

*Past, present and future
competition in telecom markets:
users' assessment*

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INTUG contents

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

INTUG what is INTUG?

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

INTUG our aims

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- 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

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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

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- 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

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- 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

INTUG mobile sector

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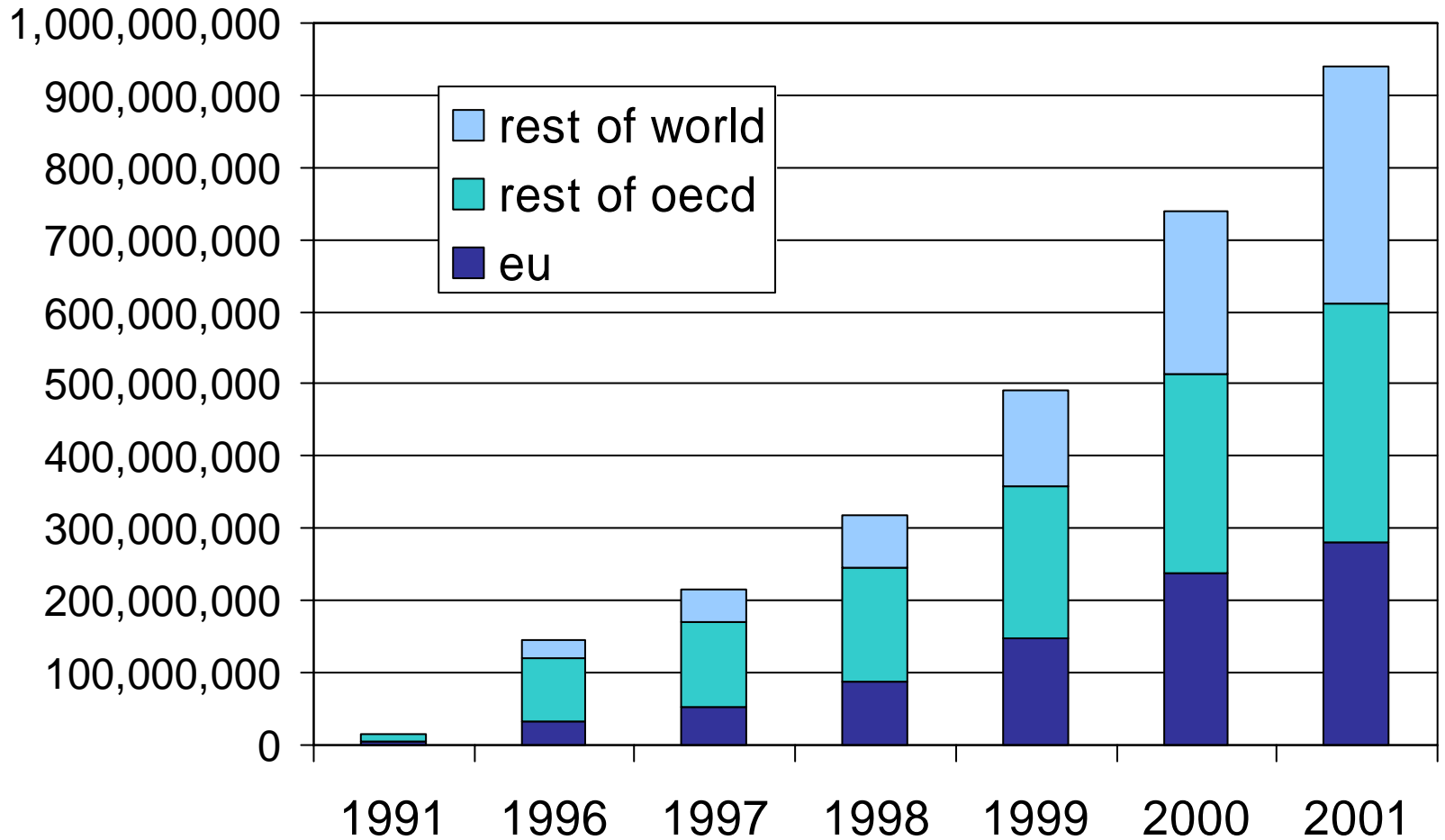
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INTUG cellular mobile subscribers

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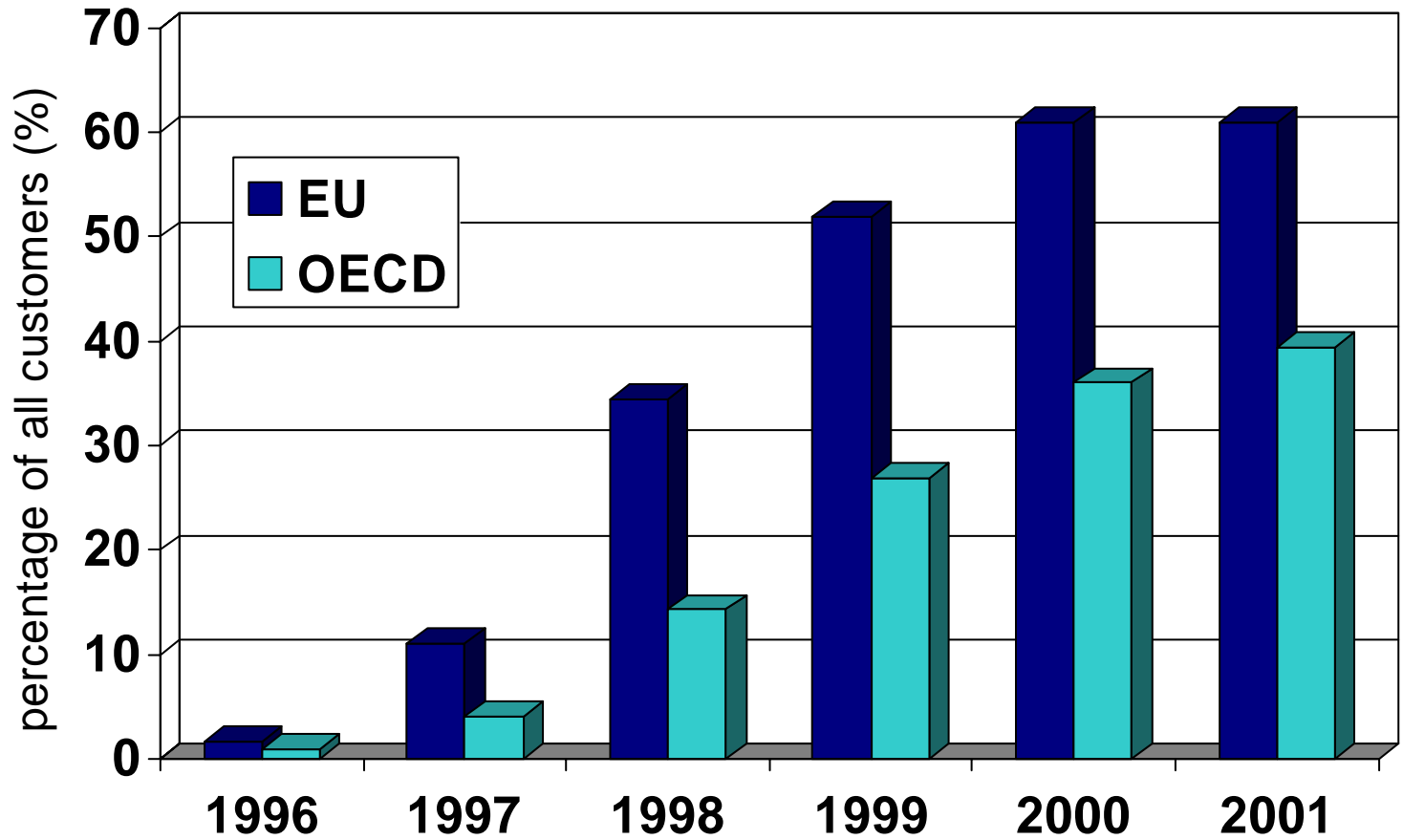


Source: OECD, 2003.

