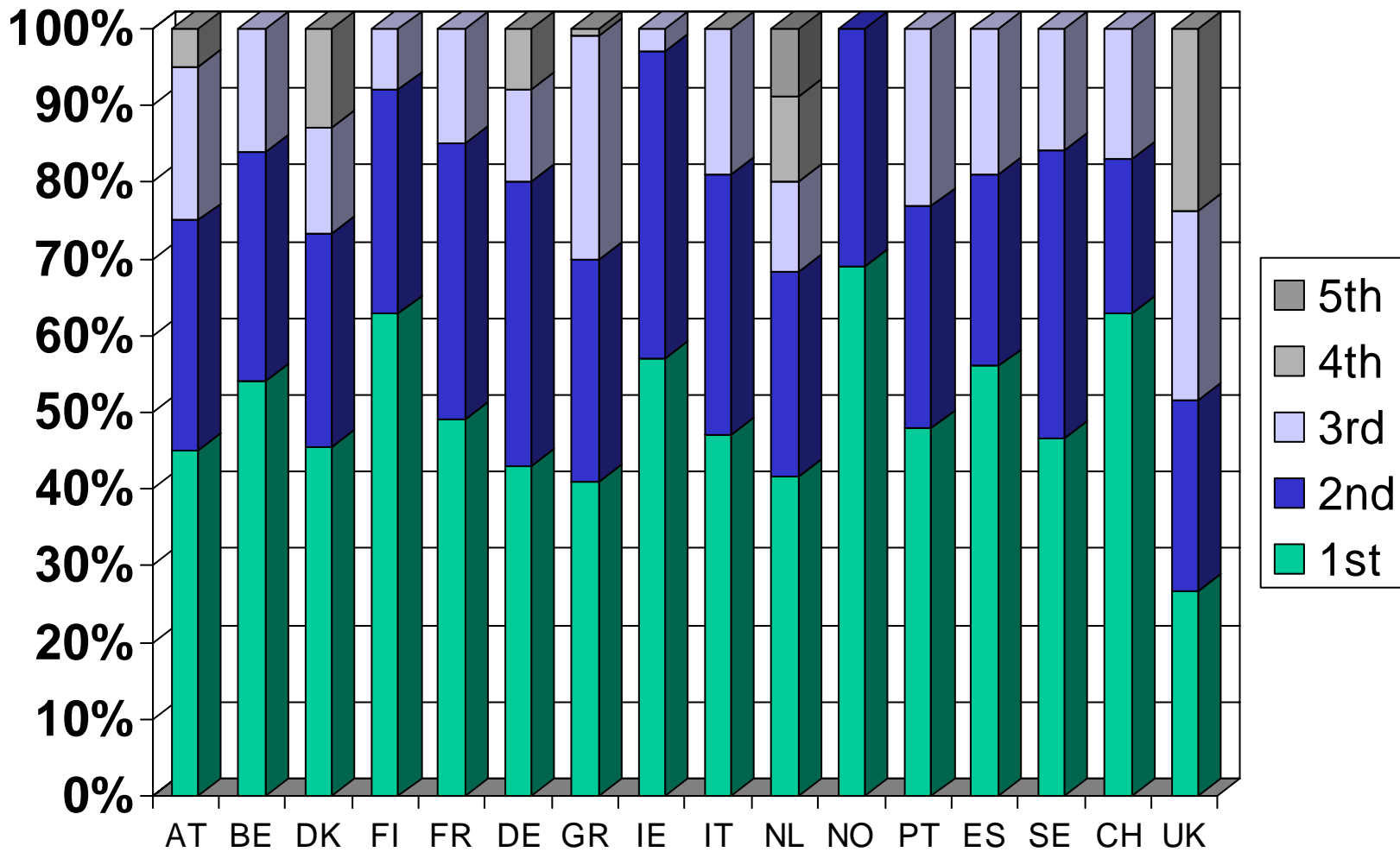
[www.INTUG.net](http://www.INTUG.net)



# INTUG a second GSM operator would

- bring competition
- allow the incumbent fixed operator to adjust to the world of competition
  - instead it encouraged lobbying
- European Union members states
  - licensed third (and fourth) operator
  - N+1 in 3G

