

## Mobile telecommunications competition or cartel?

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# INTUG contents

- closing the digital divide
- market failures
- choosing technologies
- ensuring investment
- conclusions

# INTUG what is INTUG?

- members
  - national associations
  - corporations
  - individuals
- activities
  - ITU and WTO
  - OECD
  - APEC TEL, CITELE 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 closing the digital divide

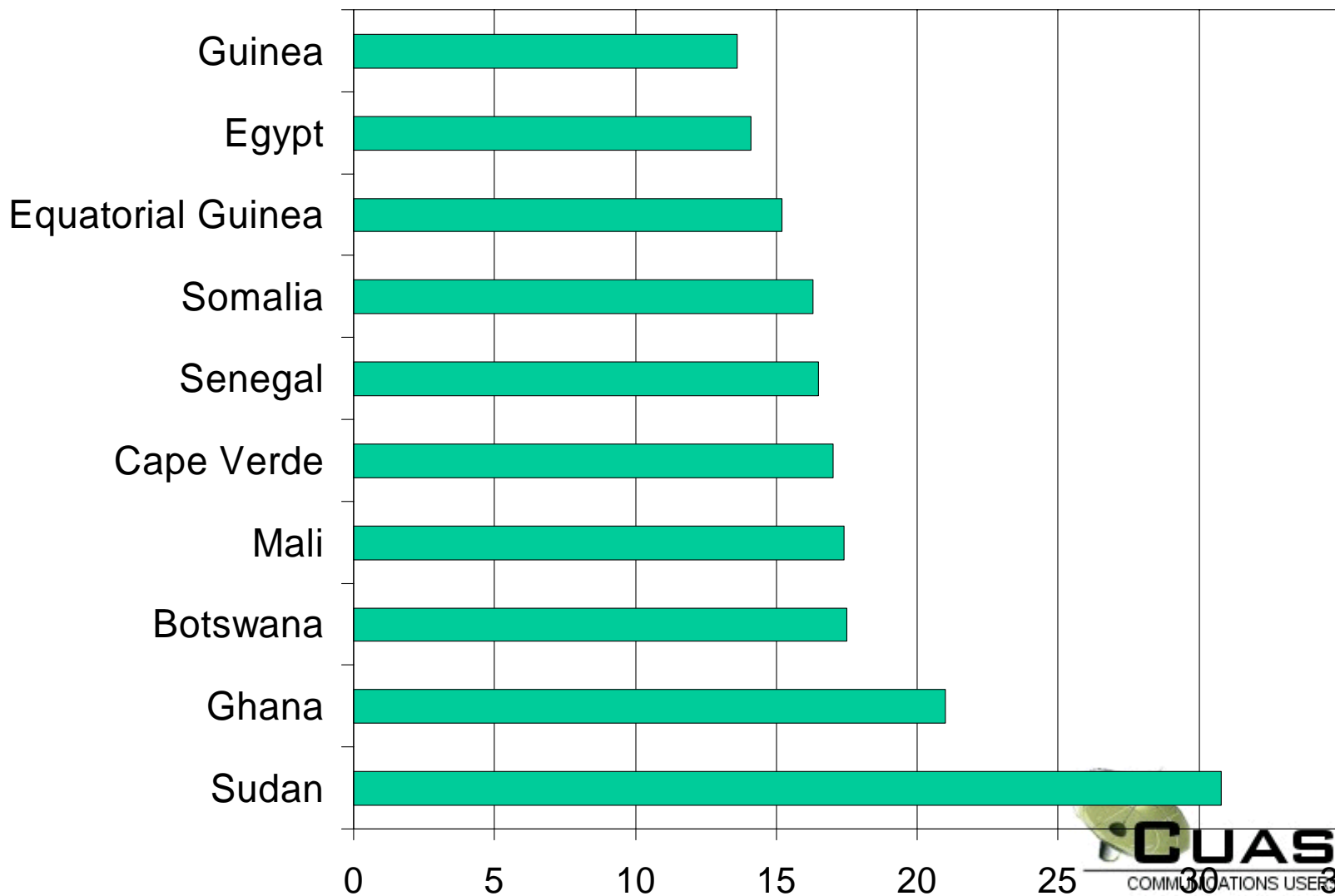
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- ITU Maitland Report in 1984
- advances in developed countries:
  - mobile
  - Internet
- reductions in costs
- loss of revenues from accounting rates
- mobile telecommunications
  - surprising contribution to teledensity
  - proves that competition can work