INTUG pre-paid customers

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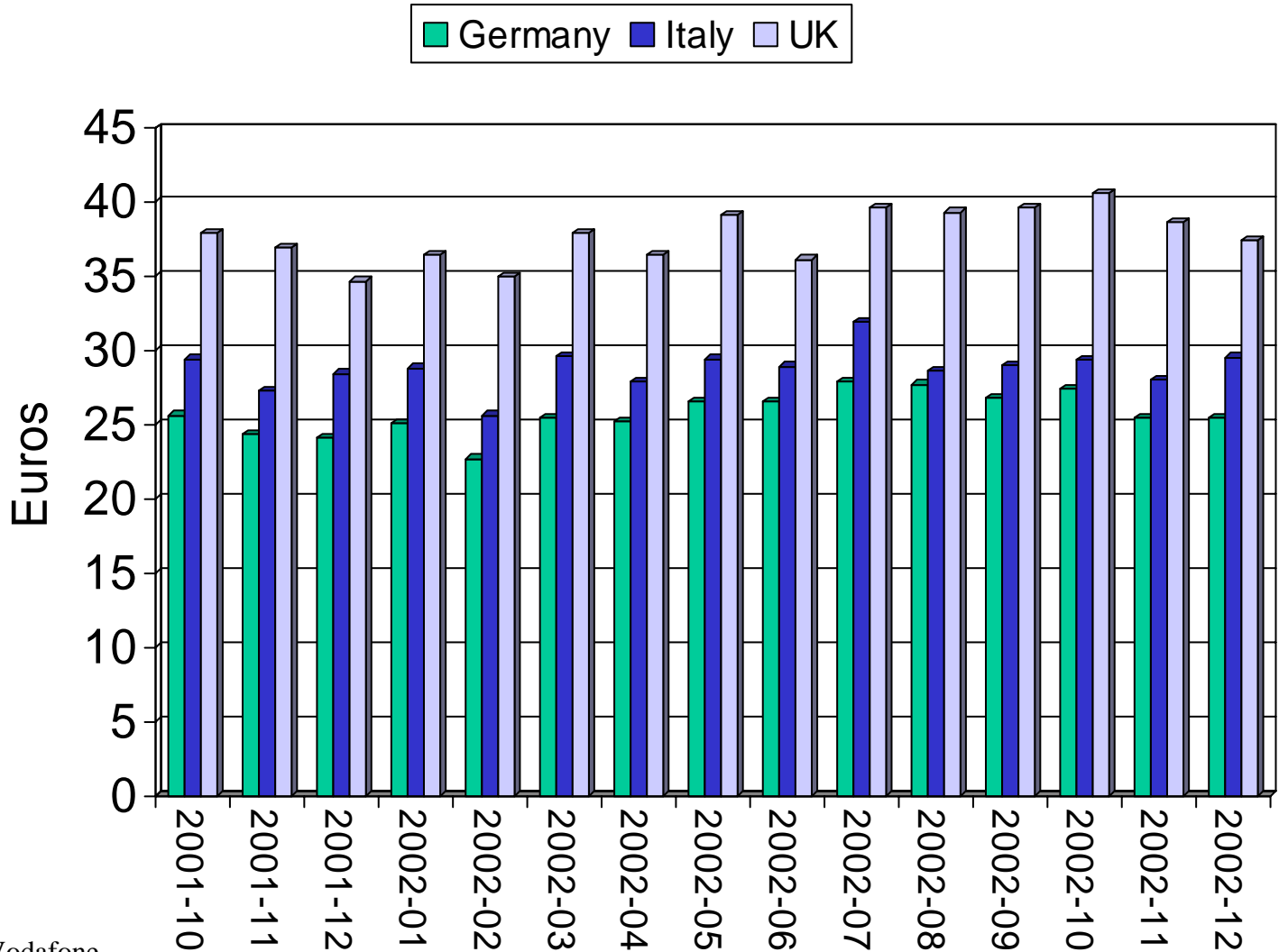
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Source: OECD, 2003.

INTUG Vodafone ARPU

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

INTUG the value of mobility

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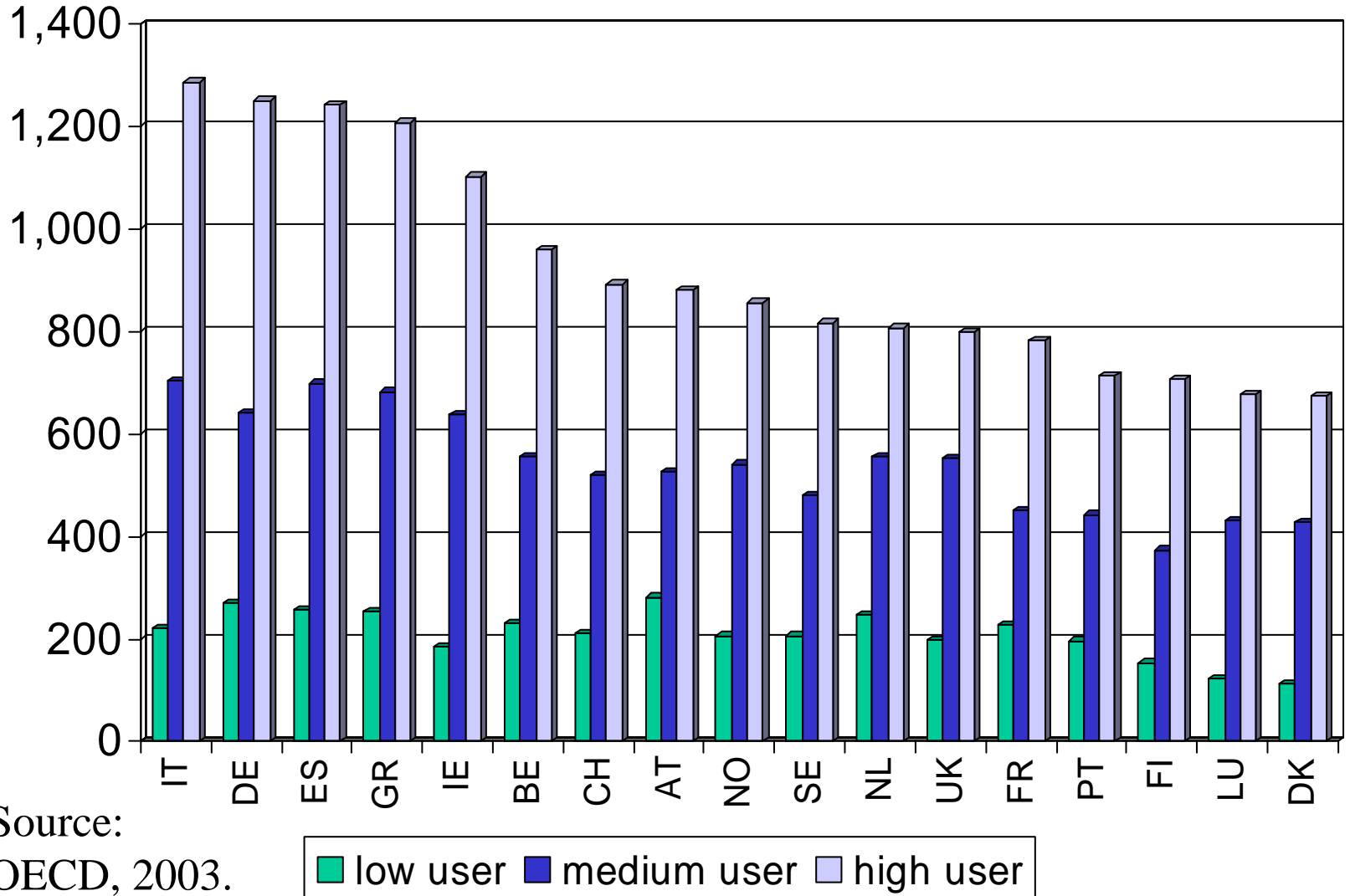
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- Wireless Local Loop (WLL) can provide “limited” mobility:
 - CMDA/WLL, PAS, etc
 - China, India and South Africa
- causes loss of growth potential for MNOs:
 - customer numbers
 - revenue
- raises questions:
 - how many users really need global roaming?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

INTUG basket of charges in USD/PPP

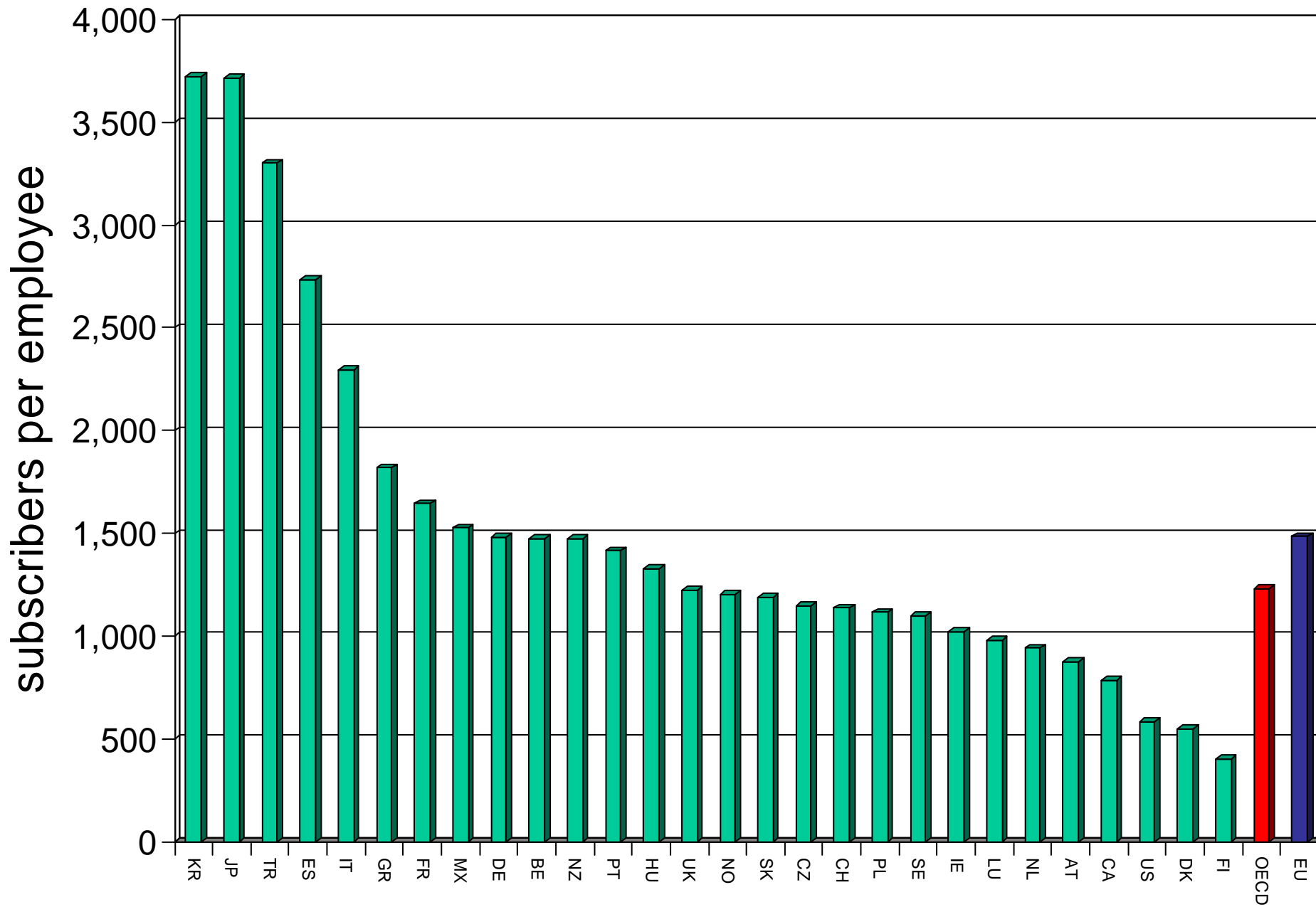
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Source:
OECD, 2003.

