# INTUG

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# *Competition and services development: a consumer analysis of prices & services*


Ewan Sutherland

Executive Director

International Telecommunications Users Group

ewan@intug.net

# INTUG contents

- INTUG
- mobile
- leased lines
- broadband
- voice telephony
- 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 surveys

- INTUG has undertaken surveys only for regulatory purposes
- total costs of telecoms
- international versus national leased lines
- international mobile roaming charges

# 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 mobile as top priority



- International Mobile Roaming (IMR)
  - significant reductions in charges
  - availability of a range of services, including global and multi-country tariffs, without necessarily having to pay roaming charges
  - regulatory action to end the cartel of mobile network operators
- Fixed-to-Mobile call termination (F2M)
  - cost orientation of wholesale prices
  - wholesale price reductions speedily passed onto users
- Mobile Number Portability (MNP)
  - availability on demand
  - inexpensive
  - no consequential loss of facilities or special offers
- Short Message Service (SMS)
  - interconnection of all operators
  - significant reductions in prices
  - regulatory action to end the cartel of mobile network operators
- national mobile roaming
  - availability in areas of low population density
  - availability to support introduction of new operators and new technology

# INTUG mobile sector



- global growth is largely found in Asia and Latin America
- Europe is characterised by:
  - customer churn
  - stable ARPU
  - replacement handsets
- MNOs focus on revenue sharing for VANS
- acquisitions and privatisation processes not yet resumed, financial markets continue to be unwelcoming

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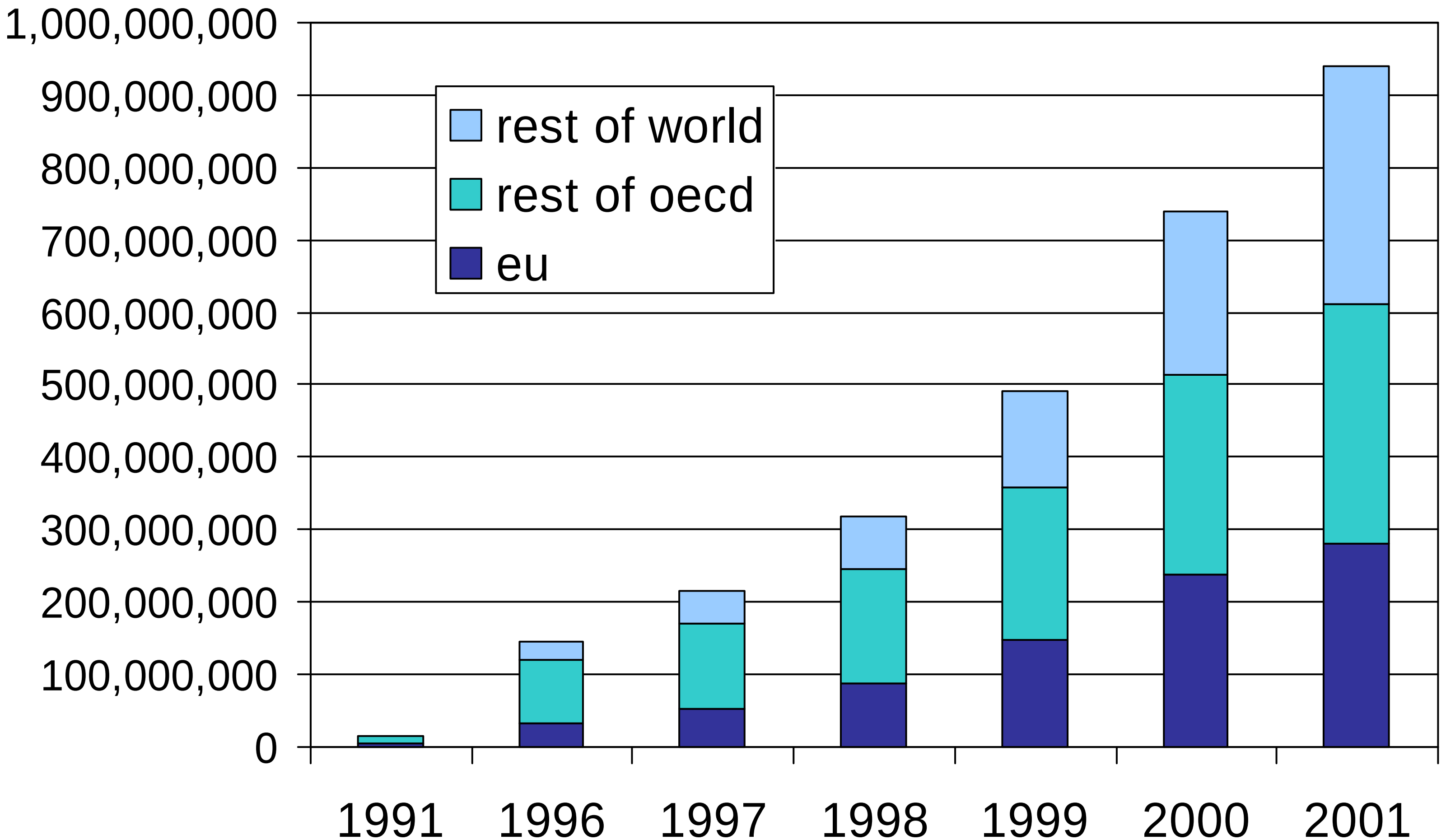
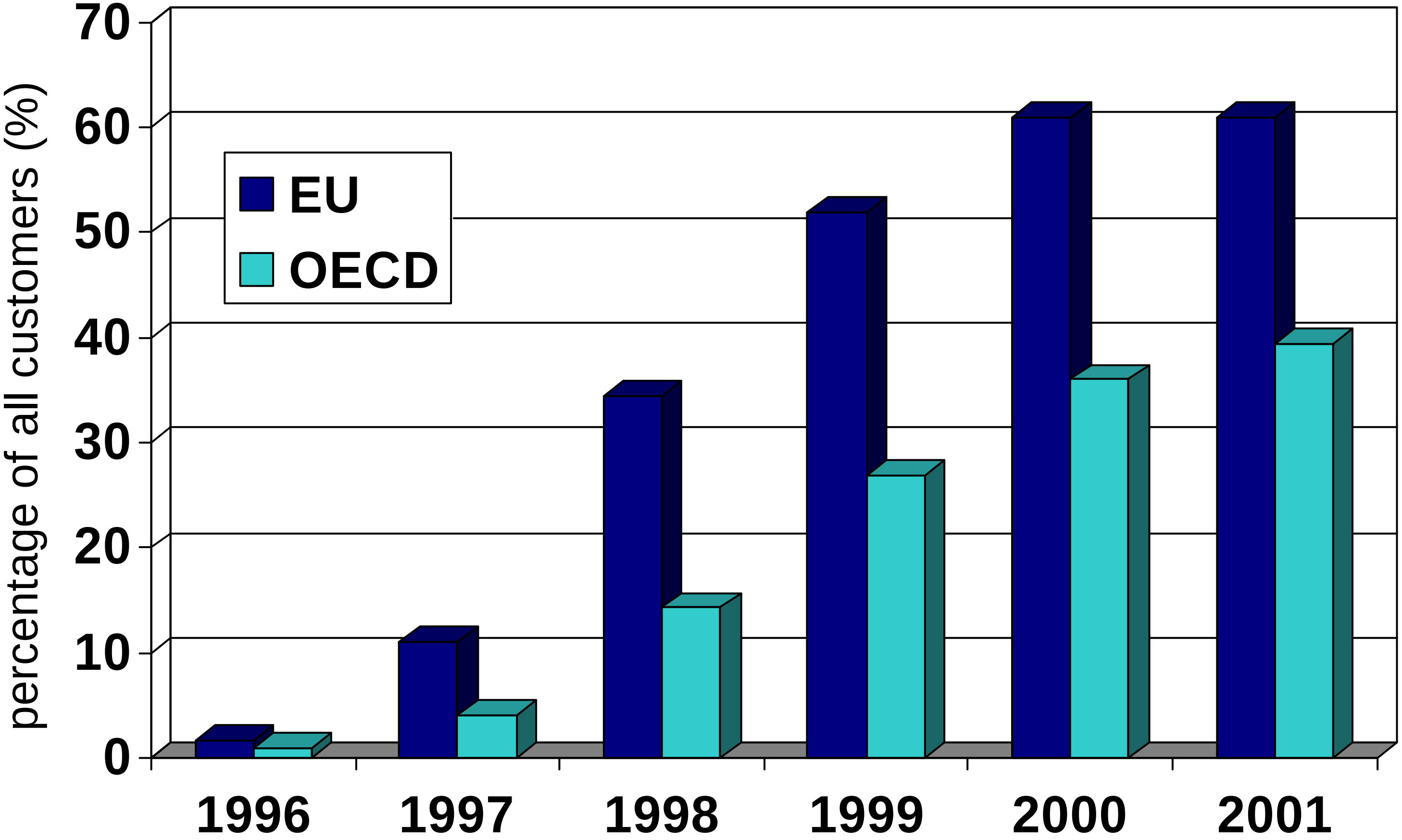
# INTUG cellular mobile subscribers




Source: OECD, 2003.