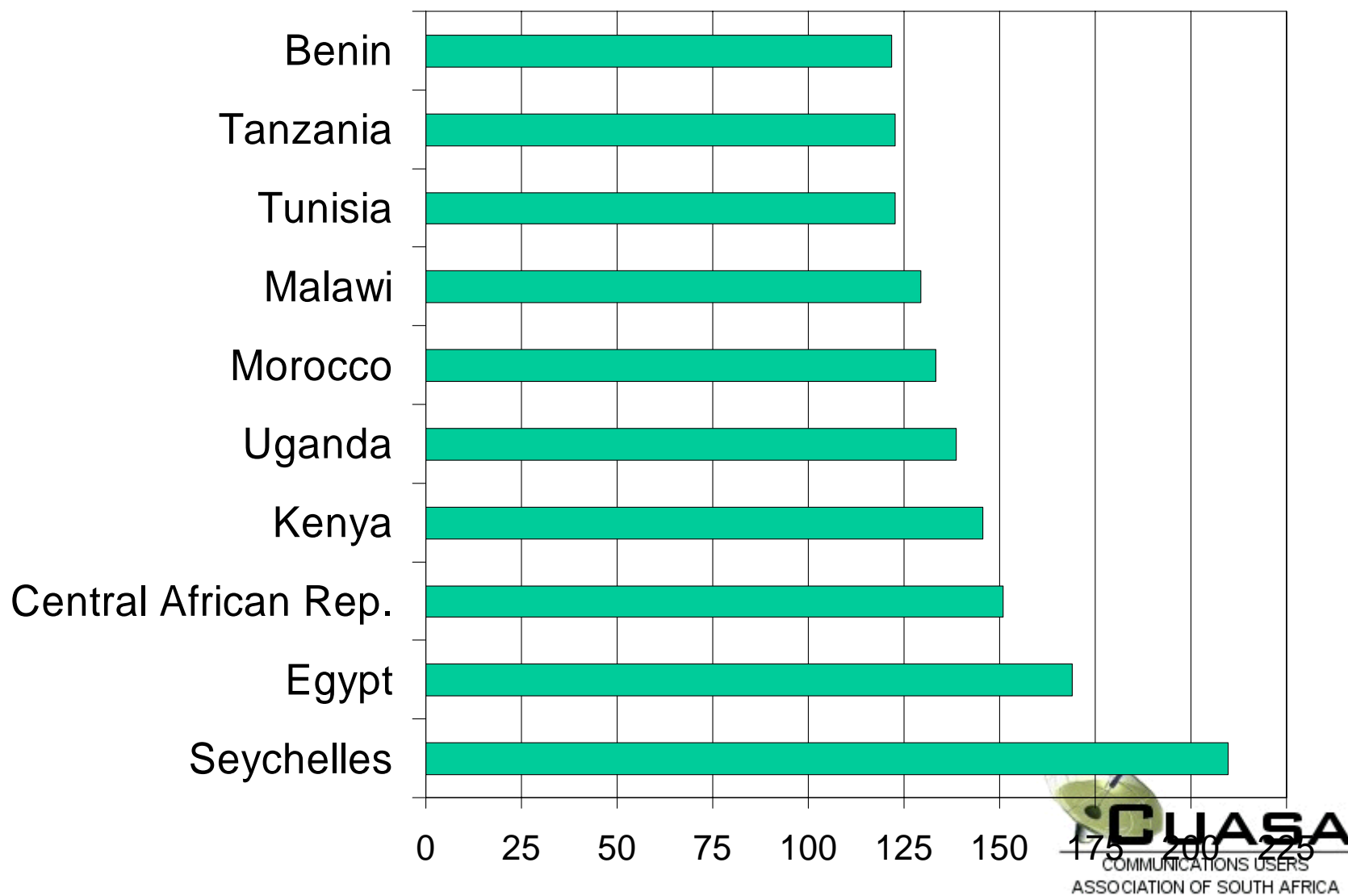
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# fixed network growth 1995-2001, top 10, CAGR %



