INTUG

Choice, access and globalisation

What can Australia learn from a global view?

Ewan Sutherland

Executive Director

ewan@intug.net

ATUG, Brisbane 11 October 2001

www.INTUG.net

INTUG contents

- what is INTUG?
- competition and choice
- local access
- mobile networks
- conclusions

INTUG what is INTUG?

- members
  - national associations
  - corporations
  - individuals
- activities
  - International Telecommunication Union
  - Organisation for Economic Cooperation and Development (OECD)
  - APEC TEL, CITEL and EU

INTUG our aims

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

INTUG competition and choice

- infrastructure and service-based competition are **both** essential
- we need competitive provision of unbundled elements
  - CPE/handsets
  - networks
  - services and content
- continuing need for independent regulatory intervention

INTUG business demand

- Intranet
- Access networks
- Extranet

each company buying from only a very few suppliers

- city centre offices
- branch plants
- call centres
- remote workers
- mobile workers
- governments
- suppliers
- customers
- banks

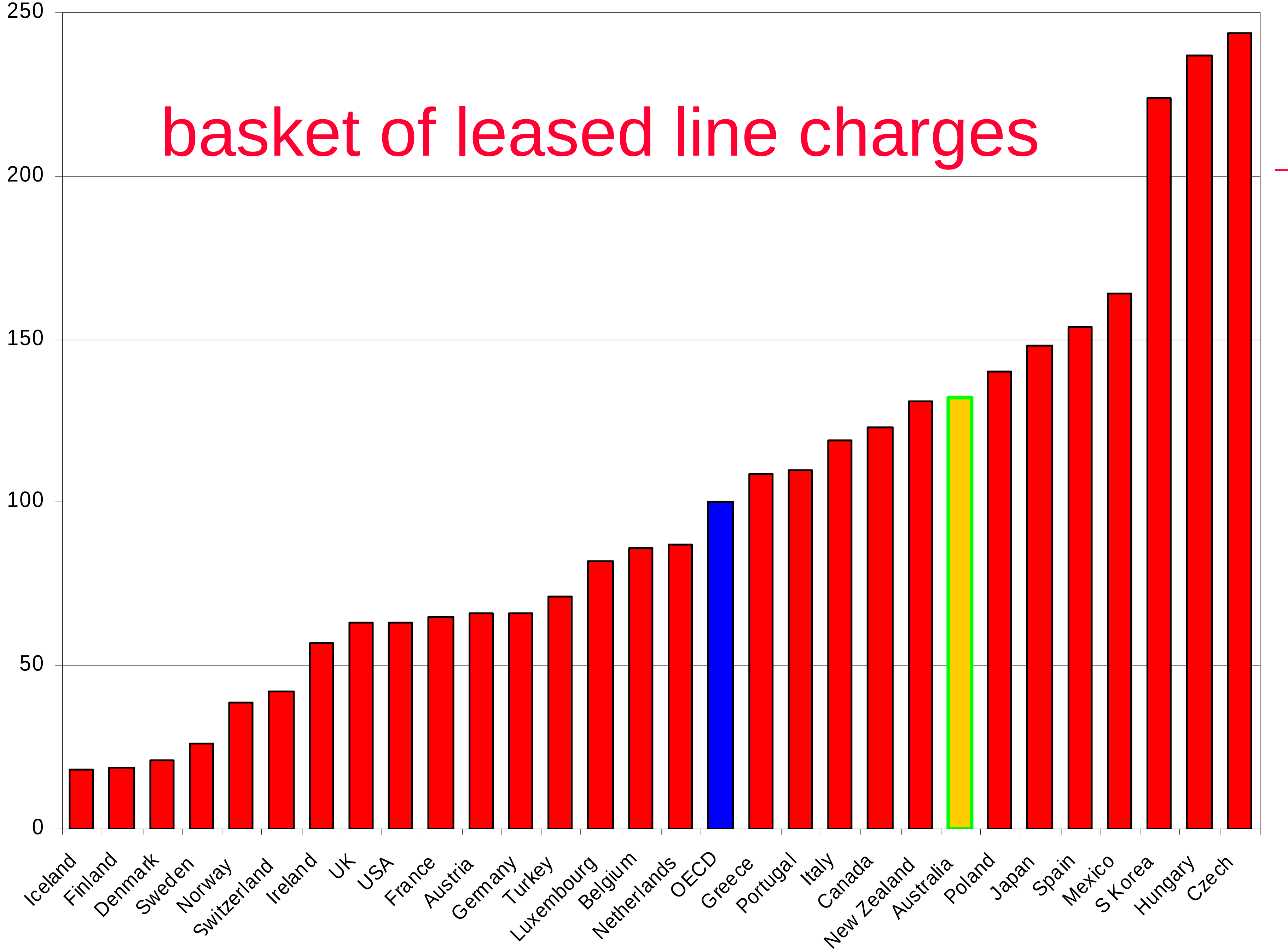
operators' choices

- fibre to premises
- leased line
- unbundled local loop
- wireless local loop
- xDSL
- ISDN

Driven by availability, quality and cost

INTUG leased lines

- market failures
  - pricing
  - non-pricing
- USA leads on
  - prices and discounts
  - geography of availability
  - especially at higher speeds
- OECD and EC reports



Source: OECD, 2001.