# INTUG pre-paid customers



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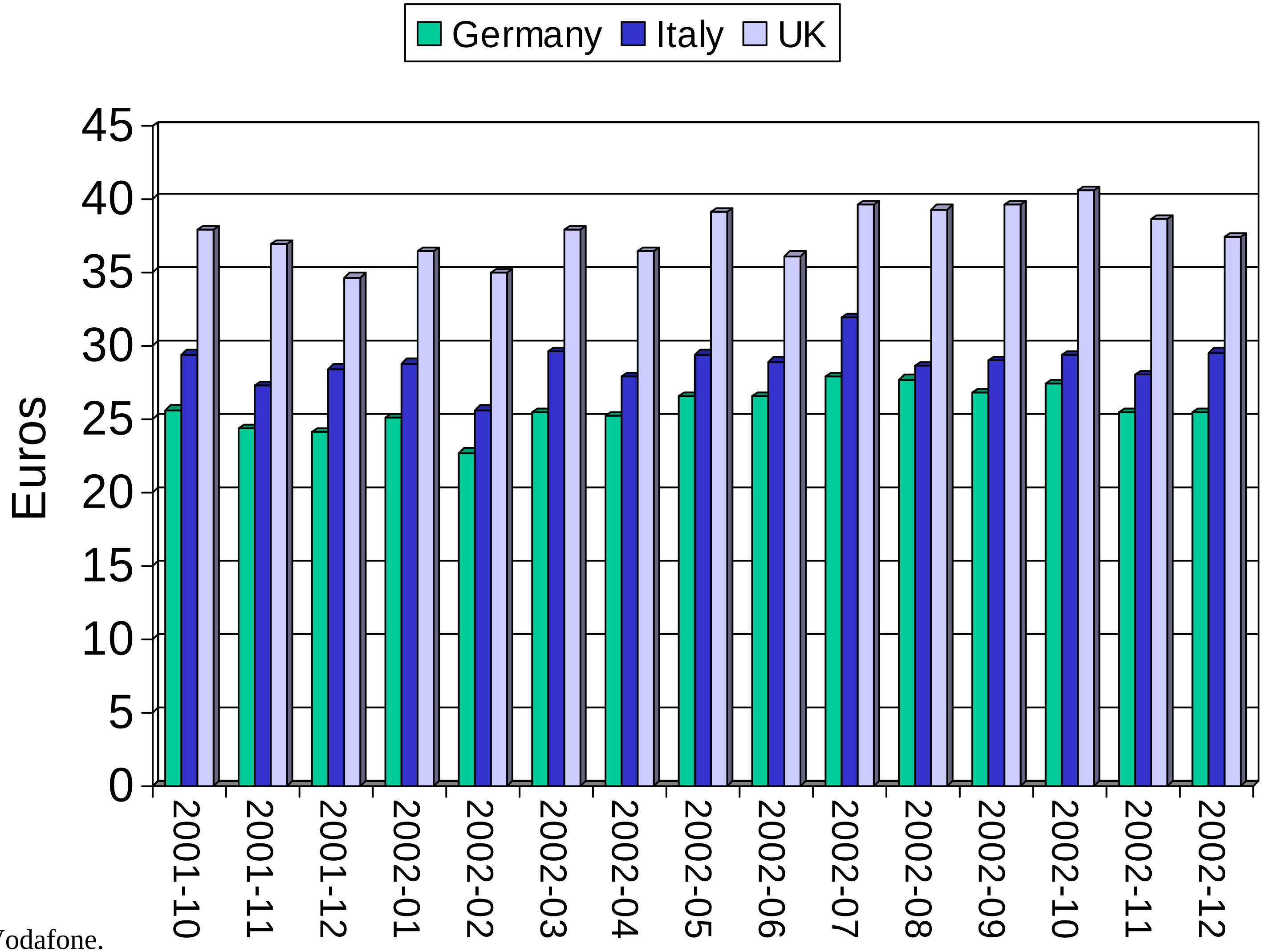
# INTUG Vodafone ARPU




Source: Vodafone.
£1 = €1.59 for UK ARPU

# the value of mobility

- Wireless Local Loop (WLL) can provide “limited” mobility:
  - CMDA/WLL, PAS, etc
  - China, India and South Africa
- causes loss of growth potential for MNOs:
  - customer numbers
  - revenue
- raises questions:
  - how many users really need global roaming?
  - how much of a premium will they pay?
- but additional revenues from incoming roamers

# INTUG basket of charges in USD/PPP

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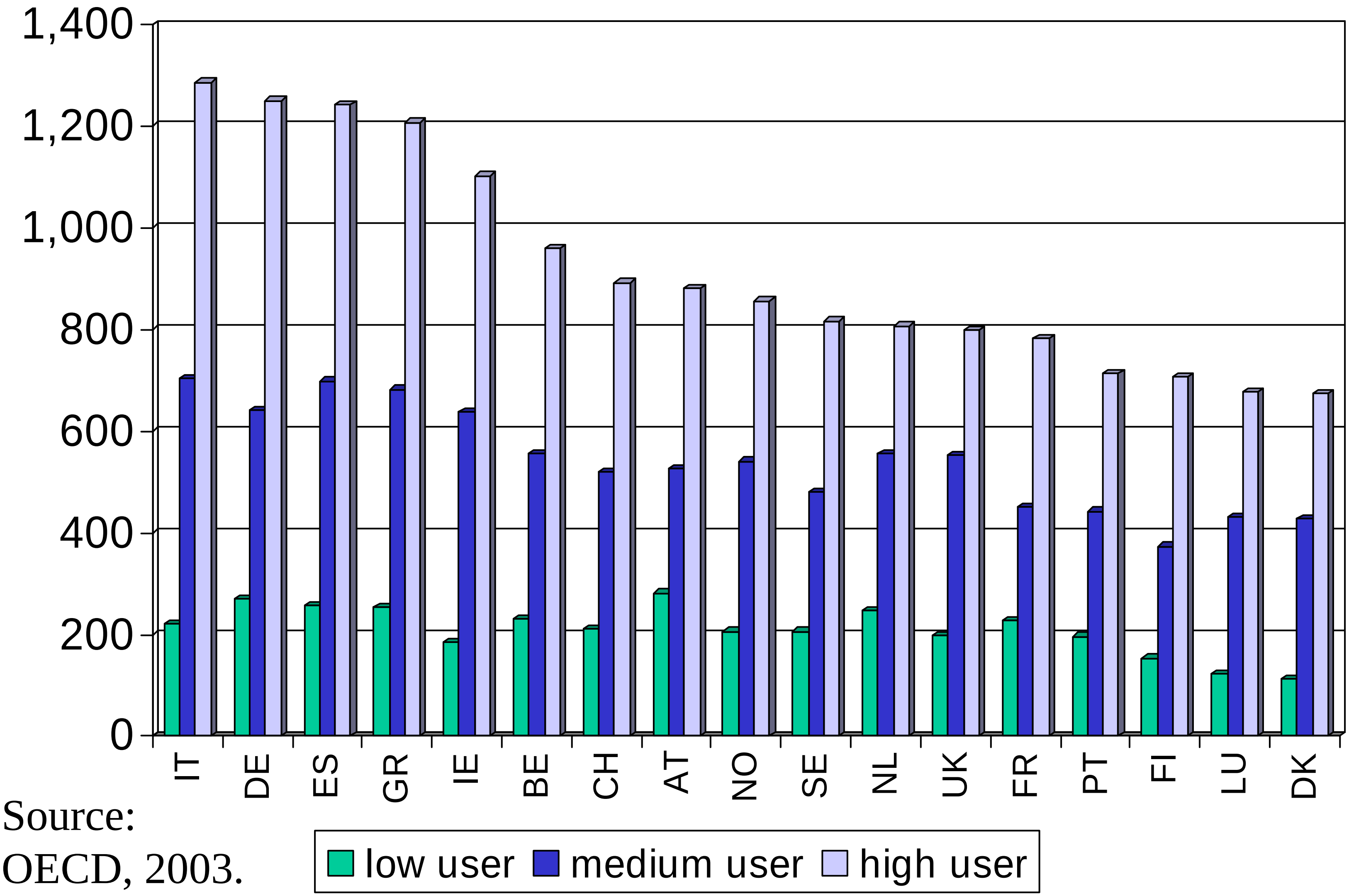