■ low user ■ medium user ■ high user



Source: OECD, 2003.

INTUG market abuses

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- 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

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- 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

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- 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

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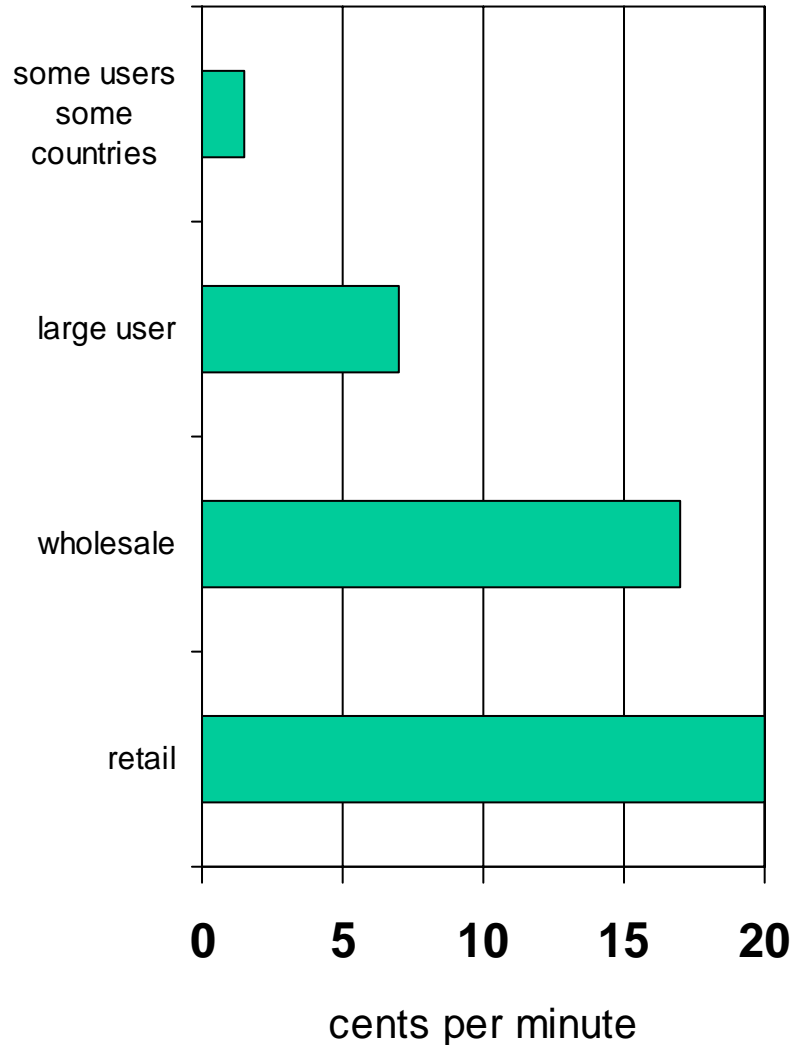
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- domestic abuse extended abroad
- long and unpleasant disputes
- cost orientation is around €0.05 per minute
- legal obligation in EU to regulate F2M
- MNOs argue they will have to raise origination prices and cut handset subsidies
- smaller operators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

INTUG discrimination

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- 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.

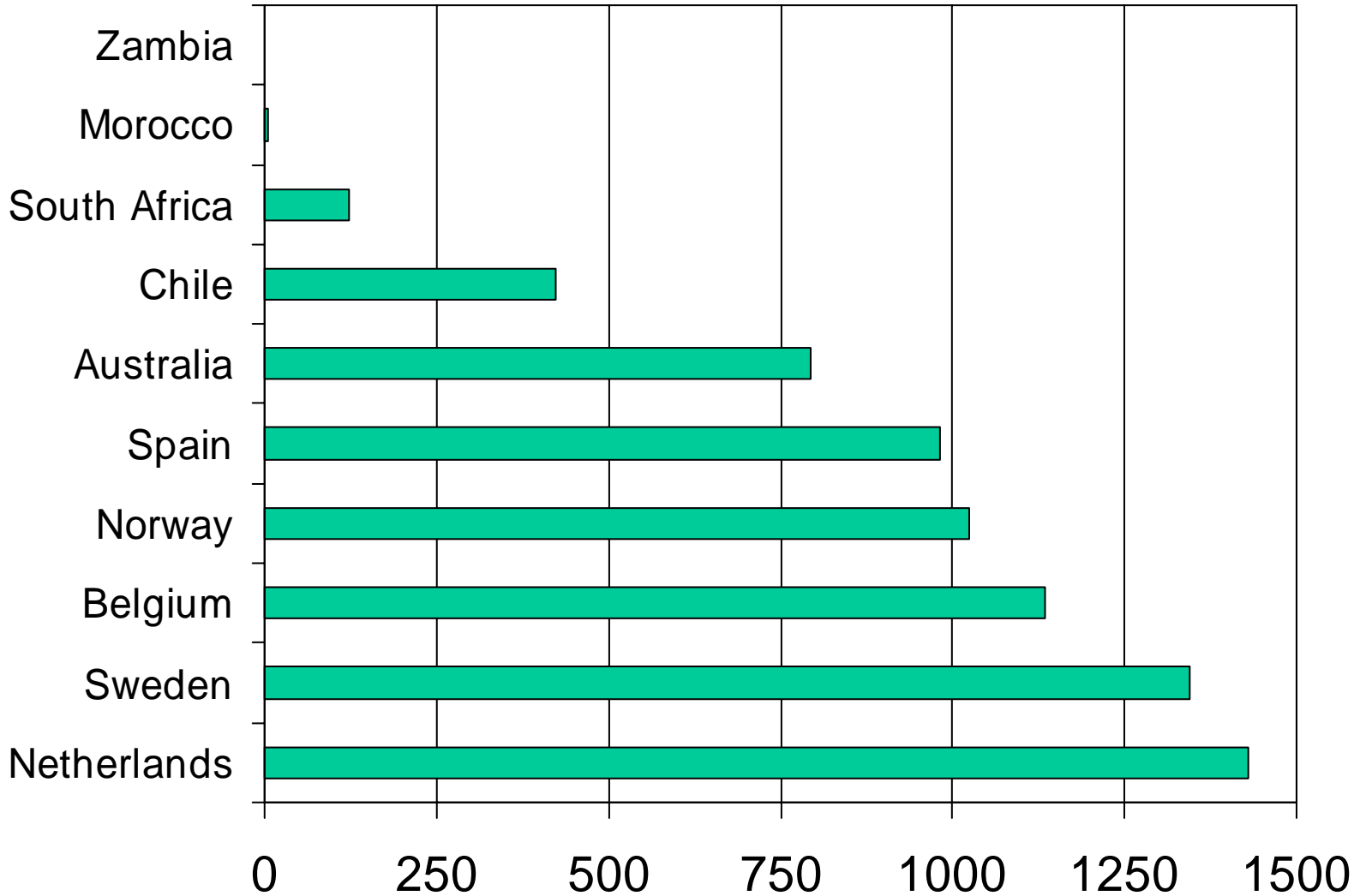
INTUG United Kingdom

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- 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 (%)



INTUG BT and Telenor

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- 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

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

INTUG possible remedies

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- 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

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- 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