# INTUG market shares of mobile operators

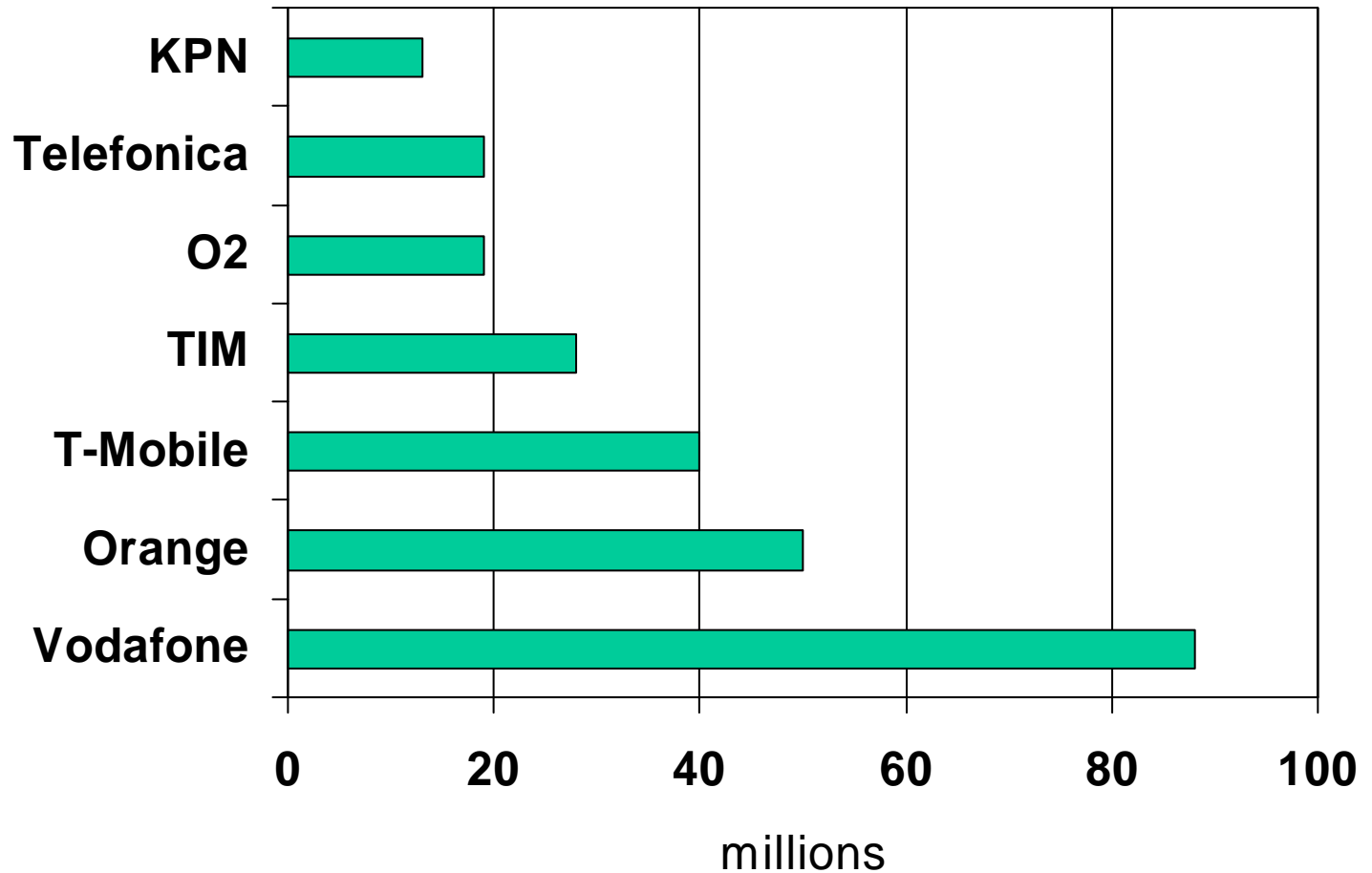


FCC, DC 25 April 2003

[www.INTUG.net](http://www.INTUG.net)

Source: Squires Sanders Demsey & Ovum

# INTUG numbers of subscribers



FCC, DC 25 April 2003

[www.INTUG.net](http://www.INTUG.net)