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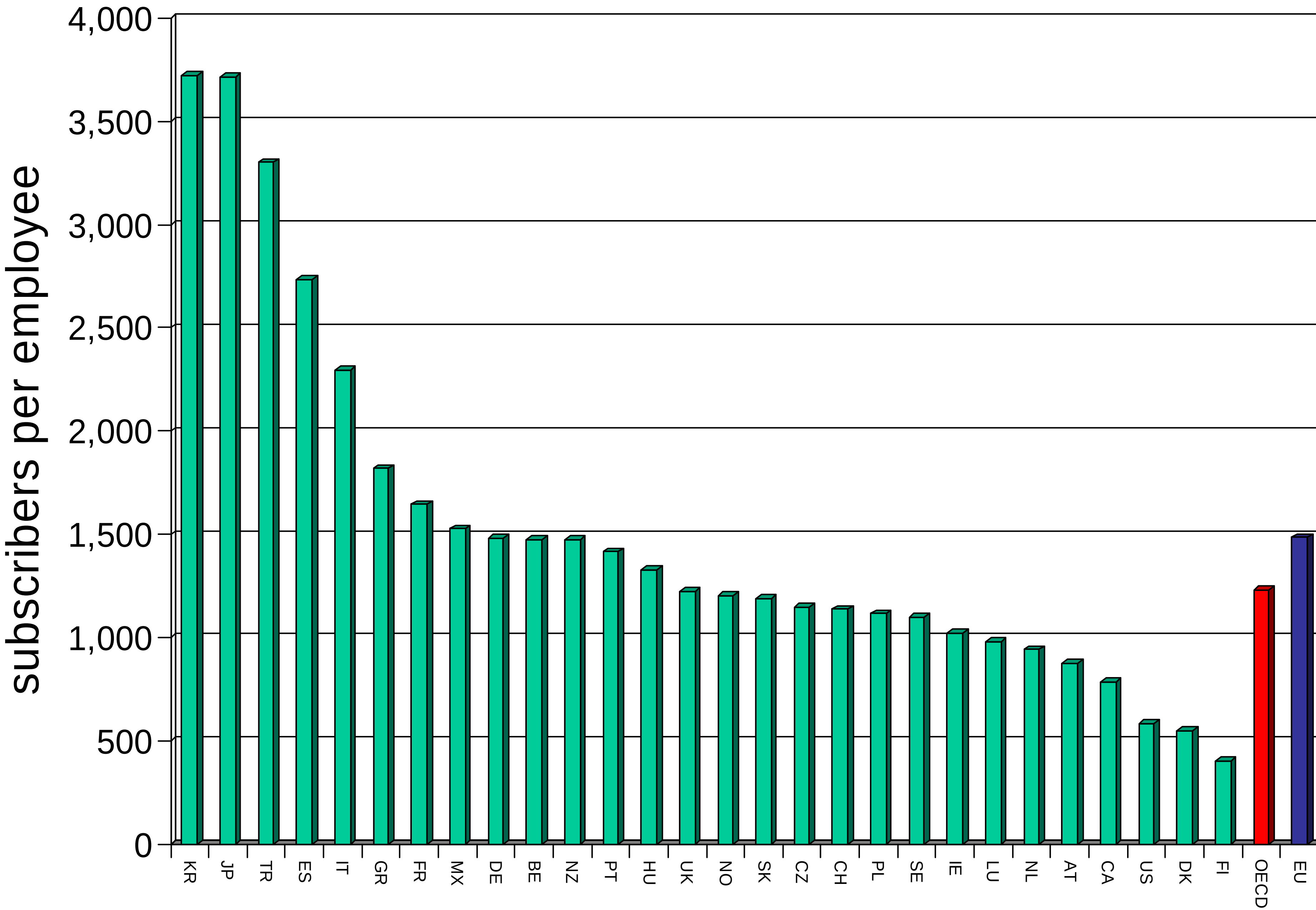



Source: OECD, 2003.

# INTUG market abuses

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

caused by an unwillingness to compete.

# INTUG results of abuses

- very much higher charges to users
- lower levels of use
- users are unable to benefit from:
  - service innovation
  - technical innovation
- no progress on fixed-mobile convergence
- lack of trust in operators by:
  - users
  - fixed operators
  - financial markets

# INTUG operator dilemma

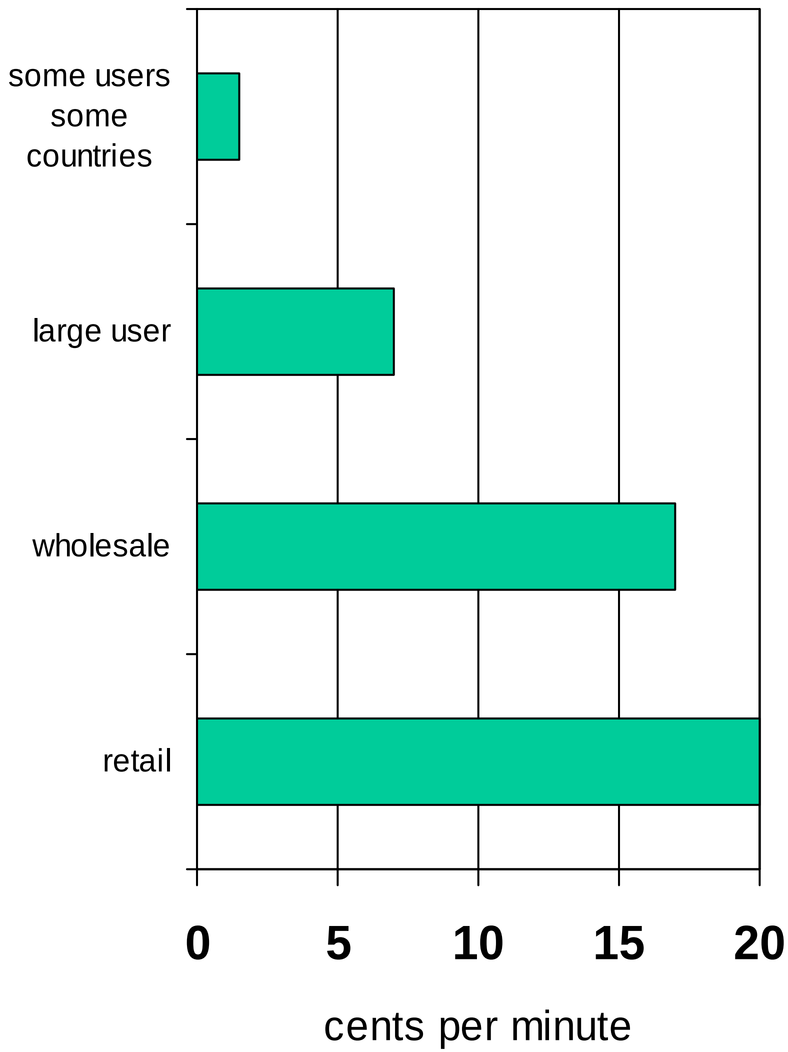
- regulated cuts to:
  - roaming is 15% of revenue
  - F2M is 25% of revenue
  - SMS is 15% of revenue
- MNOs cannot find compensating revenues from new services:
  - data
  - value-added services

# INTUG fixed-to-mobile



- domestic abuse extended abroad
- long and unpleasant disputes
- cost orientation is around €0.05 per minute
- legal obligation in EU to regulate F2M
- MNOs argue they will have to raise origination prices and cut handset subsidies
- smaller operators claim they will be driven out of business
- Germany claims its consumers respond to prices

# INTUG discrimination



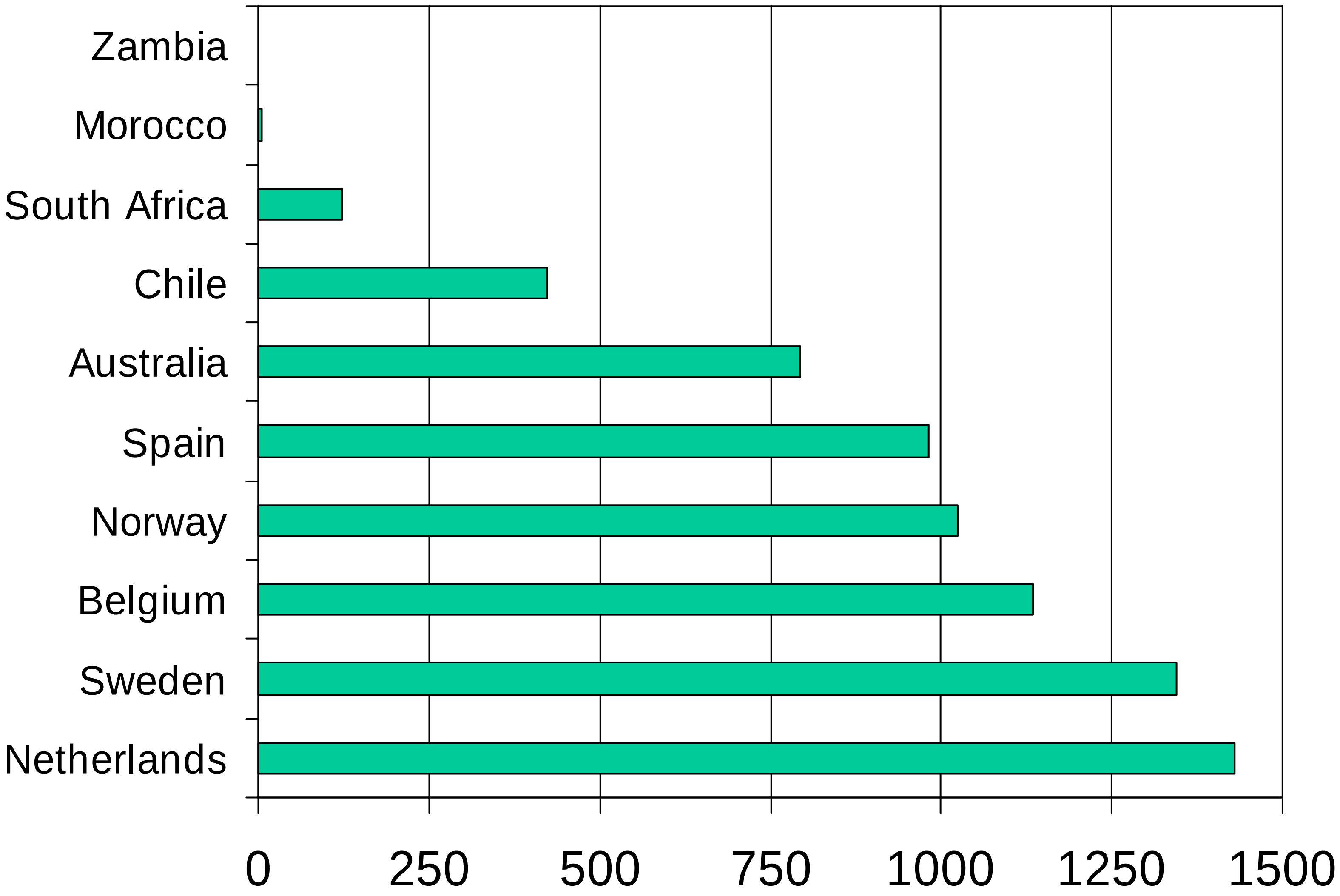

- against new fixed entrants
- some very modest signs of counter-vailing buyer power for large users
- “cost” seems to around 5-6 cents/min

Source: INTUG.