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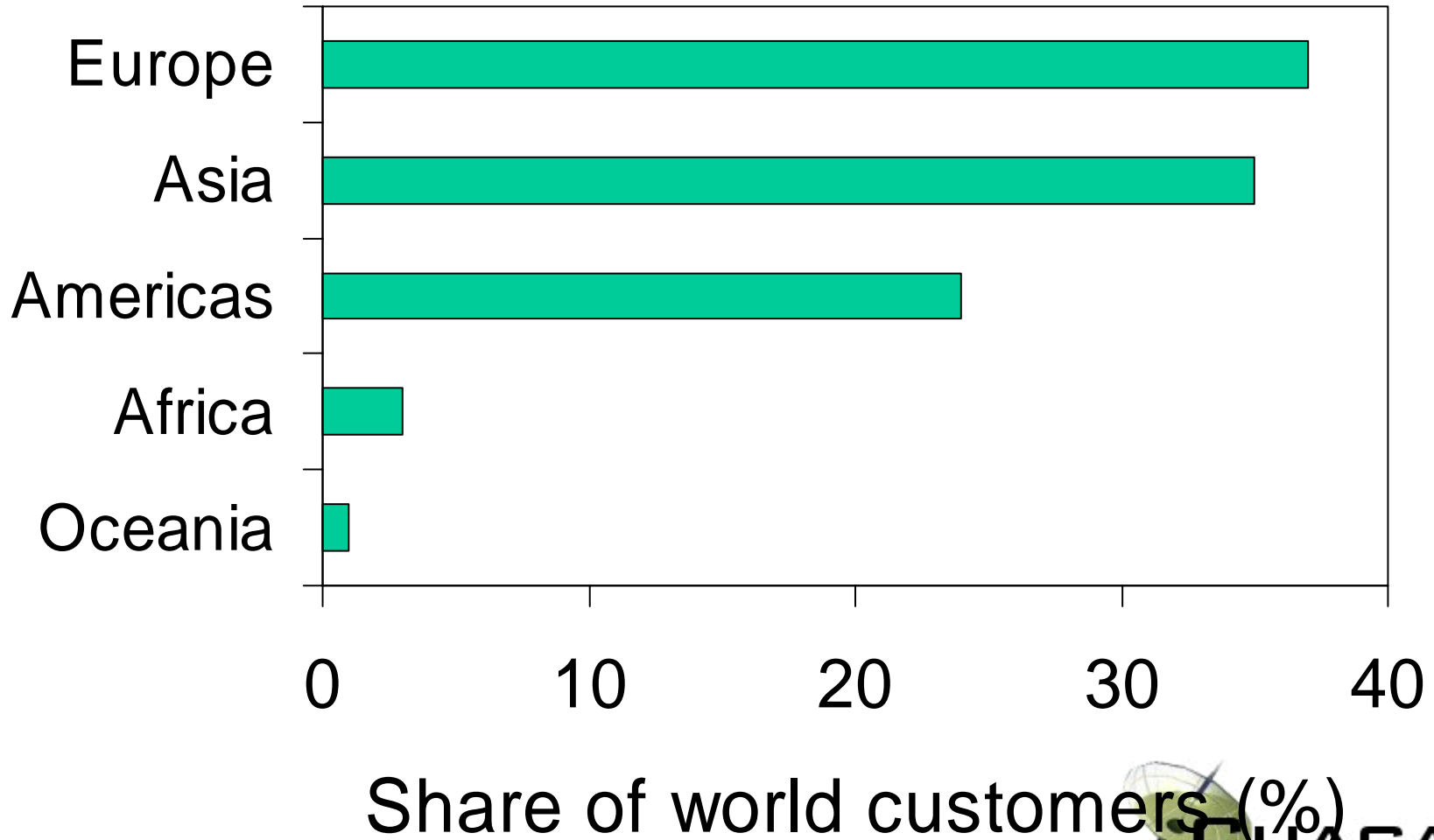
# mobile network growth 1995-2001, top 10, CAGR %