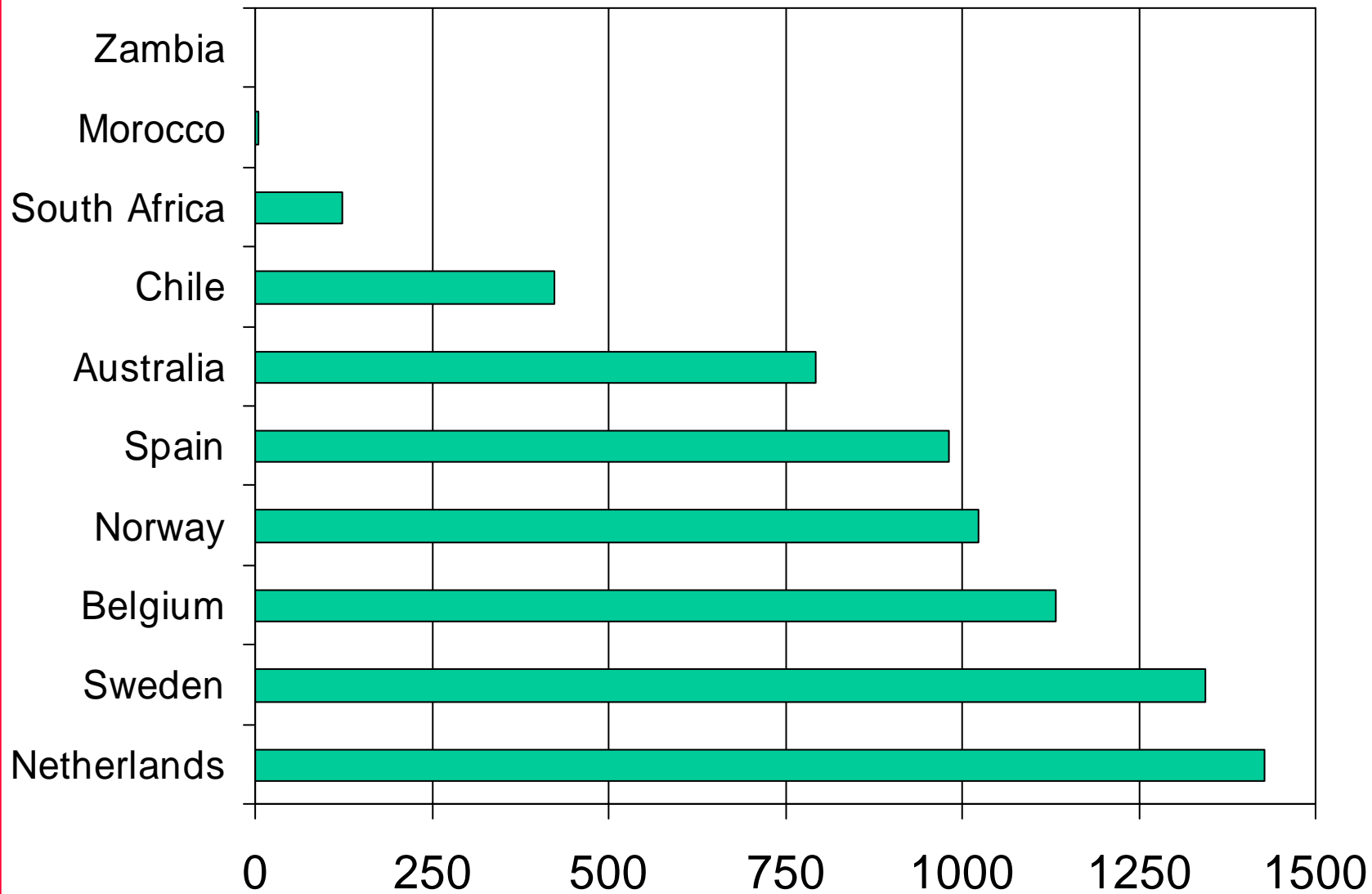
Source: Squires Sanders Demsey & Ovum

# INTUG market abuses

- call termination prices:
  - domestic
  - international
- international mobile roaming
- Short Message Service (SMS)
- call origination on freephone
- financial market problems

caused by an unwillingness to compete.

# INTUG fixed/mobile price difference (%)



Source: INTUG from spot market.