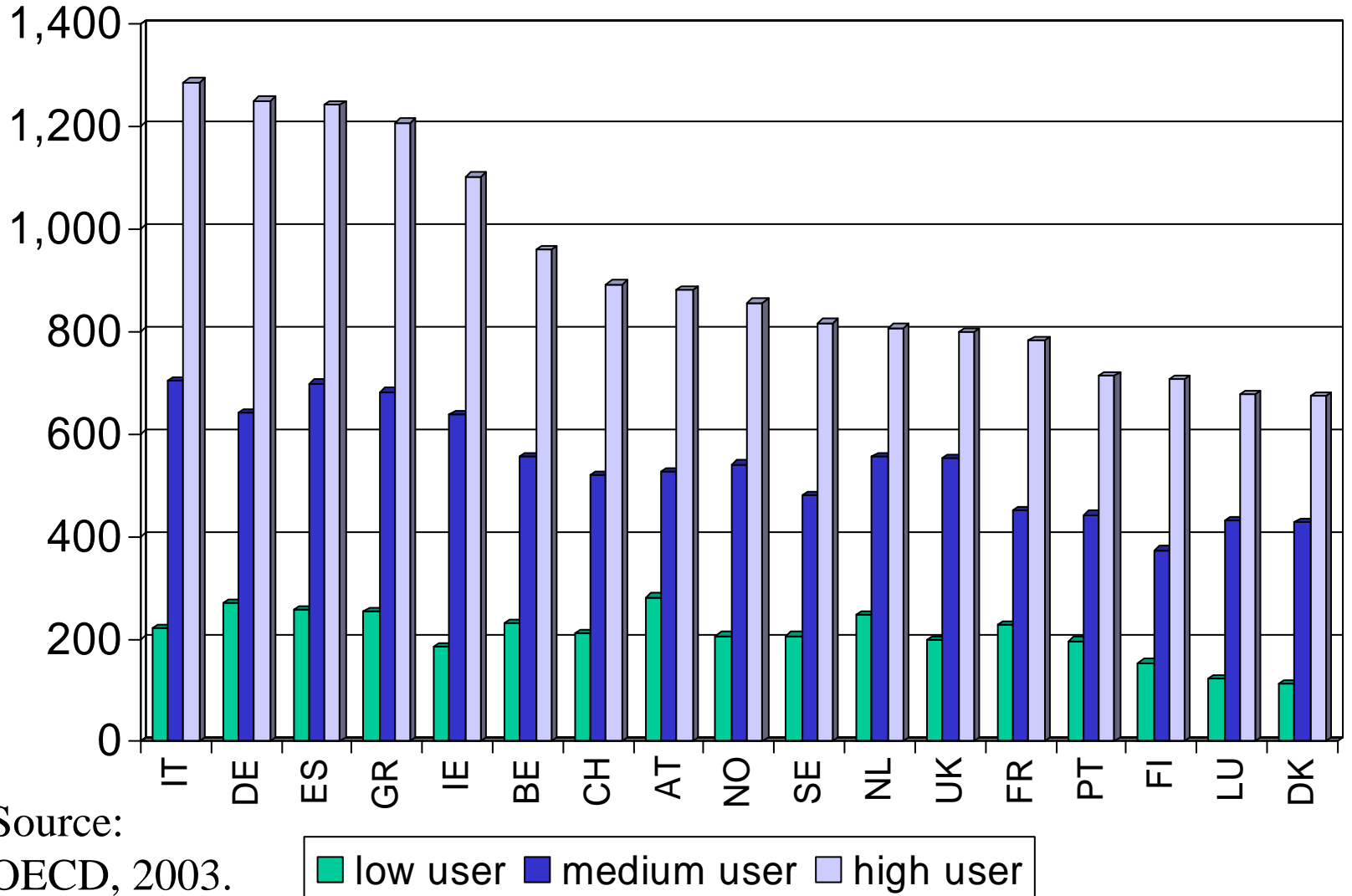
IP telephony is driving down general telephony prices

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basket of charges in USD/PPP

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INTUG fixed-to-mobile

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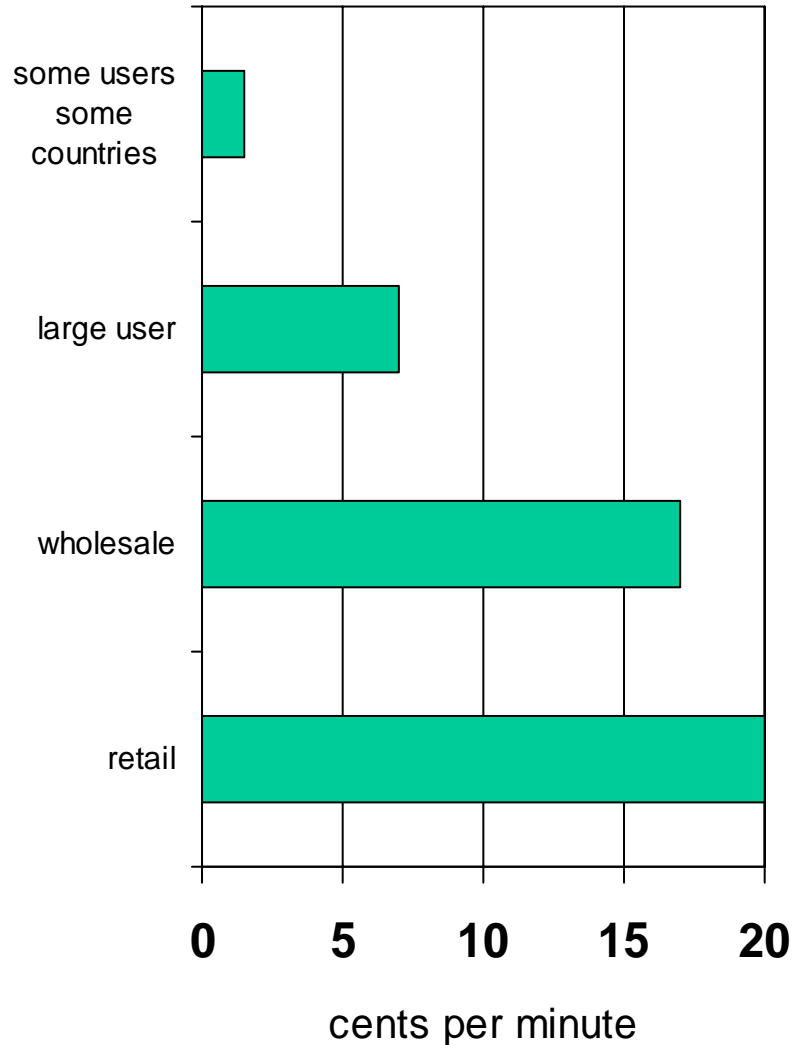
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INTUG South Africa/Belgium roaming

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- 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)

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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)

INTUG roaming market analyses

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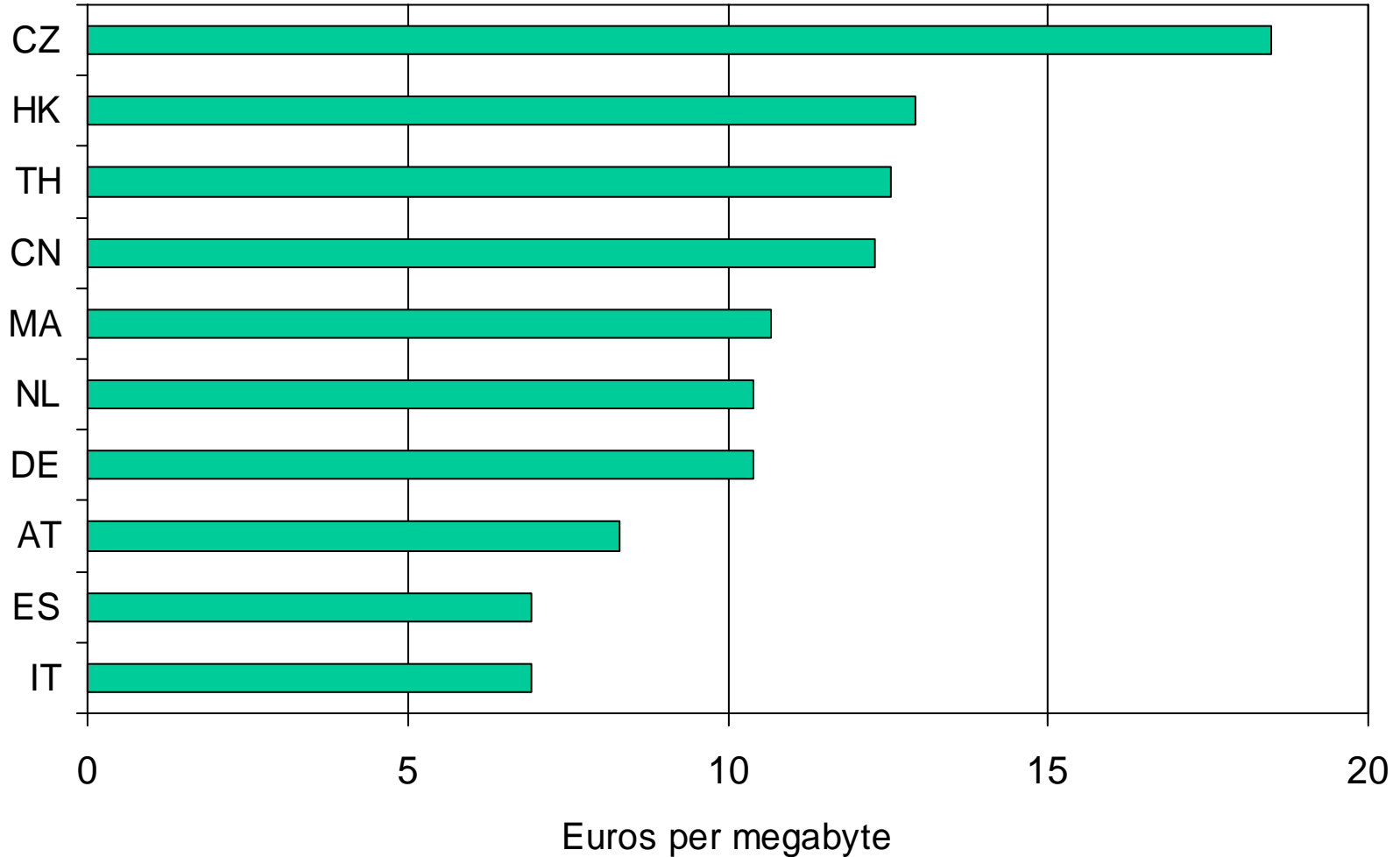
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IP telephony is driving down general telephony prices