# INTUG mobile subscribers 2001

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# INTUG world mobile rankings - ITU

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South Africa 19.2 (67<sup>th</sup>)

Botswana 12.33 (82<sup>nd</sup>)

Morocco 8.23 (93<sup>rd</sup>)

Gambia 0.43 (161<sup>st</sup>)

Kenya 0.42 (162<sup>nd</sup>)

Madagascar 0.40 (163<sup>rd</sup>)

Algeria 0.28 (165<sup>th</sup>)

Mauritania 0.27 (166<sup>th</sup>)

Mozambique 0.26 (168<sup>th</sup>)

Sierra Leone 0.25 (170<sup>th</sup>)

Burundi 0.24 (171<sup>st</sup>)

Burkina Faso 0.21 (175<sup>th</sup>)

Angola 0.20 (176<sup>th</sup>)

C.A.R. 0.14 (184<sup>th</sup>)

Mali 0.09 (1985<sup>th</sup>)

Sudan 0.07 (186<sup>th</sup>)

Chad 0.07 (187<sup>th</sup>)

Djibouti 0.04 (190<sup>th</sup>)

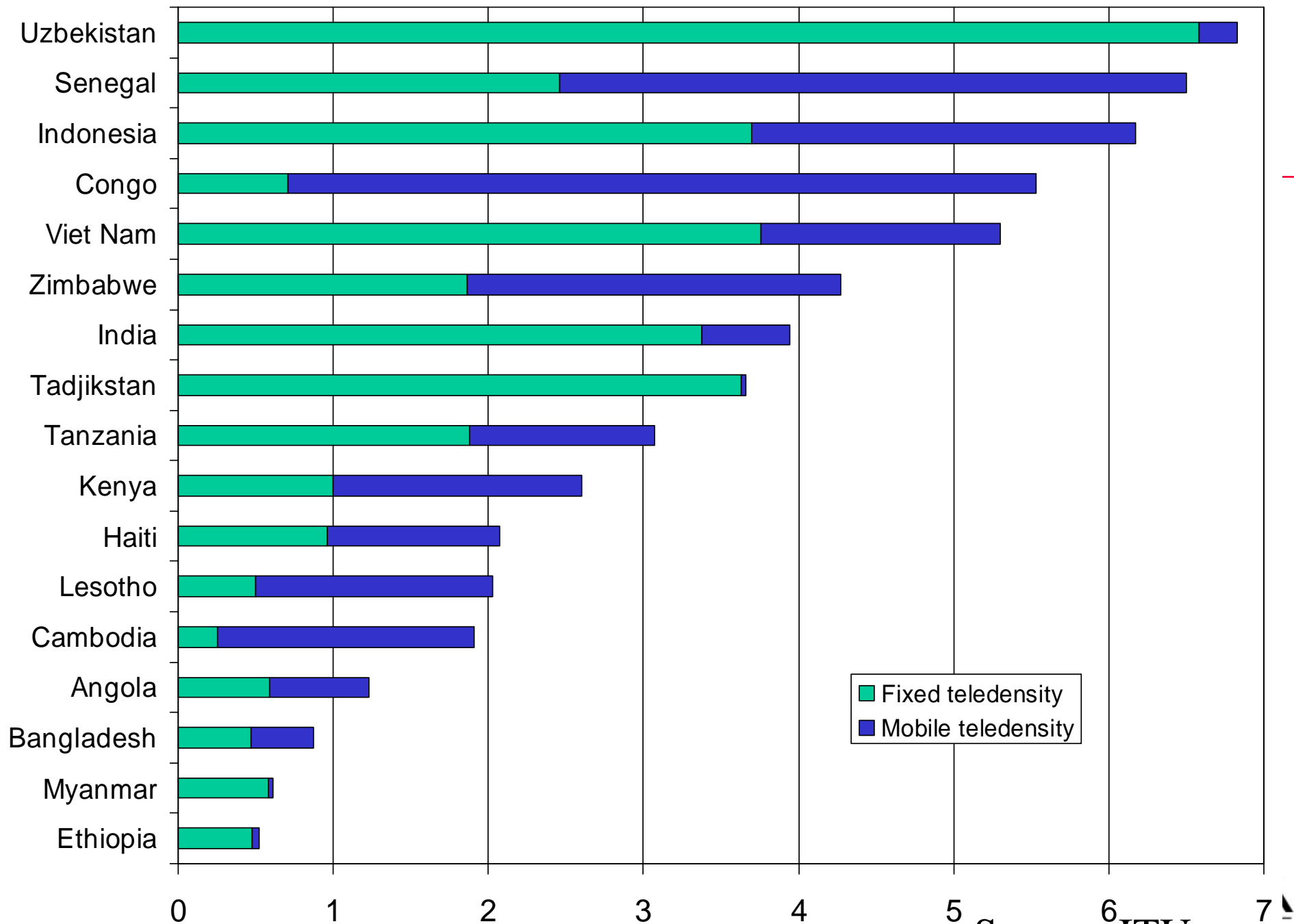
Congo 0.03 (191<sup>st</sup>)