FCC, DC 25 April 2003

[www.INTUG.net](http://www.INTUG.net)

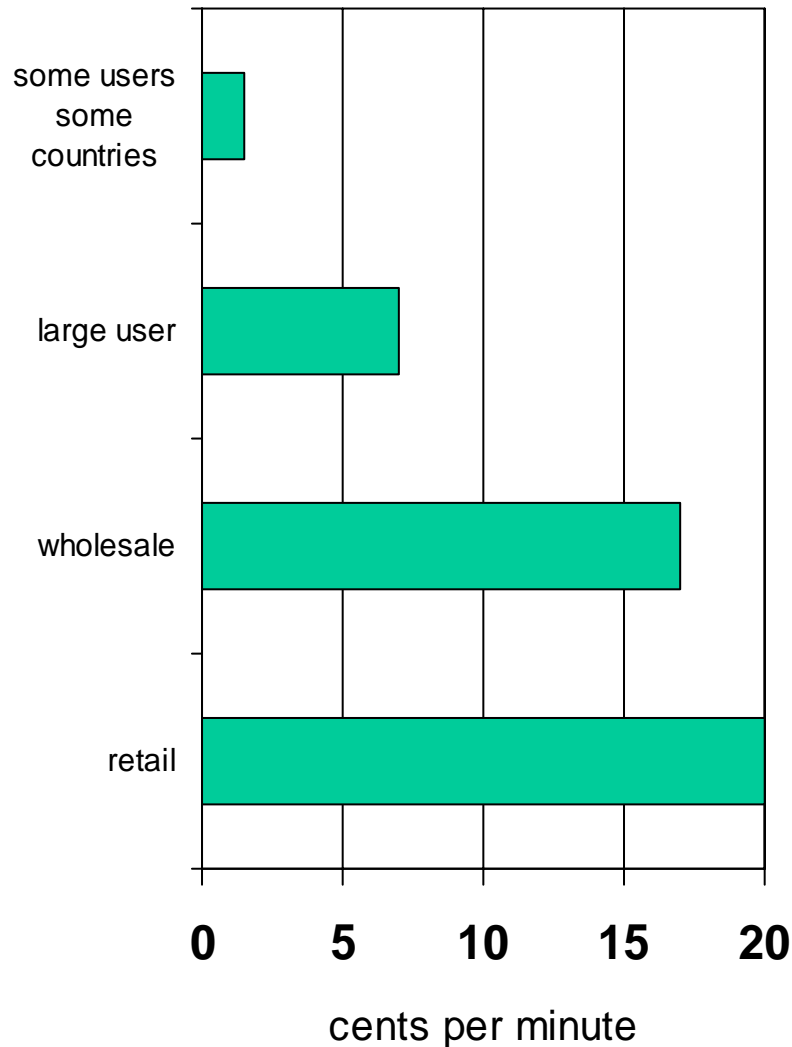
# INTUG call termination prices

- cheap origination because of regulated termination on fixed networks
- unregulated termination on mobile leading to high and sometimes rising prices
- leveraging power into origination markets
- started at home but extended abroad
- how to drive down prices?

# INTUG regulation of mobile

- left unregulated:
  - a European “champion”
  - a torch-bearer for competition
  - overwhelming lobbying by operators
  - uncertain legal basis
- gradual recognition of problems
- series of regulatory decisions
- rethinking the definition of SMP
- also competition law actions

# INTUG discrimination



- against new fixed entrants
- some very modest signs of counter-vailing buyer power for large users
- “cost” seems to around 5-6 cents/min

Source: INTUG.



# INTUG United Kingdom

- action by the Office of Telecommunications to reduce rates
- mobile network operators appealed to Competition Commission
- long and very detailed proceedings
- enforced massive cut in rates:
  - 15% in 2003
  - RPI minus 14% for following 3 years
- operators seeking judicial review
  - every extra day makes them a lot of money

# INTUG single operator definition

- consensus of competition authorities:
  - Nederlandse Mededingingsautoriteit (NMa)
  - UK Competition Commission
  - EC DG Competition
- Independent Regulators Group (IRG)
- re-affirmed by European Commission in the Recommendation on Relevant markets (February 2002)

# INTUG EU new legislation

- mobile markets:
  - access and call origination on public mobile networks
  - voice call termination on individual mobile networks
  - wholesale market for international mobile roaming on public mobile networks
- these will now be assessed by 15 NRAs, then the Accession Countries
- avoided (for now) the question of contestability between fixed and mobile