# INTUG United Kingdom

- action by the OFTEL to reduce rates
- mobile network operators appealed to Competition Commission
- long and very detailed proceedings
- proved prices were excessive
- 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
- process begun again for new legislation

# INTUG fixed/mobile price difference (%)

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# INTUG BT and Telenor

- both found with “wrong” prices
- web sites claiming a surcharge to call a cellphone in USA despite Receiving Party Pays
- no explanation so far
- how many other “wrong” prices?
- did anyone pay these surcharges?
- do they check their web sites

INTUG **roaming market analyses**

- wholesale market not retail
- very easy to show market is not competitive
- generally no MNO is dominant
- therefore, use joint dominance

# INTUG possible remedies

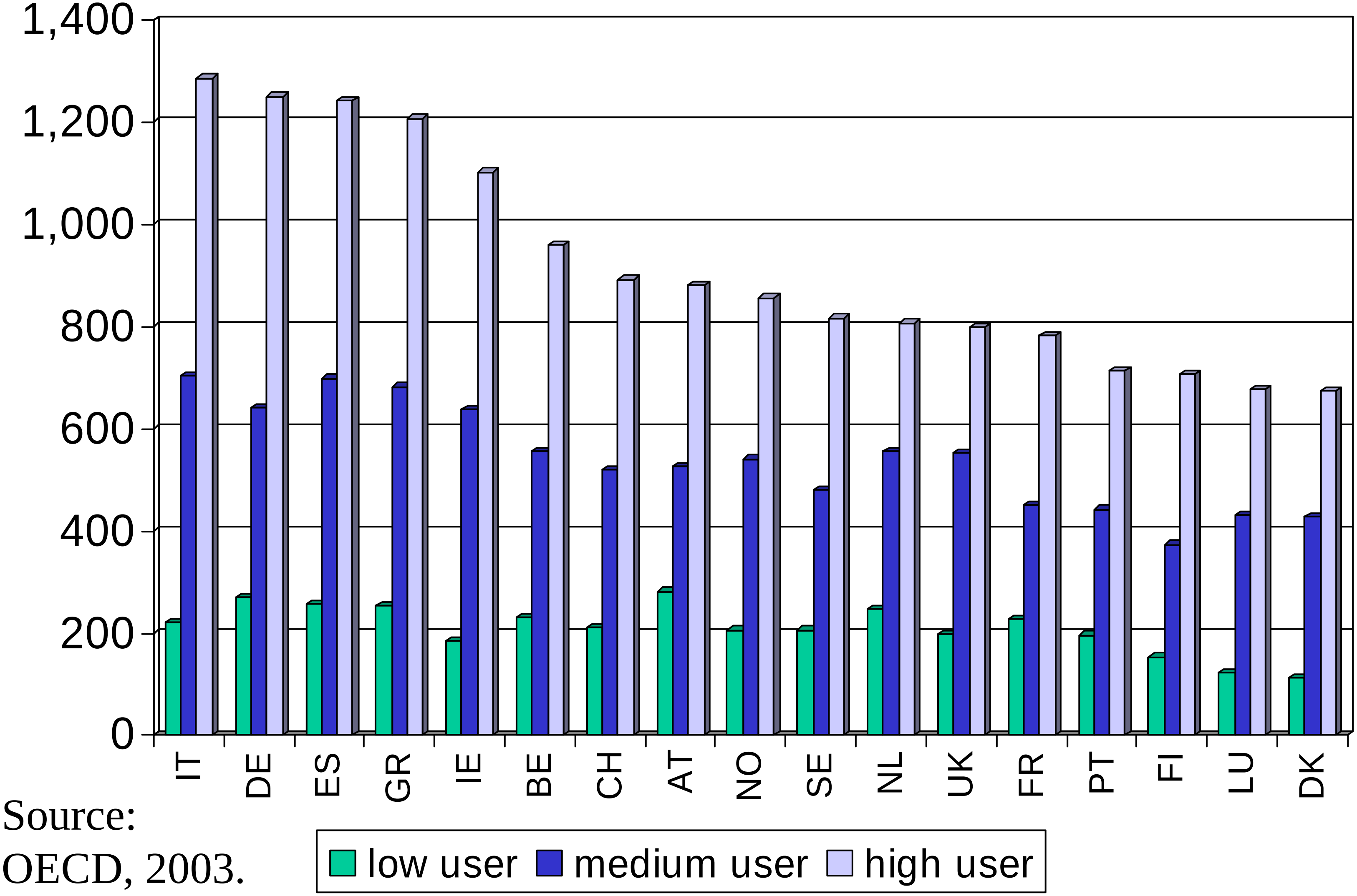
- must comply with:
  - policy objectives
  - proportionality
- options are:
  - benchmarking
  - linking to other prices
  - mandating market entry
  - cost orientation
- obstacles:
  - few remaining new entrants
  - none of whom trust the mobile operators

# INTUG the value of roaming

- once exciting and highly praised
- now expected and taken for granted
- “limited” mobility is challenging GSM in many markets
- WiFi hot spots are popular for data
- the cash cow will not last for ever

IP telephony is driving down general telephony prices

# INTUG basket of charges in USD/PPP

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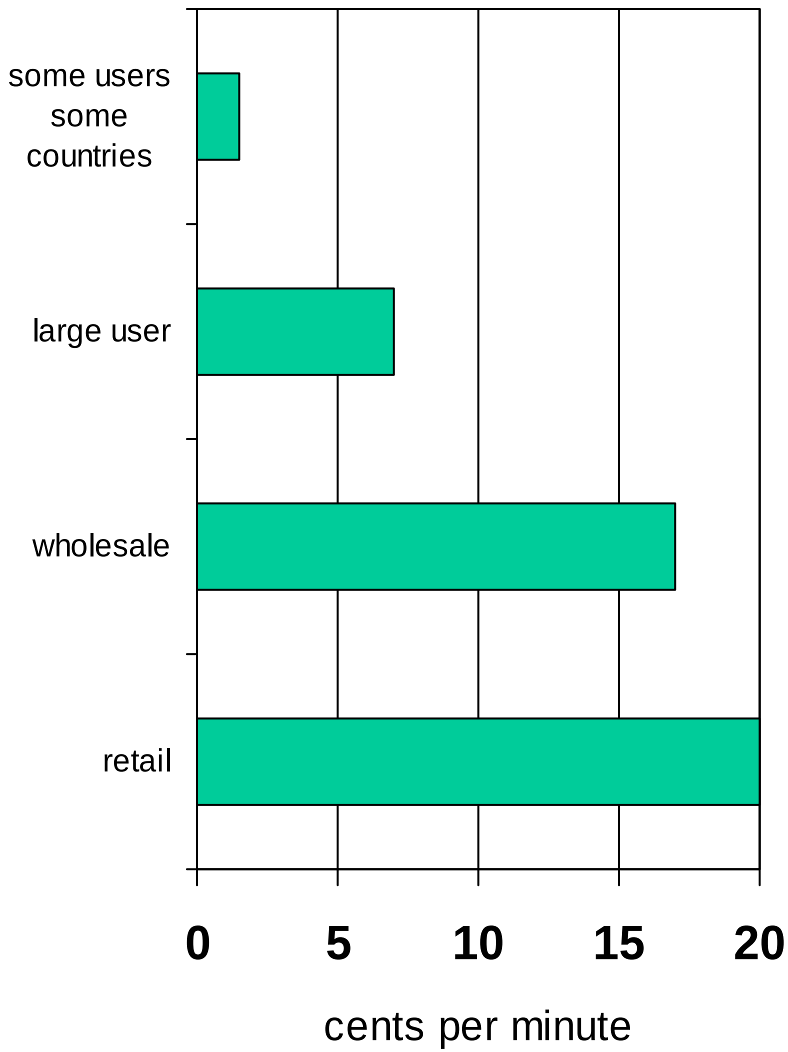


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# INTUG South Africa/Belgium roaming



- 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 roaming charges (2002)

| Calling to Belgium from the UK | | BT Cellnet | Vodafone |
|---|---|---|---|
| Belgian subscriber | Mobistar | € 2.92 (3.19) | € 2.41 (2.83) |
| | Proximus | € 2.68 (4.05) | € 2.73 (3.62) |
| UK subscriber | non-roaming | € 2.12 (3.25) | € 1.58 (3.47) |
| | | | |
| Calling to UK from Belgium | | Mobistar | Proximus |
| UK subscriber | BT Cellnet | € 2.53 (2.43) | € 2.53 (2.41) |
| | Vodafone | € 1.81 (2.48) | € 1.89 (2.44) |
| Belgian subscriber | non-roaming | € 1.01 (2.63) | € 1.30 (2.06) |