Ethiopia 0.03 (193<sup>rd</sup>)

Nigeria 0.02 (187<sup>th</sup>)

Niger 0.02 (188<sup>th</sup>)

Somalia 0.00 (197<sup>th</sup>)

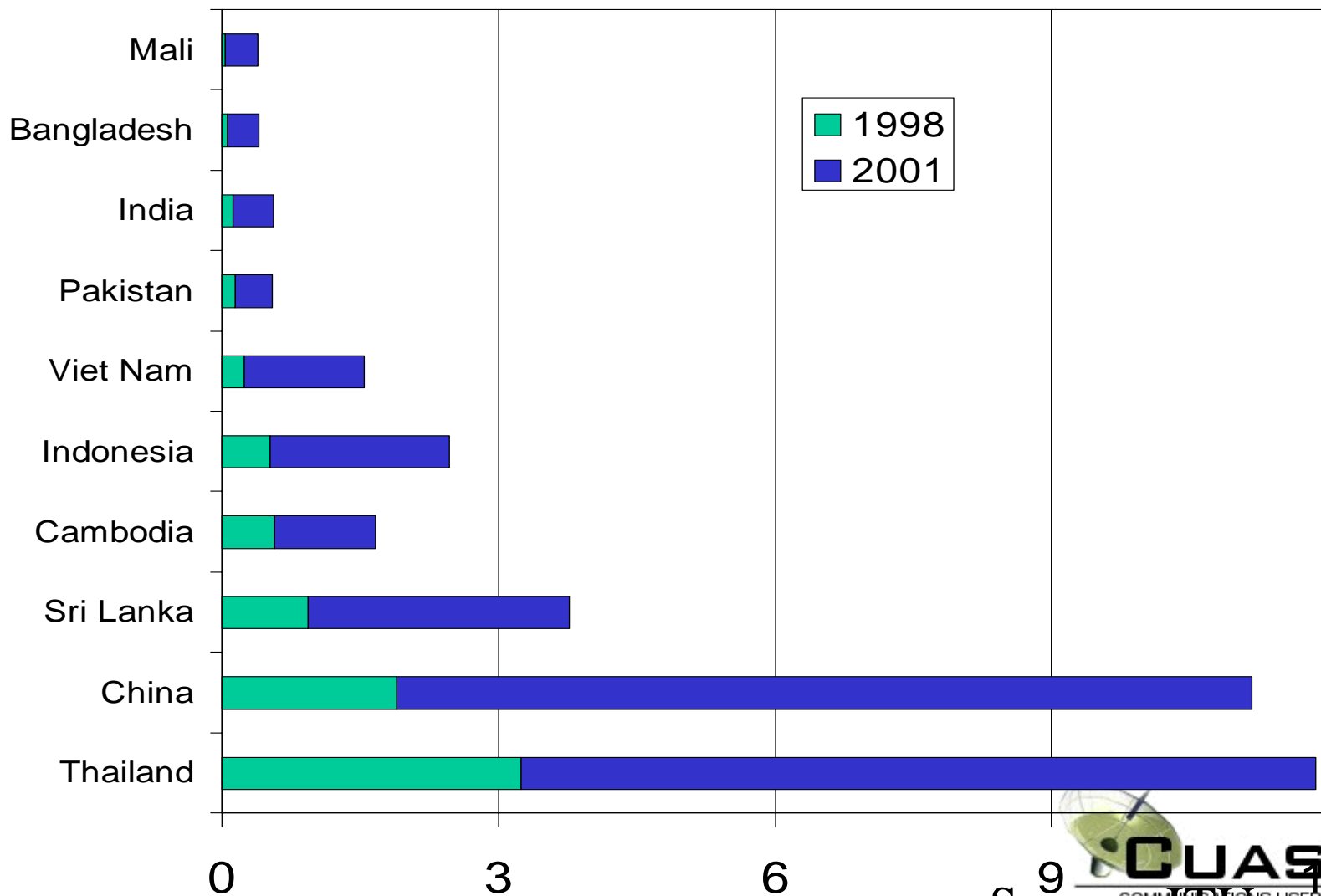


Source: ITU.

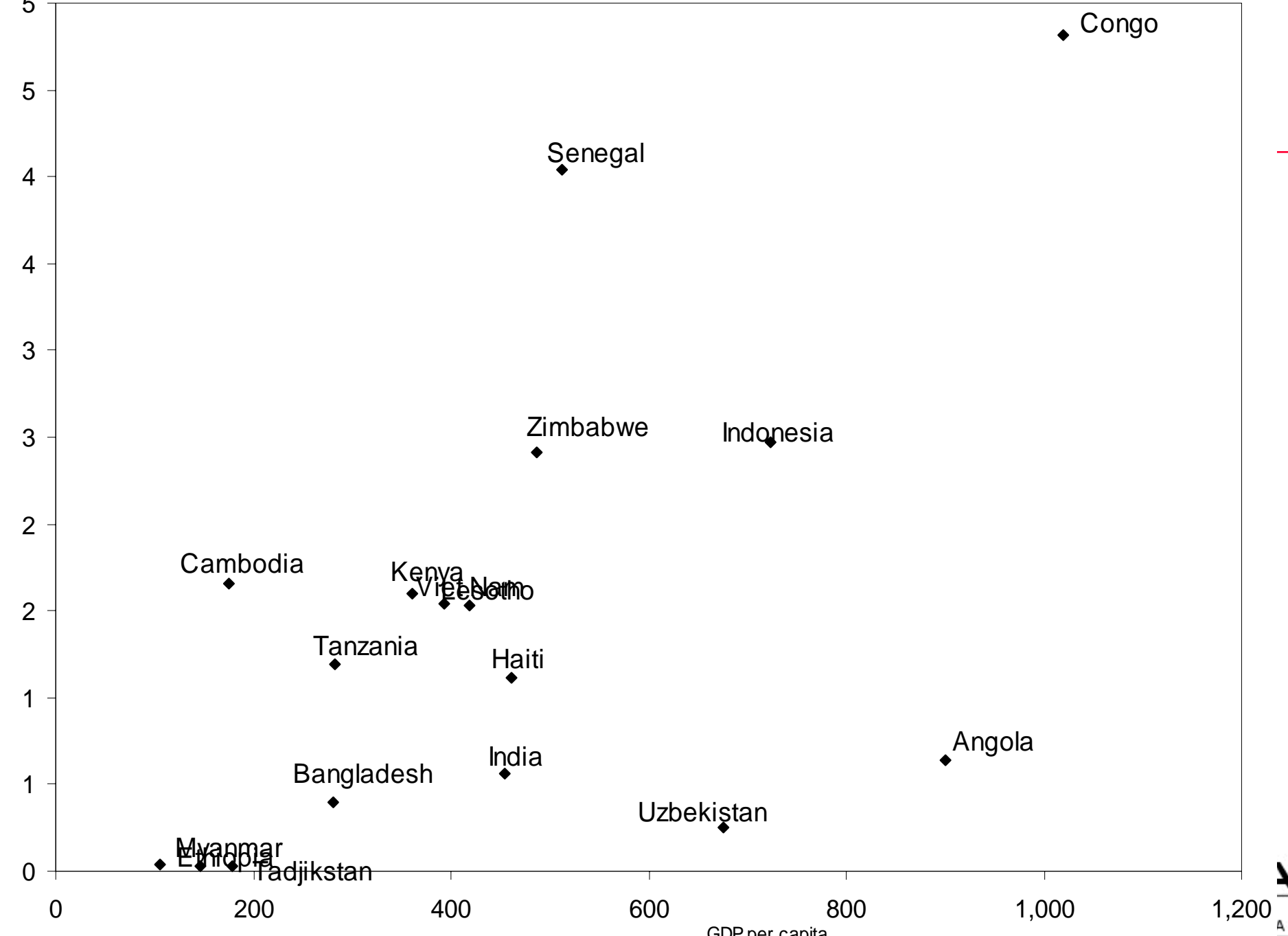
# INTUG mobile teledensity in low income countries