# INTUG new process

1. define service market
2. define geographical market
3. test if it is (not) competitive
4. test for operators with (new) SMP:
  - dominance
  - joint dominance (oligopoly)
5. decide on obligations on SMP operators
6. repeat until competitive

# INTUG RPP *versus* CPP

- some people claim RPP is better
- inconceivable a country could switch from CPP to RPP
- countries with CPP see substantially faster subscriber growth

# INTUG US government

- Federal Communications Commission
  - consumer alert (September 2002)
  - NPRM on international settlement rates (October 2002)
  - extensive (defensive) filings by MNOs
- US Trade Representative
  - annual “1377” report
  - F2M has been an issue for several years

# INTUG ITU

- an issue at ITU-T Study Group 3
- stopped in December by Syria and Togo demanding higher international fixed rates
- had been substantial agreement, but not on:
  - real level of cost-orientation
  - network externalities
  - inclusion of licence fees

# INTUG WTO

- already has long lists of disputes between countries
- it would be slow, consequently enormously beneficial to MNOs
- relief might come in other sectors!
- applicability of the GATS is not accepted by all parties, certainly not by MNOs



# INTUG WTO - GATS

- commitment to **cost-oriented interconnection** to major suppliers at any technically feasible point
- **major supplier** is a supplier which has the ability to materially affect the terms of participation (having regard to price and supply) in the relevant market for basic telecommunications services as a result of:
  - (a) control over essential facilities; or
  - (b) use of its position in the market.
- **essential facilities** of a public telecommunications transport network or service:
  - (a) are exclusively or predominantly provided by a single or limited number of suppliers; and
  - (b) cannot feasibly be economically or technically substituted in order to provide a service.

# INTUG WTO and roaming

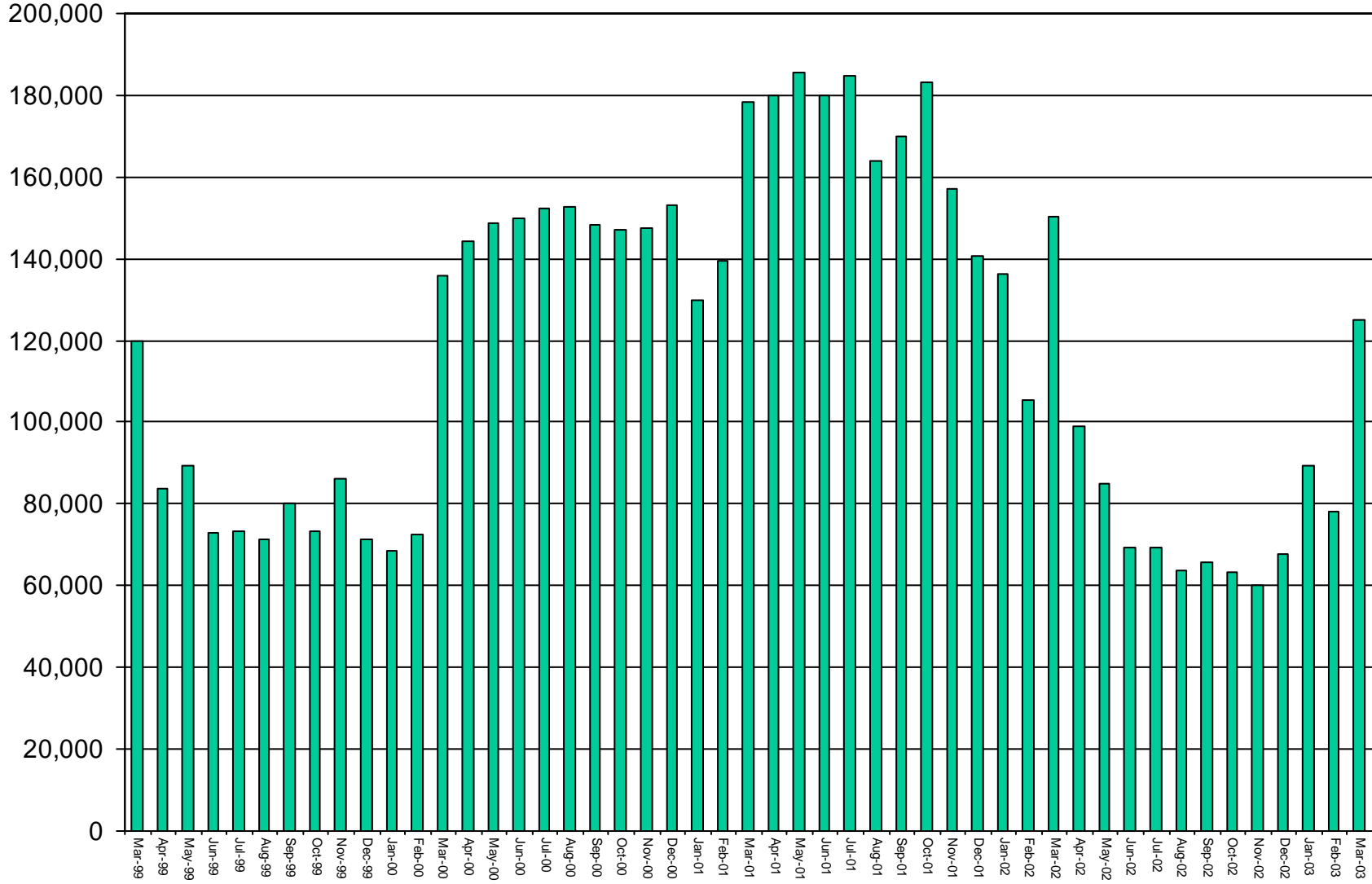
- since the GATS applies to fixed-to-mobile termination
- then it should also apply to the provision of cost-oriented international mobile roaming