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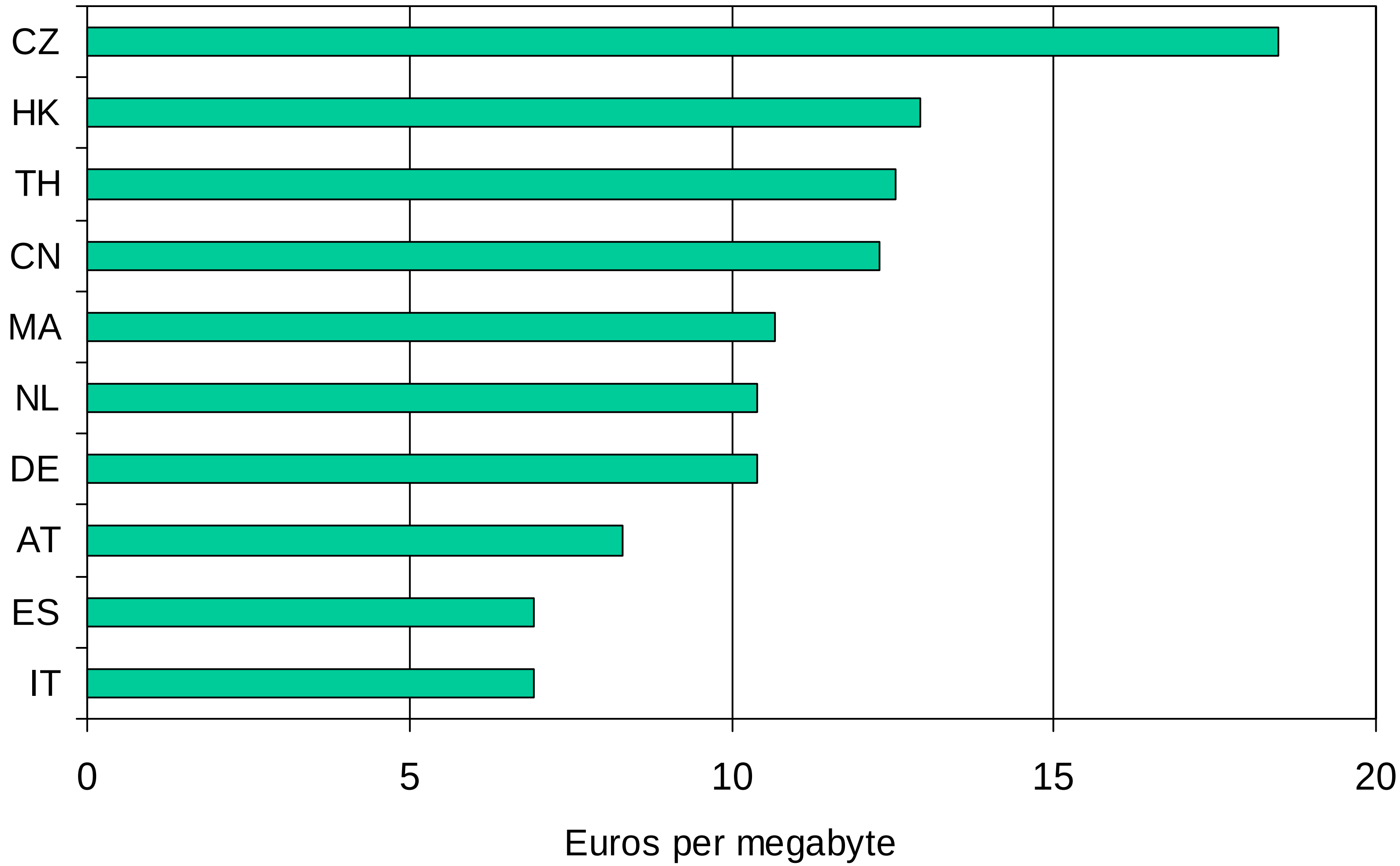
**INTUG** SingTel GPRS roaming rates




Source: Singtel. Currently “free” in AU, DK, FI, IN and ML.

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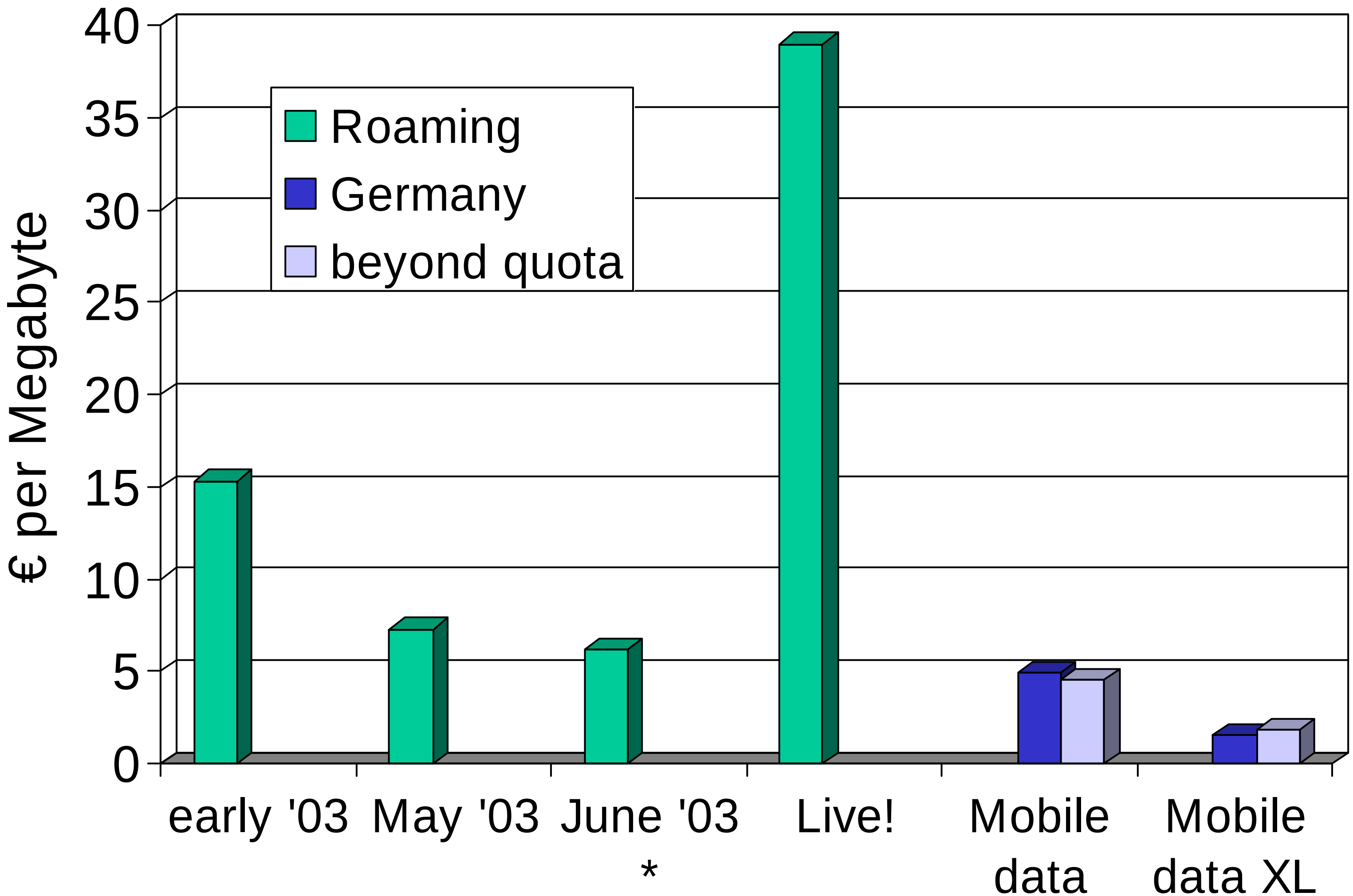
# INTUG Vodafone Germany





# 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 public WLAN

- 2.4 and 5GHz spectrum being opened up:
  - Hong Kong, Germany, France, USA
  - agreement this month at ITU WRC-03
- Korean-Japanese business model
  - roll-out fixed broadband services extremely fast
  - add Wi-Fi to the residential offer, for incremental charge
  - add public hot-spots for incremental charge, say US$ 5-10 per month
  - now being used by Verizon