INTUG SingTel GPRS roaming rates

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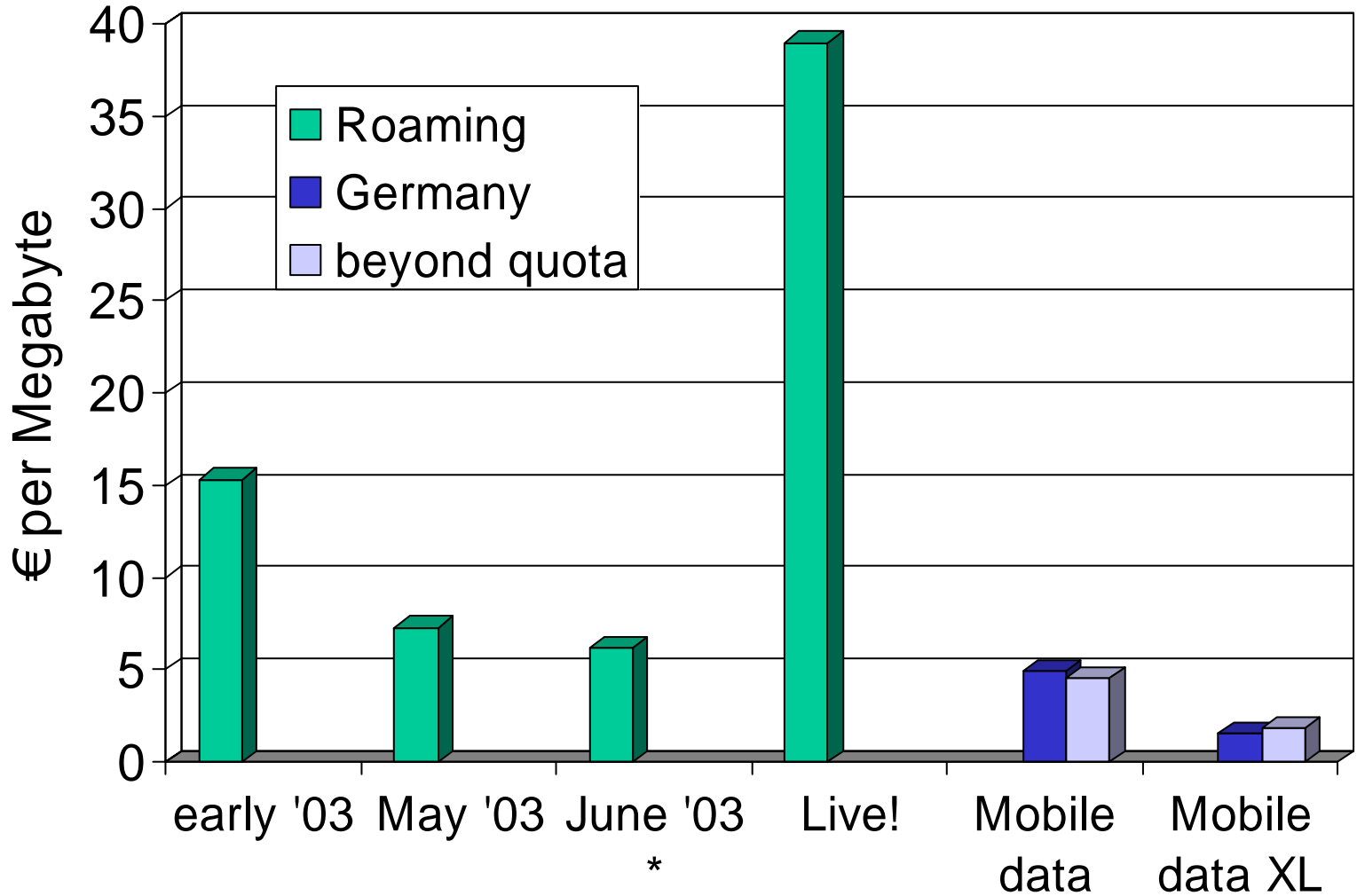


Source: Singtel. Currently "free" in AU, DK, FI, IN and ML.

INTUG Vodafone Germany

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INTUG USA and UK

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- 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

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- 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

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- 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

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- 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

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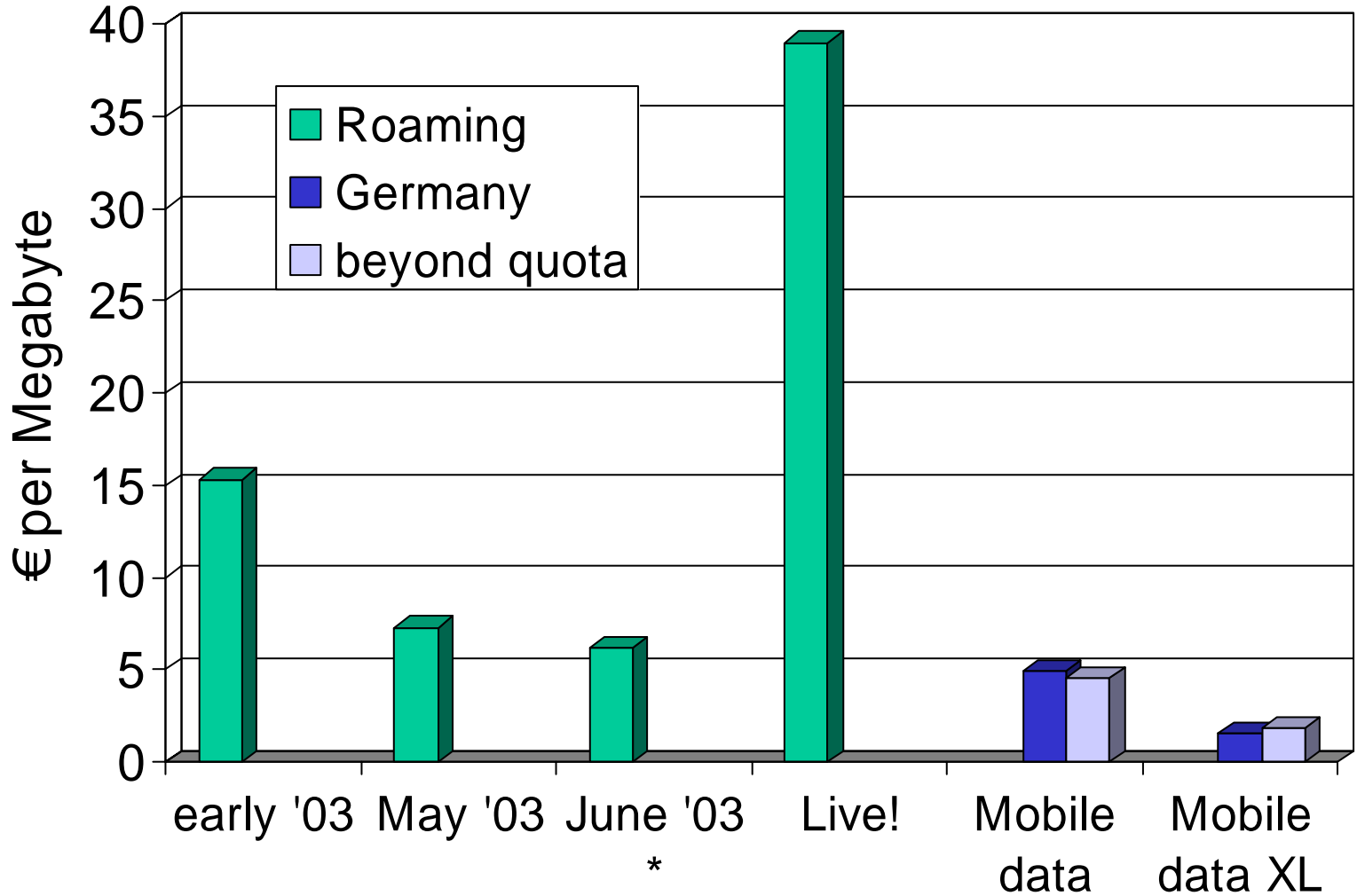
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- like ISDN for mobile phones
- only being used in trials
- even big companies see this as grossly over-priced
- roaming prices are higher still
- no signs or hopes of any revenues for the operators
- EDGE and 3G due very soon