# INTUG mobile number portability

- now established global best practice
- prerequisite for a competitive market, especially in corporate sector
- by voluntary agreement in Australia
- legal obligation across European Union from 25 July 2003, but already in place in most countries
- established in Hong Kong, SAR, by law since March 1999:
  - 4.1M subscribers
  - 1.2M pre-paid
  - 100,000 number ports per month

# INTUG

# MNP in Hong Kong SAR



FCC, DC 25 April 2003

[www.INTUG.net](http://www.INTUG.net)

# INTUG international mobile roaming

- began with NMT-450 standardisation
- extended to GSM-900
- a useful feature for business travellers in Europe and Asia
- expensive, but had seemed justified
- users became concerned in 1998

# INTUG international mobile roaming

- investigation by the Competition Directorate-General of European Commission begun in 1999
- looks very much like a cartel
- absence of competition
- inexplicable price variations
- “ripping off” each other’s customers
- operators heavily reliant on this, can be 15% of total revenues

# INTUG DG Competition

- competition concerns:
  - national markets are highly concentrated
  - excessive pricing
  - price collusion
- market structure concerns:
  - high transparency favours collective dominance
  - non-typical cross-border relationships
  - GSM Association's STIRA reinforces oligopolistic market structure
  - GSMA MoU non-discrimination obligation removes incentives to compete

# INTUG South Africa and Belgium

- Belgacom (fixed incumbent)
  - peak €1.00 off-peak 0.86
- Proximus (Vodafone group)
  - international call to RSA €1.66
  - forwarding to a roamer in RSA
    - €2.08 MTN or Vodacom
  - calling from RSA to Belgium
    - on MTN €1.43 or €1.19 (off-peak)
    - on Vodacom €1.51
- Telkom
  - peak R 3.64 or 3.29 off-peak (€0.34)
- Vodacom
  - international calls to Belgium  
R 5.30 and R 4.16 off-peak (€0.50 and 0.39)
  - Vodacom roaming on Proximus
    - Forwarding to a roamer R 4.23 (€ 0.40)
    - Call back to RSA R 32.12 and 30.18 off-peak (€3.00/2.82)