# 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

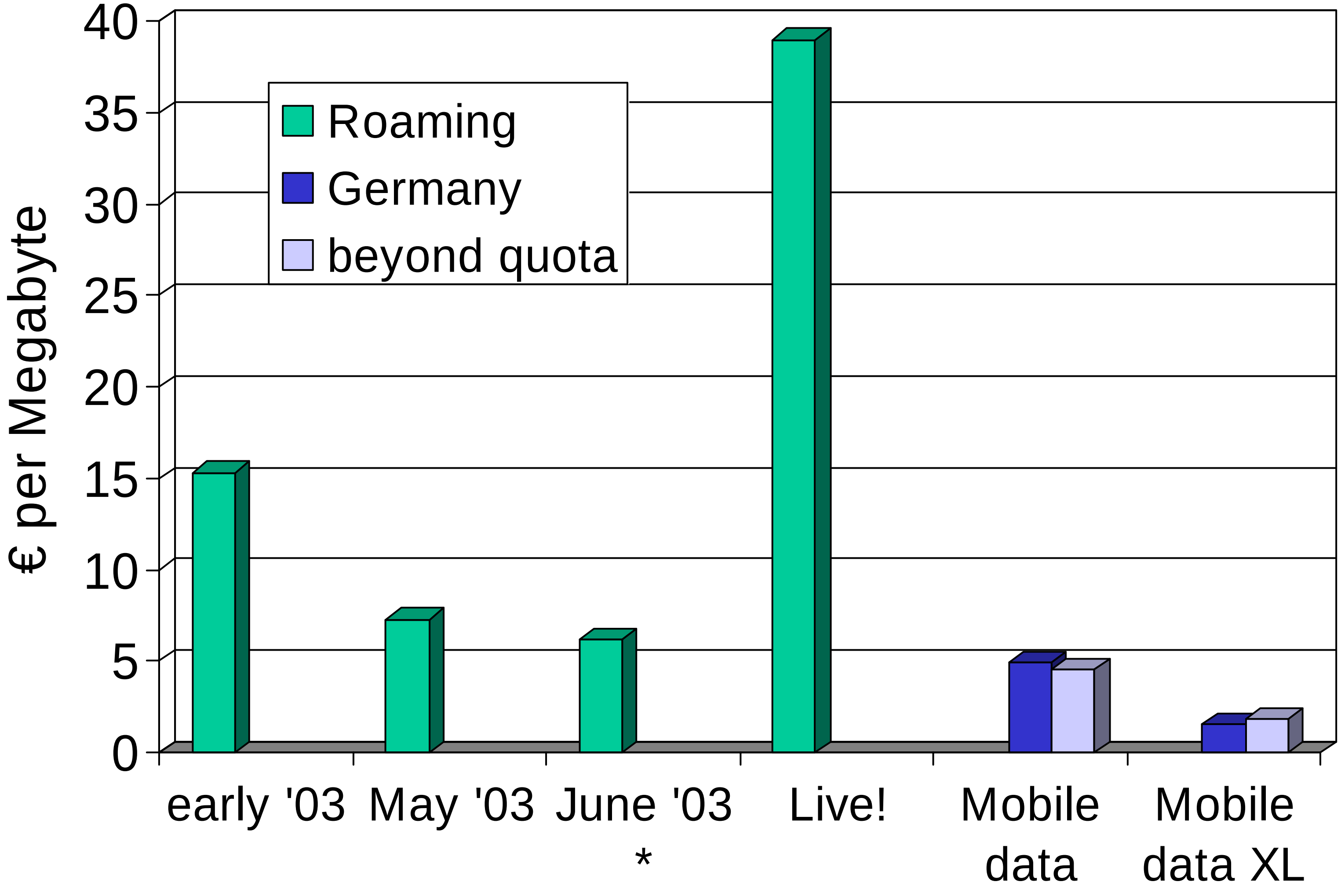
# INTUG marketing failures

- 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

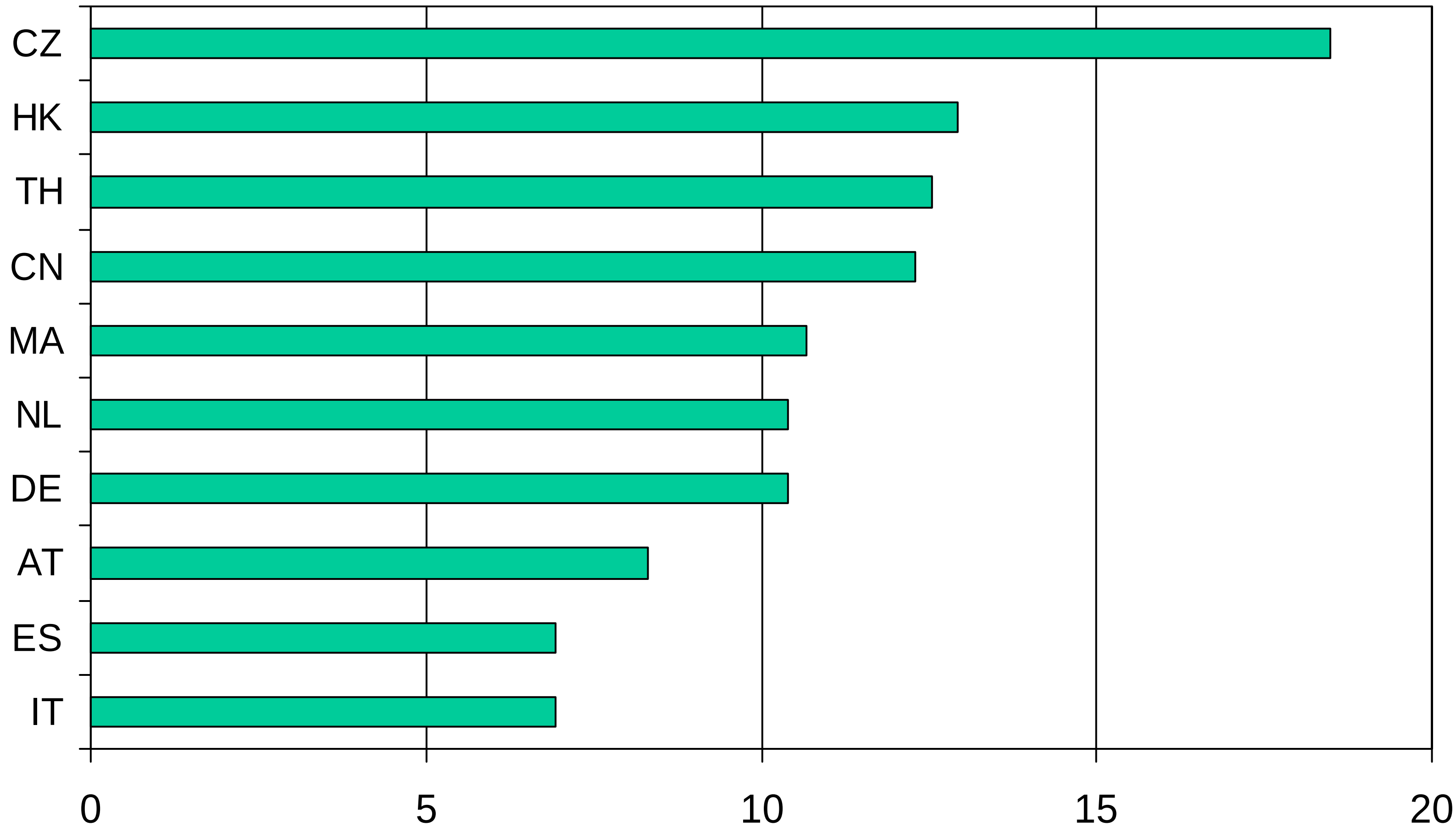
# INTUG GPRS

- 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

# Vodafone Germany



# INTUG SingTel GPRS roaming rates

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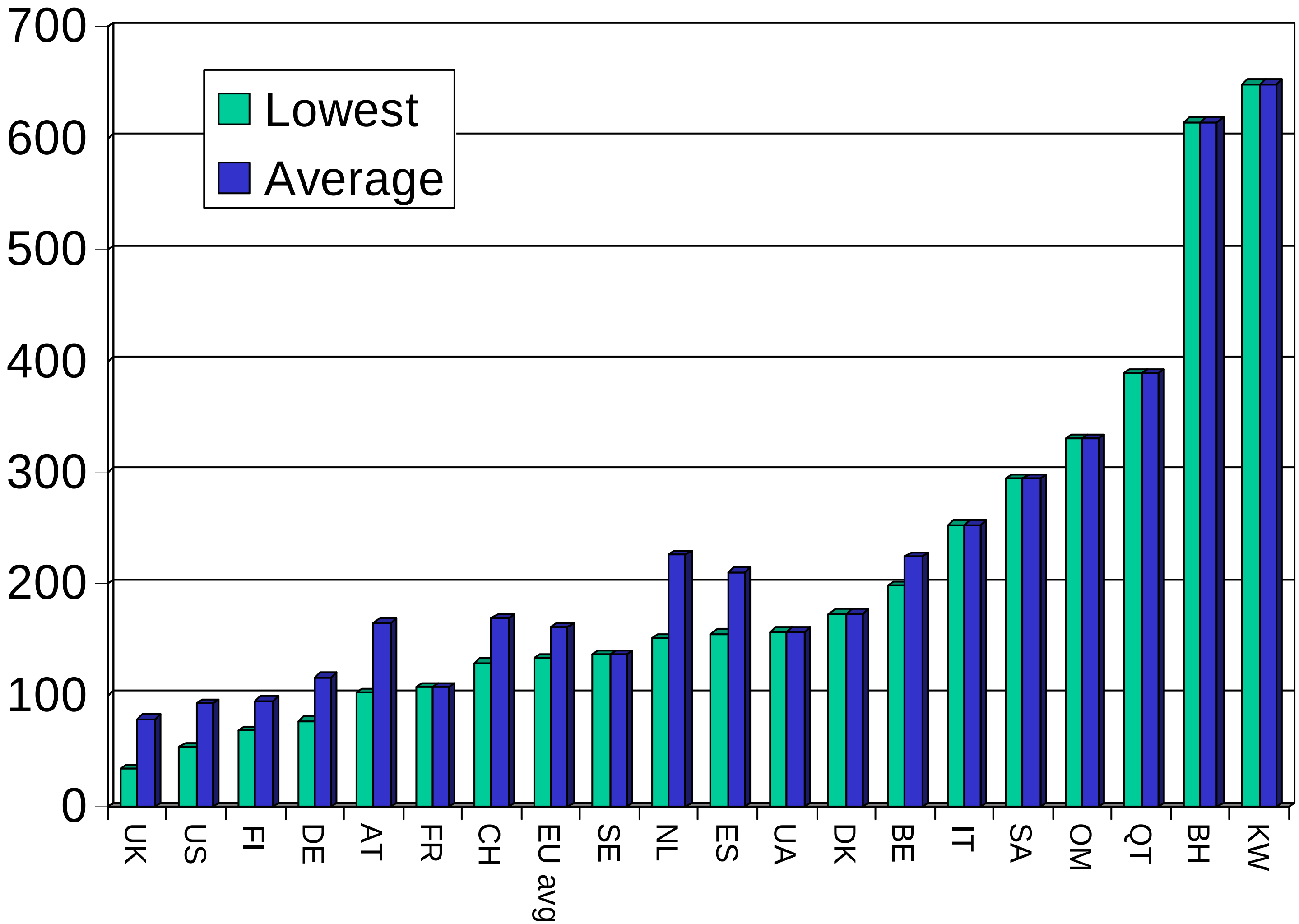