INTUG Vodafone Germany

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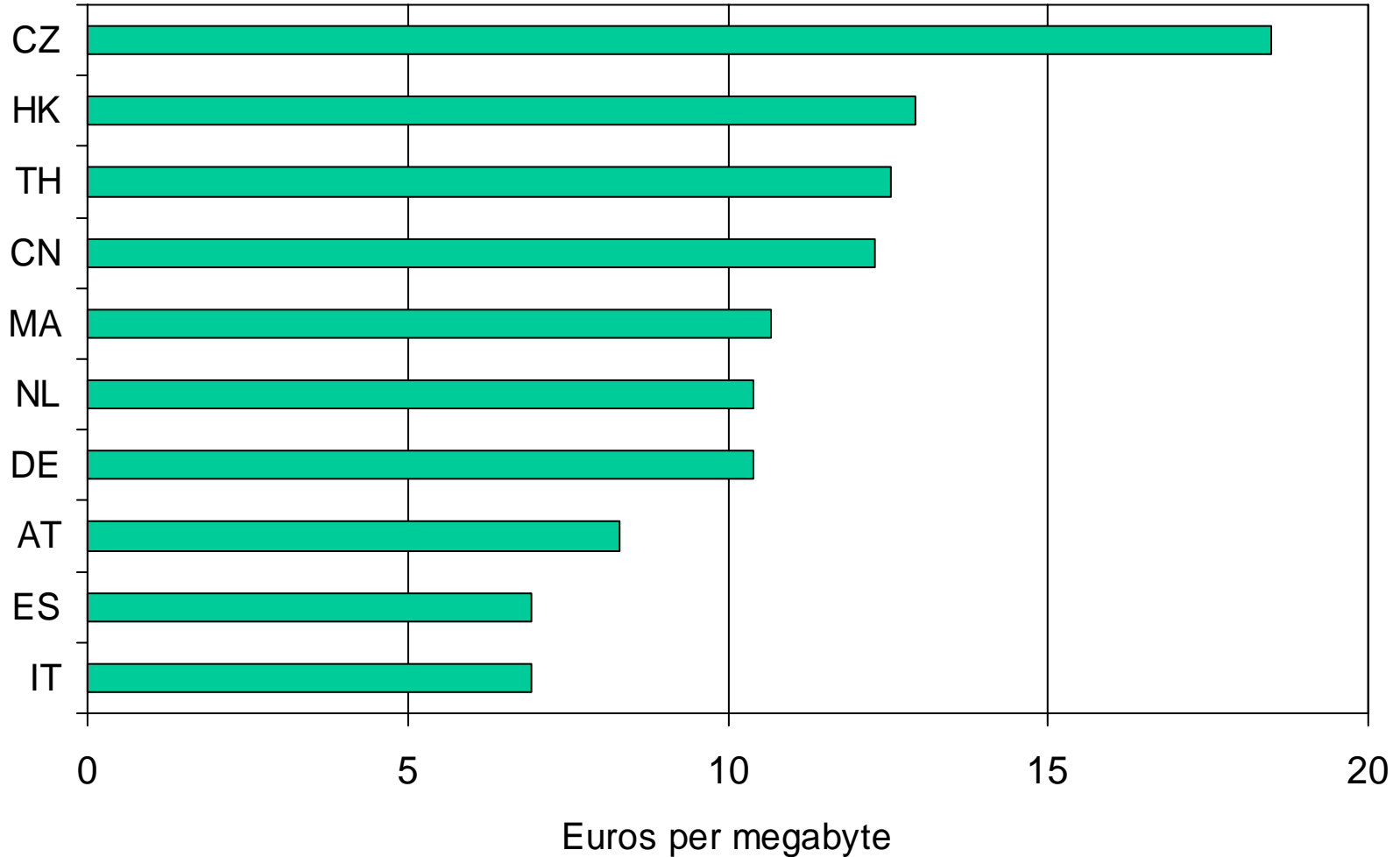
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INTUG leased lines

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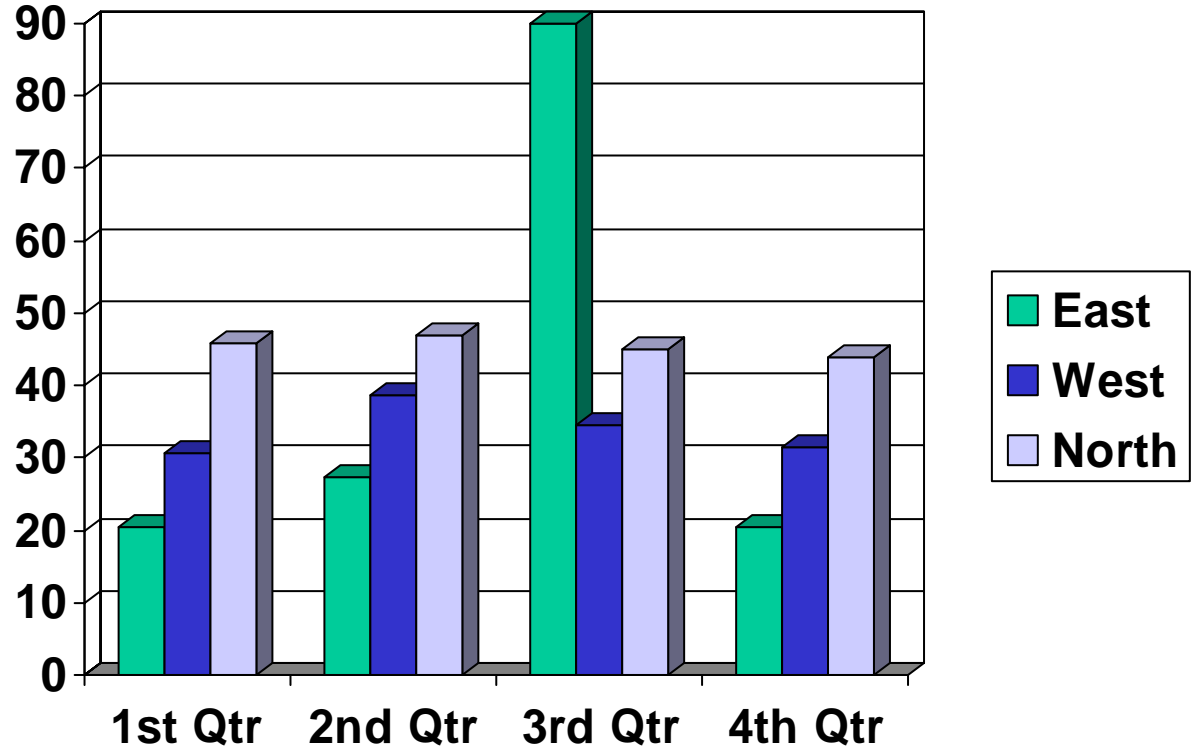
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- work item since 1974
- raised by INTUG at CCITT in 1979
- pressed European Commission to act
- remains a problem
 - availability
 - discrimination against new entrants
 - pricing

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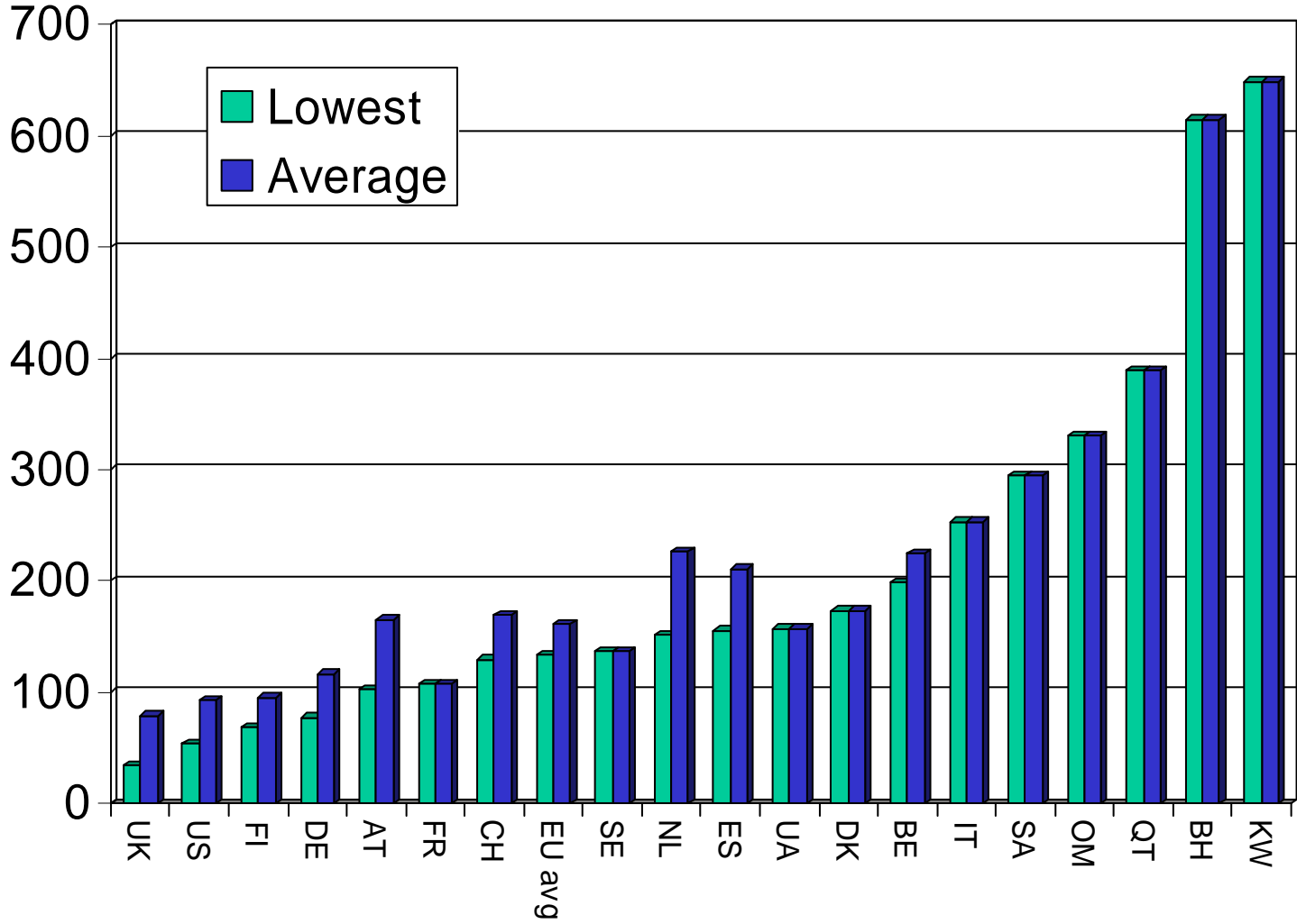
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INTUG 64k local leased lines