Price per minute  
Min €0.34 R 3.64  
Max €3.00 R 32.10



# INTUG USA and UK

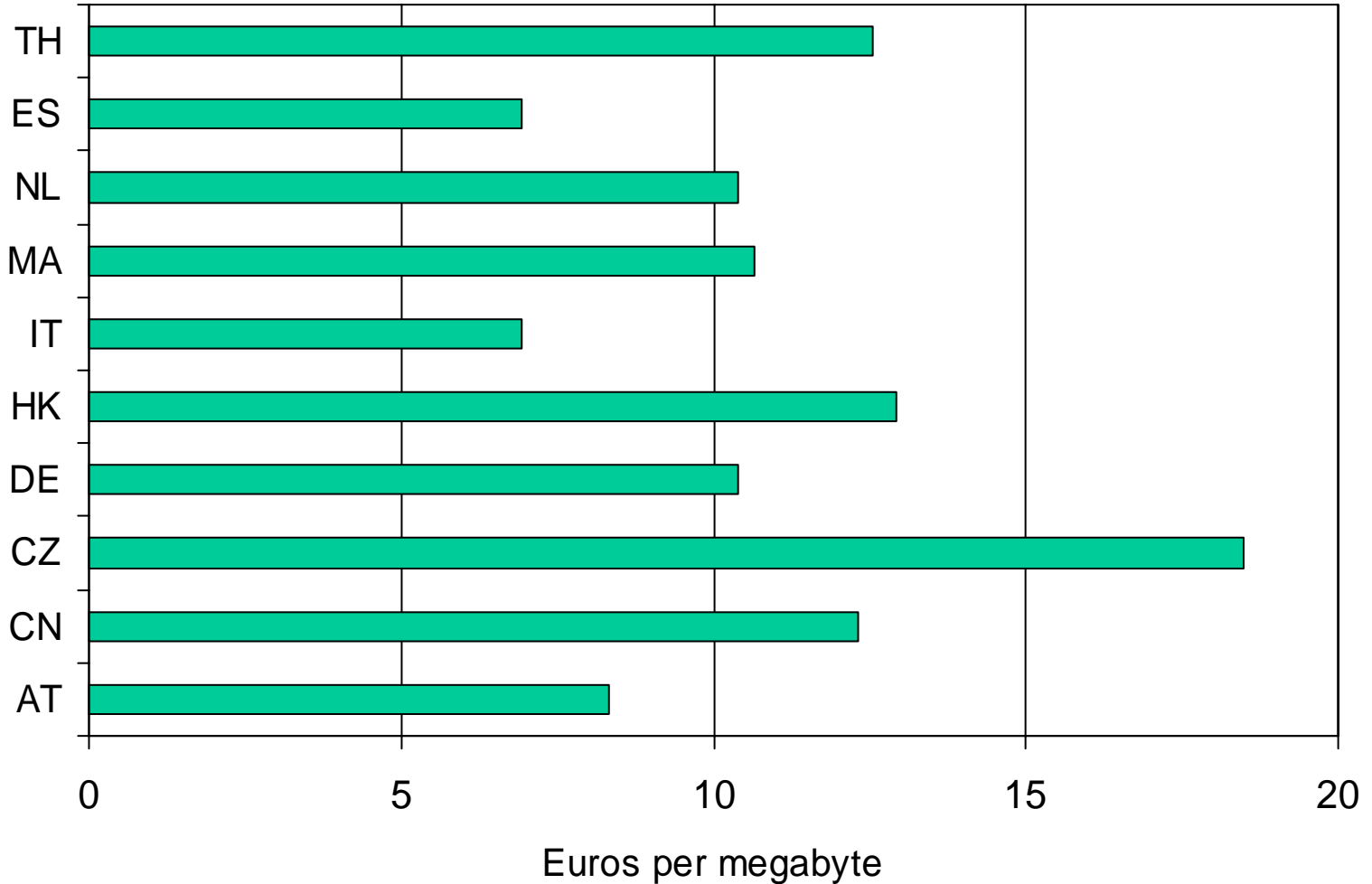
- BT
  - UK fixed to USA fixed 14p/min (8.99p off-peak)
  - UK fixed to USA cellphone 19p/min (13.99p off-peak)
- Vodafone
  - UK GSM to USA ???
  - T-mobile roamer
    - calling to USA or receiving from USA US\$ 0.99/min
- Verizon
  - USA to UK fixed US\$ .08/min (US\$ 1.88 with no sub.)
  - USA to UK mobile ??? (.30/min)
- Sprint
  - fixed 0.14/min +0.22/min mobile surcharge
- T-Mobile
  - USA GSM to UK US\$ 0.29/min
  - Vodafone roamer
    - calling to UK 82p/min
    - receiving a call from UK 110p/min
- Vonage
  - USA Internet to UK fixed US\$ 0.06
  - USA Internet to UK mobile US\$ 0.20
  - the same when roaming in UK