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Mobile teledensity



# INTUG

## *90 minutes/month of mobile as % of GDP per capita*

- Burundi 11.00
- Tanzania 2.43
- Mali 2.38
- Burkina Faso 1.97
- Uganda 1.65
- Mozambique 1.64
- Ethiopia 1.58
- Malawi 1.44
- Benin 1.40
- Cameroon 1.36
- Togo 1.30
- Niger 1.04
- Côte d'Ivoire 0.96
- Kenya 0.92
- C.A.R. 0.68
- Zambia 0.78
- Senegal 0.61
- Zimbabwe 0.55
- Angola 0.49
- Morocco 0.29
- Namibia 0.21
- South Africa 0.21
- Gabon 0.15
- Botswana 0.16
- Algeria 0.16
- Seychelles 0.05

# INTUG market abuses

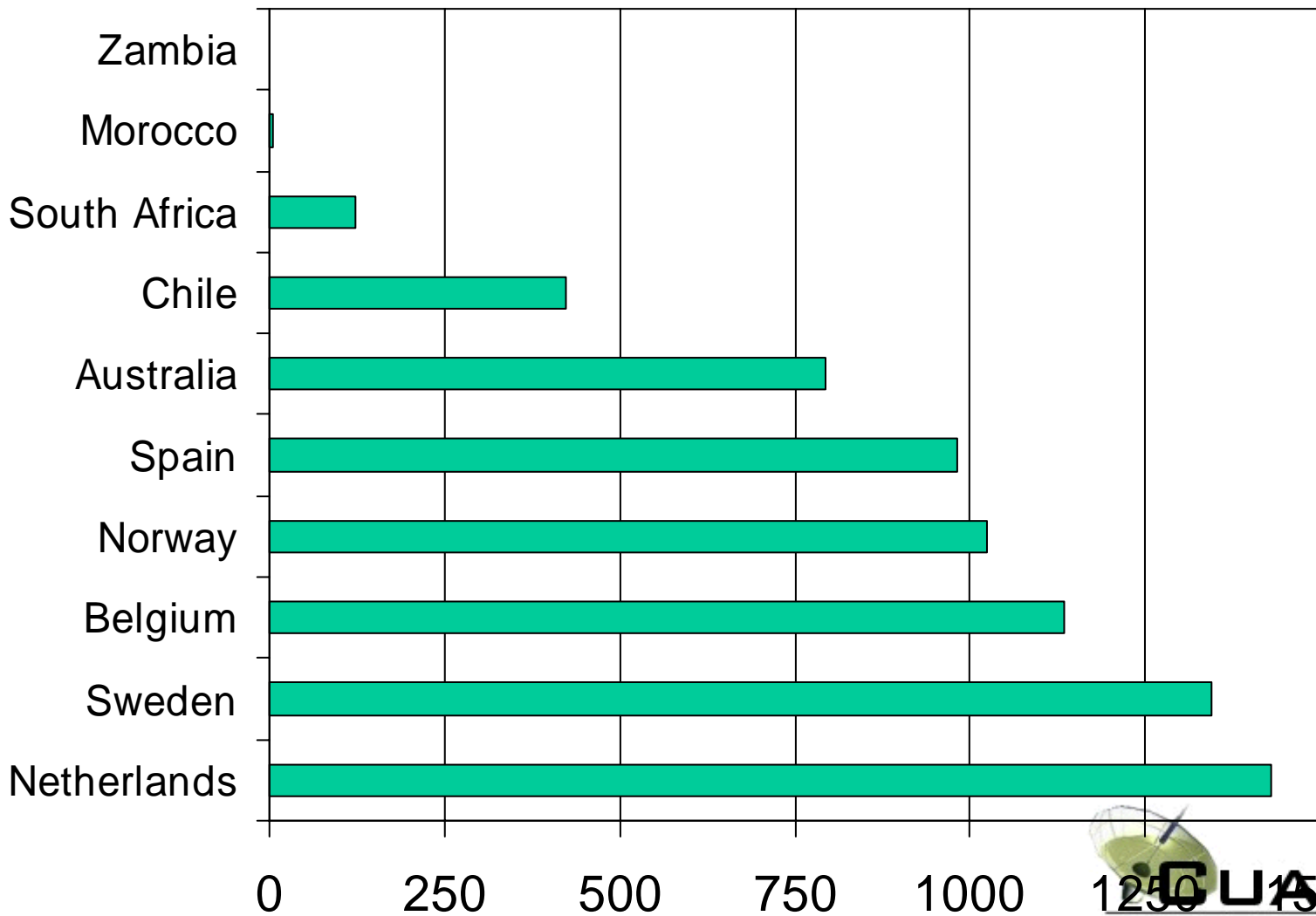
- call termination prices
  - domestic
  - international
- international mobile roaming
- Short Message Service
- financial market problems

Caused by an unwillingness to compete.

# INTUG call termination prices

- regulated termination on fixed networks
- unregulated termination on mobile
- high and sometimes rising prices
- operators are dominant on their own market
- started at home but extended abroad
- need to drive down prices

# INTUG fixed/mobile price difference (%)





# INTUG international mobile roaming

- investigation by the Competition Directorate-General of European Commission begun in 1999
- looks 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 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 state of play

- regulators and competition authorities are now fully aware of these issues
- they will drive down voice revenues of many operators
- operators will need to compensate with data and VANS revenues
- challenges from:
  - Voice over IP over GPRS and WLAN
  - instant messaging

# 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 i-mode

- SIM-locked
- portal-locked
  - “walled garden”
- selective third-party billing
- very, very hard to transplant

# INTUG market failures

- HSCSD
  - nobody has heard of this
- WAP
  - killed by hype
- GPRS
  - no business users
  - only trialists

# INTUG financial markets

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

# INTUG choosing technologies

- GSM or CDMA?
- GPRS or CDMA2000?
- or CDMA/WLL/M?
- 3G?
- regulation as a hand-maiden to investment



# 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

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- 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 other problems

- competition law problems
  - open access
- 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
- want to avoid bankruptcies which would allow in new players

# INTUG WLAN

- need to ensure spectrum is available
  - 2.5GHz and 5.8GHz
  - harmonised
- consider licensing of public services
- encourage proper security
- it can add considerably to competition

# INTUG investment

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

# INTUG conclusions

- mobile has contributed to closing the digital divide
- enormous variations in performance
- well established market failures
- very worrying signs from 3G
- little revenue from either data or VANS on 2.5G
- WLAN looks interesting

# INTUG thank you

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