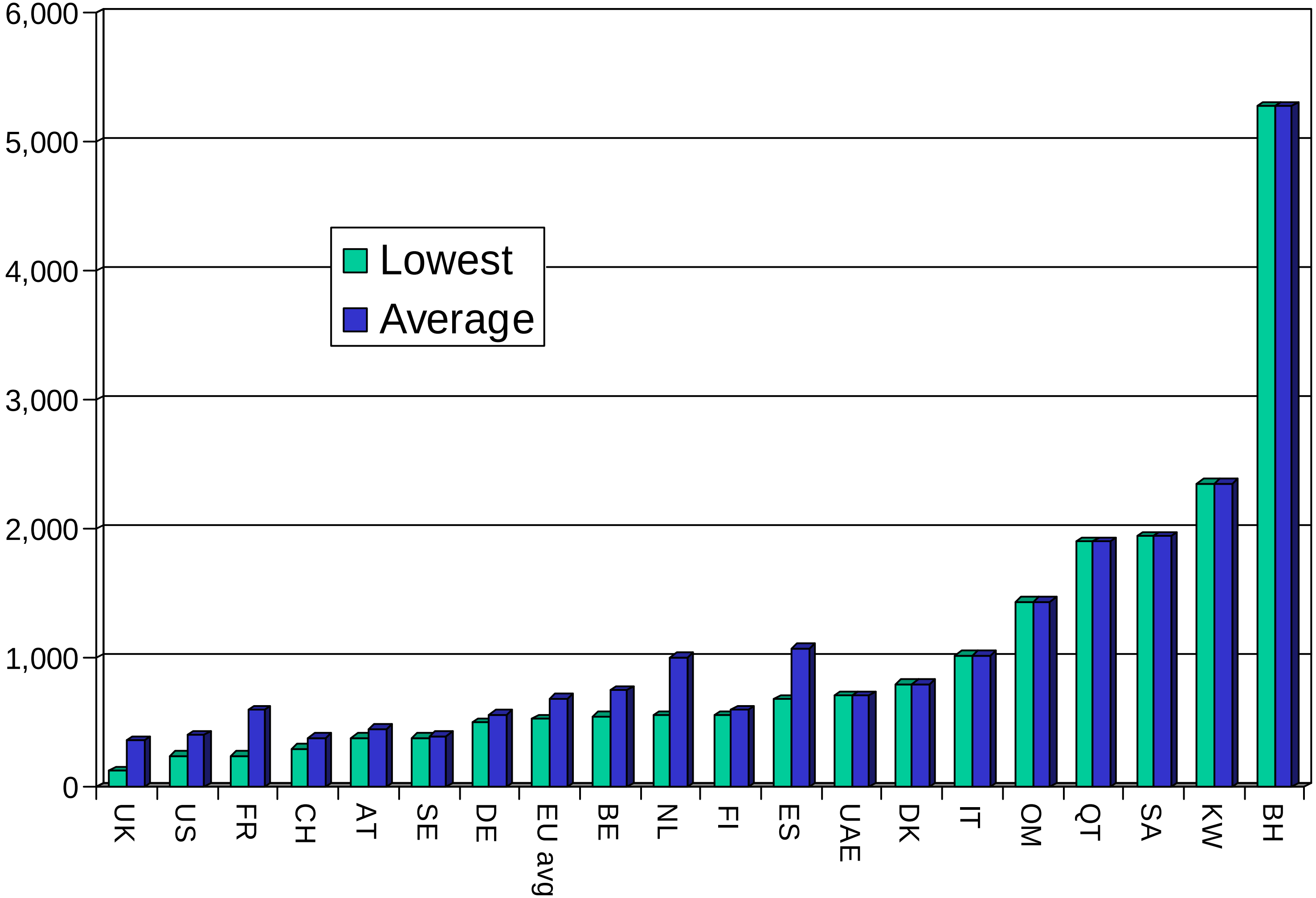
# INTUG leased lines

- work item since 1974
- raised by INTUG at CCITT in 1979
- pressed European Commission to act
- remains a problem
  - availability
  - discrimination against new entrants
  - pricing

# INTUG 64k local leased lines



# INTUG 2Mbit/s local leased line

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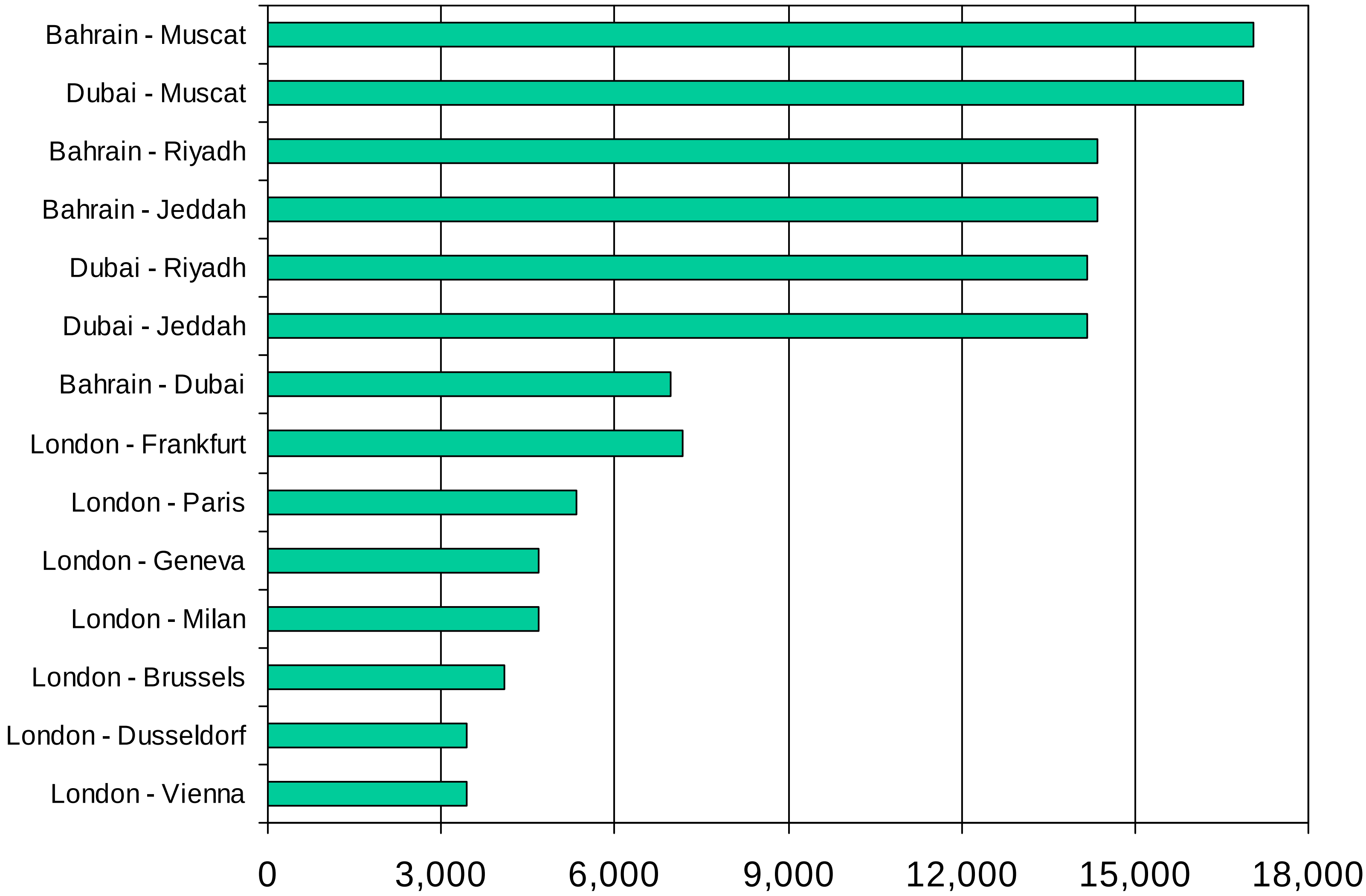
# INTUG International leased lines