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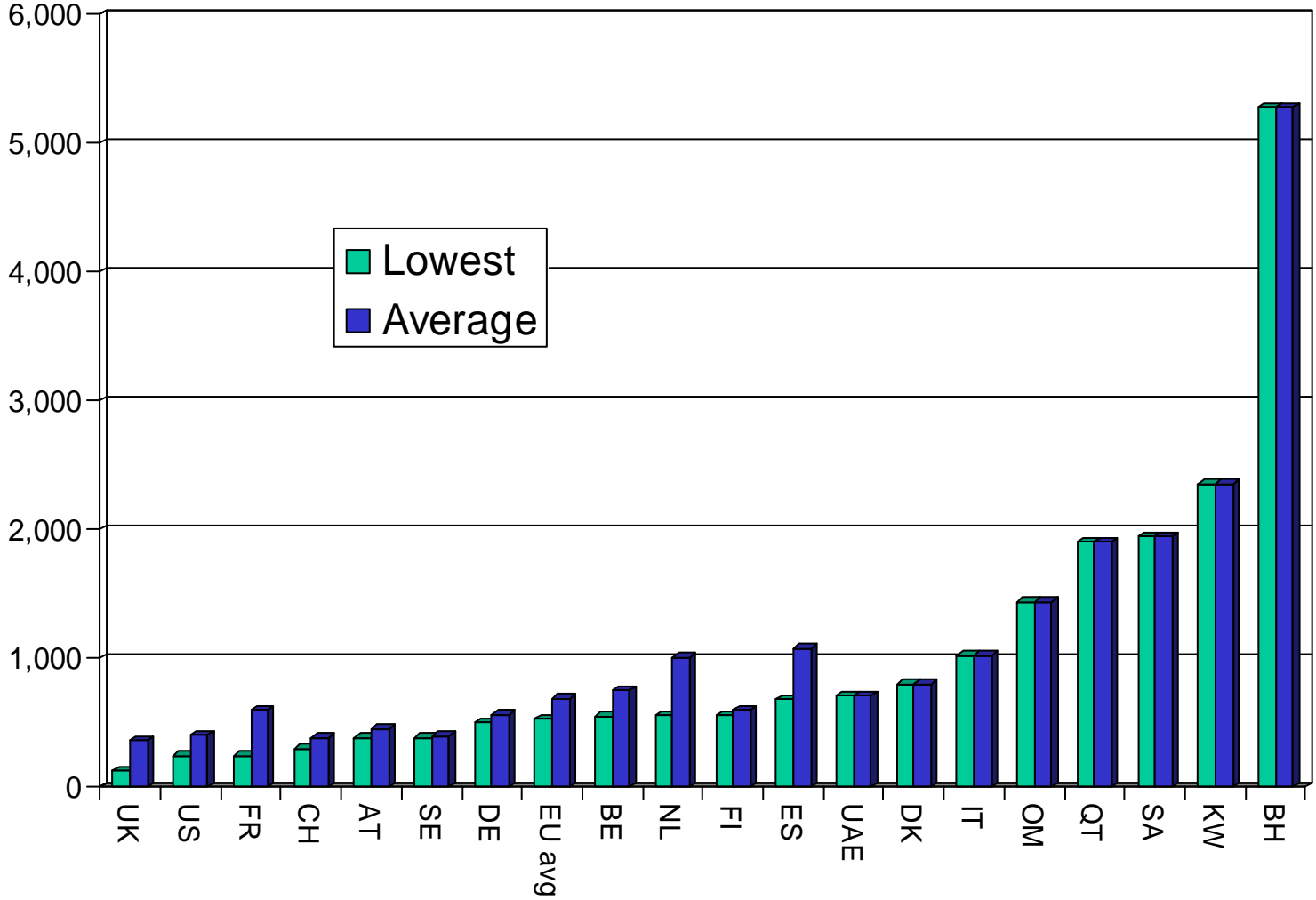
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INTUG 2Mbit/s local leased line

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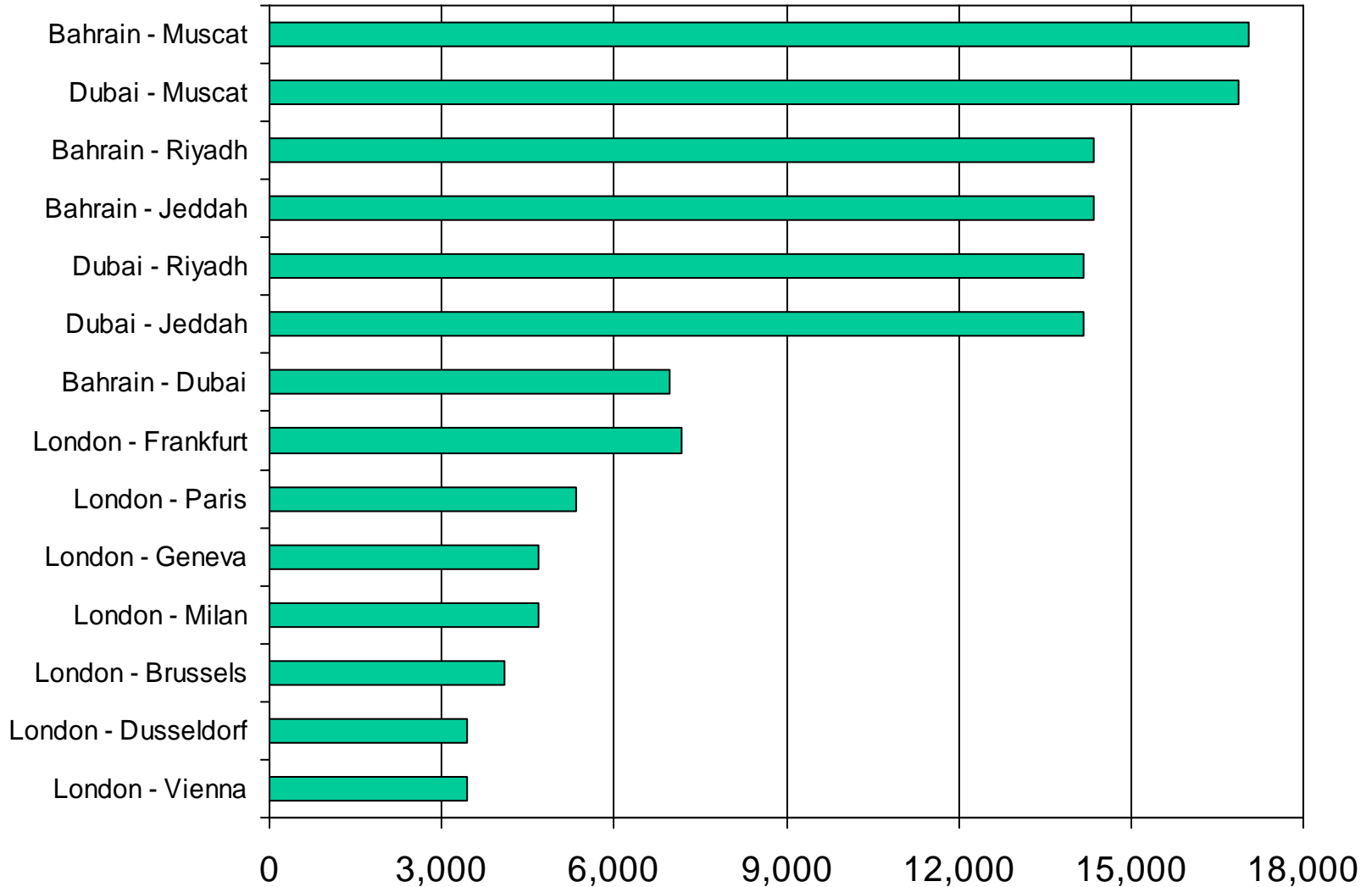
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INTUG International leased lines

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INTUG broadband

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- 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