Price per minute  
Min \$ 0.06 £ 0.04  
Max \$ 1.73 £1.10

# INTUG SingTel GPRS roaming rates

FCC, DC 25 April 2003

[www.INTUG.net](http://www.INTUG.net)



Source: Singtel. Currently "free" in Australia, Denmark, Finland, Indonesia, Malaysia

# INTUG mobile data in USA

- AT&T Wireless
  - mLife Local Plan - Next Generation US\$ 30 per Mb
  - mMode Mega US \$7.99 for 1 MB then US\$ 10 per Mb
  - \$7.99 monthly recurring charge to enable roaming, the US\$ 70 per Megabyte.
- T-Mobile
  - t-zones (GPRS)
    - Service US\$ 3 per Megabyte
    - Pro first 10 MB for US\$10 then per US\$ 9.99 per MB
    - US\$ 15.00 per megabyte roaming in Europe and Asia

# INTUG regulation of roaming

- generally not covered by regulation
- complaint to European Commission under the competition law articles of the Treaty of Rome
- long and difficult investigation
- now EU regulators must assess their national wholesale markets

# INTUG SMS

- carried in the signalling channel
- costs to the operator are minimal
- massive contribution to revenues
- prices driven up in a spiral
- operators stabilising ARPU
- looks like a cartel
- a fairly straightforward case for a willing regulator

# INTUG financial markets

- until 2000 analysts used:
  - size of customer base
  - growth
- then they got rid of the analysts
- operators now provide the Average Revenue Per User (ARPU) each month
- no remaining trust
- very little money is available, even for good ideas
- enormous pressure on operators

# INTUG operator dilemma

- regulated cuts to:
  - roaming is 15% of revenue
  - F2M is 25% of revenue
  - SMS is 15% of revenue
- MNOs cannot find compensating revenues from new services:
  - data
  - value-added services

# INTUG marketing failures

- HSCSD
  - nobody has heard of this
- WAP
  - killed by an over-dose of hype
- GPRS
  - no business users, only trialists
  - prices are wrong by at least an order of magnitude



# INTUG GPRS

- like ISDN for mobile phones
- only being used in trials
- even big companies see this as grossly over-priced
- roaming prices are higher still
- no signs or hopes of any revenues for the operators
- EDGE and 3G due very soon

# INTUG 3G

- transition to 3G was to be easy and lucrative
- financial markets pushed the operators, now telling them to get out
- few handsets and no services, so no additional revenues
- regulatory problems of network sharing
- may only ever be consumer services
- competition from WLAN, Bluetooth, IR ...
- *today* there is no business case for operators

# INTUG 3G

- Games, Gambling, Girls
- Gullability, Greed, Grief
- Going, Going, Gone ...

FCC, DC 25 April 2003

[www.INTUG.net](http://www.INTUG.net)

# INTUG other problems

- competition law problems
  - open access to 3G
- privacy and data protection problems
  - especially when roaming
- no billing software
- push adverts
- unsolicited messages (“spam”)

# INTUG consolidation

- operators are keen to limit competition
- they want to “consolidate”
  - leave markets where they are weak
  - strengthen where they are strong
- secondary trading of spectrum
- divide the spectrum of the exiting player amongst the other operators
- want to avoid possibility of new entrants

# INTUG investment

- regulation and the investment decision making process are inextricably linked
  - timing
  - costs
- asymmetry between technologies
- operators play complicated political games for financial gain, regulate my competitors, not me

# INTUG leadership

- GSM was a European flagship
- standard was adopted quickly and globally, beating USA and Japan
- now failing
- South Korea now winning:
  - global handset sales
  - revenues for mobile data
  - combining mobile and fixed access

# INTUG conclusions

- well established market failures
- regulators now addressing these
- operators can show little (if any) revenue from either data or VANS on 2.5G
- very worrying signs from 3G especially when compared with WLAN



# INTUG thank you

Ewan Sutherland

International Telecommunications Users Group

Boulevard Reyers 80

B-1030 Brussels

Belgium

+32.2.706.8255

<http://www.intug.net/talks.html>

FCC, DC 25 April 2003

[www.INTUG.net](http://www.INTUG.net)