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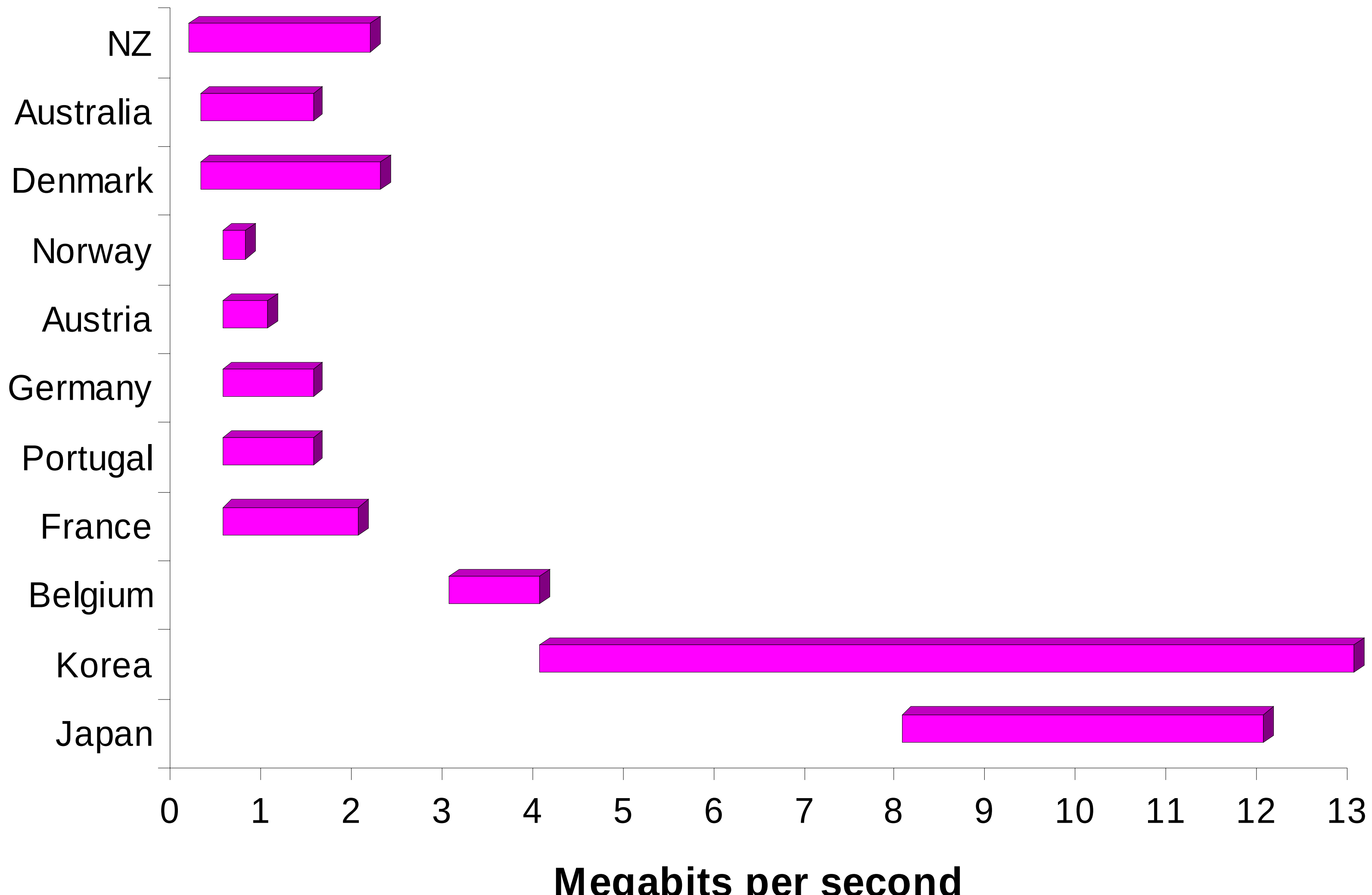
# INTUG broadband

- new “hot” area
- major area of revenue growth in developed countries
- geographic centre is near East China Sea
- services still at early stage of evolution

# Yahoo! BB summer offer

- 26 Megabits per second
  - diminishes with distance from exchange
  - minimum 0.7Mbit/s
  - no download cap or charge
- three months free
- JPY 3,828 per month
- JPY 4,828 with residential Wi-Fi
- http://bb.yahoo.co.jp/

# INTUG available download speeds

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# What does €25 buy?

| | | down MBps | up Mbps | **days** |
|---|---|---|---|---|
| Japan | Yahoo! BB | 12 | 1 | **33** |
| Belgium | Skynet Go! | 3 | 0.26 | **19** |
| Denmark | TDC ADSL | 0.26 | 0.13 | **16** |
| Italy | Linea alice 640 | 0.64 | 0.13 | **15** |

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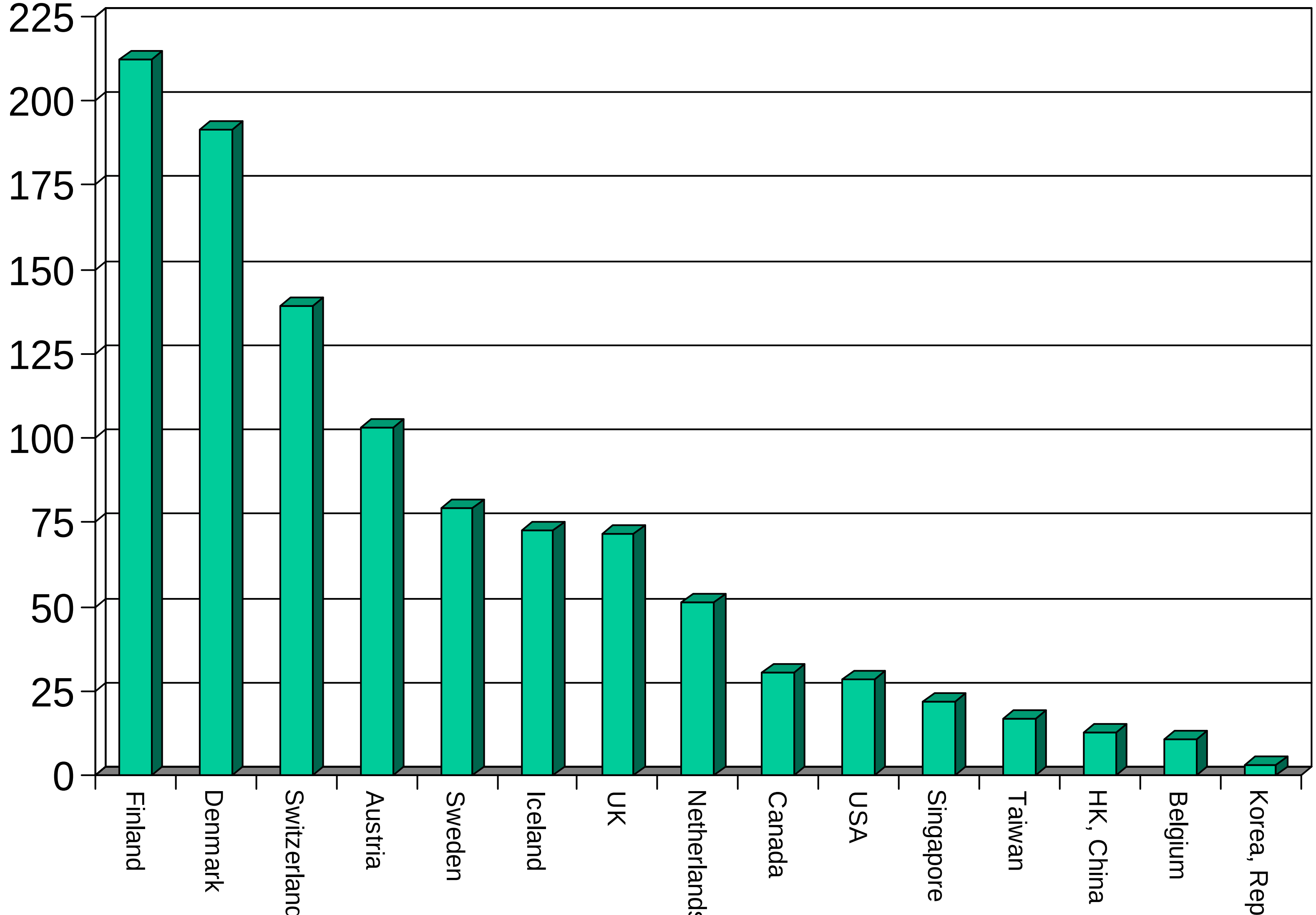
# Price (US$) per 1Mbit/s per month, April 2003

Source: ITU.

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# two small countries - broadband

- Denmark
- 8.3 lines per 100
- EUR 45 per month for 0.25Mbit/s
- 2Mbit/s speed limit

- Belgium
- 8.5 lines per 100
- EUR 30 per month for 3Mbit/s
- competition from Telenet (cable tv)
- significant variations between Flanders (Dutch) and Walloonia (French)

# voice telephony

- sharp reductions in price
- sharp reductions in cost
- decline to close to zero
- forthcoming OECD report DSTI/ICCP/TISP(2003)2

# INTUG conclusions

- service developments constrained by
  - absence or attenuation of competition
  - lack of incentives for new players
  - politico-regulatory pressure from incumbents
- needs for more competition

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# thank you


Ewan Sutherland

INTUG

Boulevard Reyers 80

B-1030 Brussels

+32.2.706.8255

ewan@intug.net

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