INTUG Yahoo! BB summer offer

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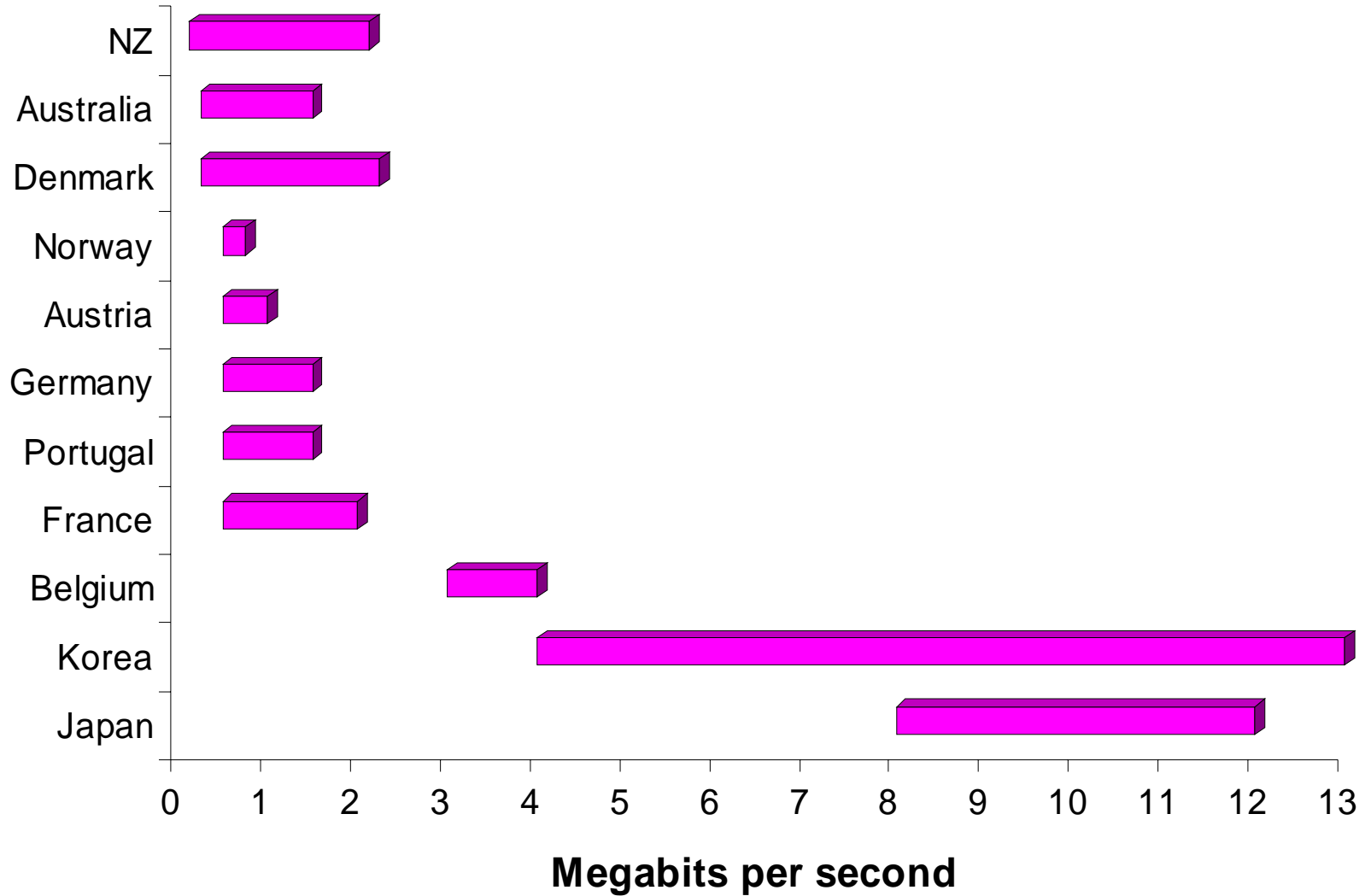
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- 26 Megabits per second
 - diminishes with distance from exchange
 - minimum 0.7Mbit/s
 - no download cap or charge
- three months free
- JPY 3,828 per month
- JPY 4,828 with residential Wi-Fi
- <http://bb.yahoo.co.jp/>

INTUG available download speeds

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INTUG What does €25 buy?

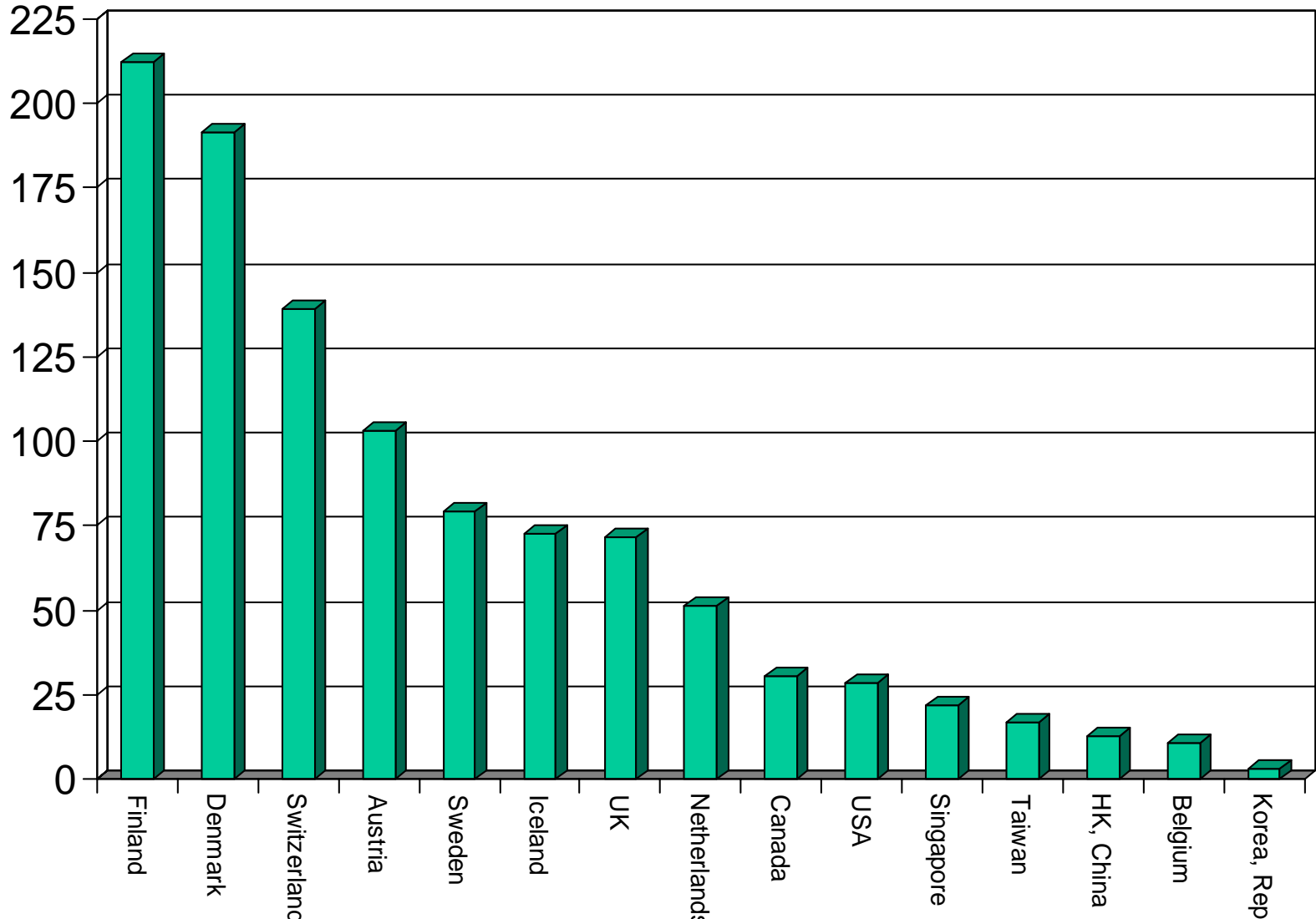
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		down MBps	up Mbps	days
Japan	Yahoo! BB	12	1	33
Belgium	Skynet Go!	3	0.26	19
Denmark	TDC ADSL	0.26	0.13	16
Italy	Linea alice 640	0.64	0.13	15

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

Source: ITU.



INTUG two small countries - broadband

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- 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 Walloon (French)

INTUG voice telephony

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

INTUG current EU legislation

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- privatisation
- Liberalisation
- politico-regulatory games
- transposition
 - delays
 - errors

INTUG liberalisation

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- Green Paper
- 1998 "big bang"
- 1999 Review
- 2001 political compromise of Council, Parliament and Commission
- 25 July 2003 transposition date
- 2005 review of scope of universal service
- 2006 review of the directives

INTUG delays

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- translators (few weeks)
- Recommendation on markets (few months)
 - inclusion of Mobile markets
 - broadband market definitions
- Article 7 procedure (until 25 July)
- member states (nothing to several months)

INTUG transposition

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- five on time, ten late
- none of the six founding members
- two of the EFTA countries
- infringement proceedings:
 - failure to transpose
 - incorrect transposition

INTUG why delay?

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- afraid market assessments will show the dearth of competition?
- afraid of competition law?
- no longer believe in lifting the regulatory burden from incumbent operators?
- uncertainty about the positive effects of implementation?
- other political priorities
- temporary loss of government

INTUG harmonisation

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- no single market and no prospect
- the system has few (if any) incentives?
- the start is staggered/staggering?

INTUG conclusions

- start is
 - staggered?
 - staggering?
- complex legal issues

INTUG thank you

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INTUG conclusions

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- 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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