INTUG market failures

- pricing
- discounting
- availability
- quality of service
- coverage

The Last Mile – we cannot obtain adequate service in order to link to core network of the competitive carrier.

INTUG geography of competition

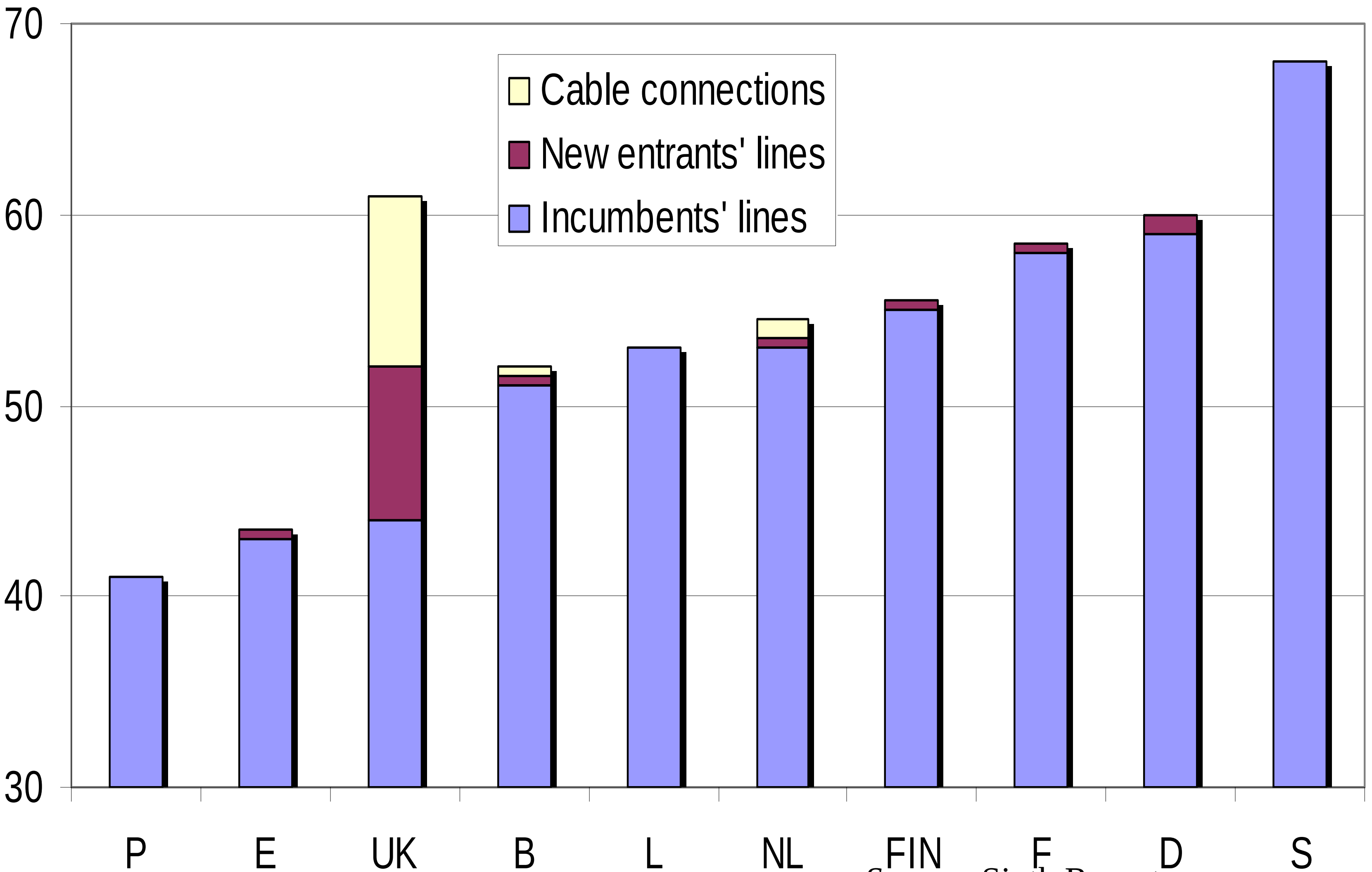
- competitive
  - financial districts of largest cities in developed countries
- non-competitive
  - other cities
  - outer suburbs
  - outback
- can vary from street to street

INTUG subscriber lines

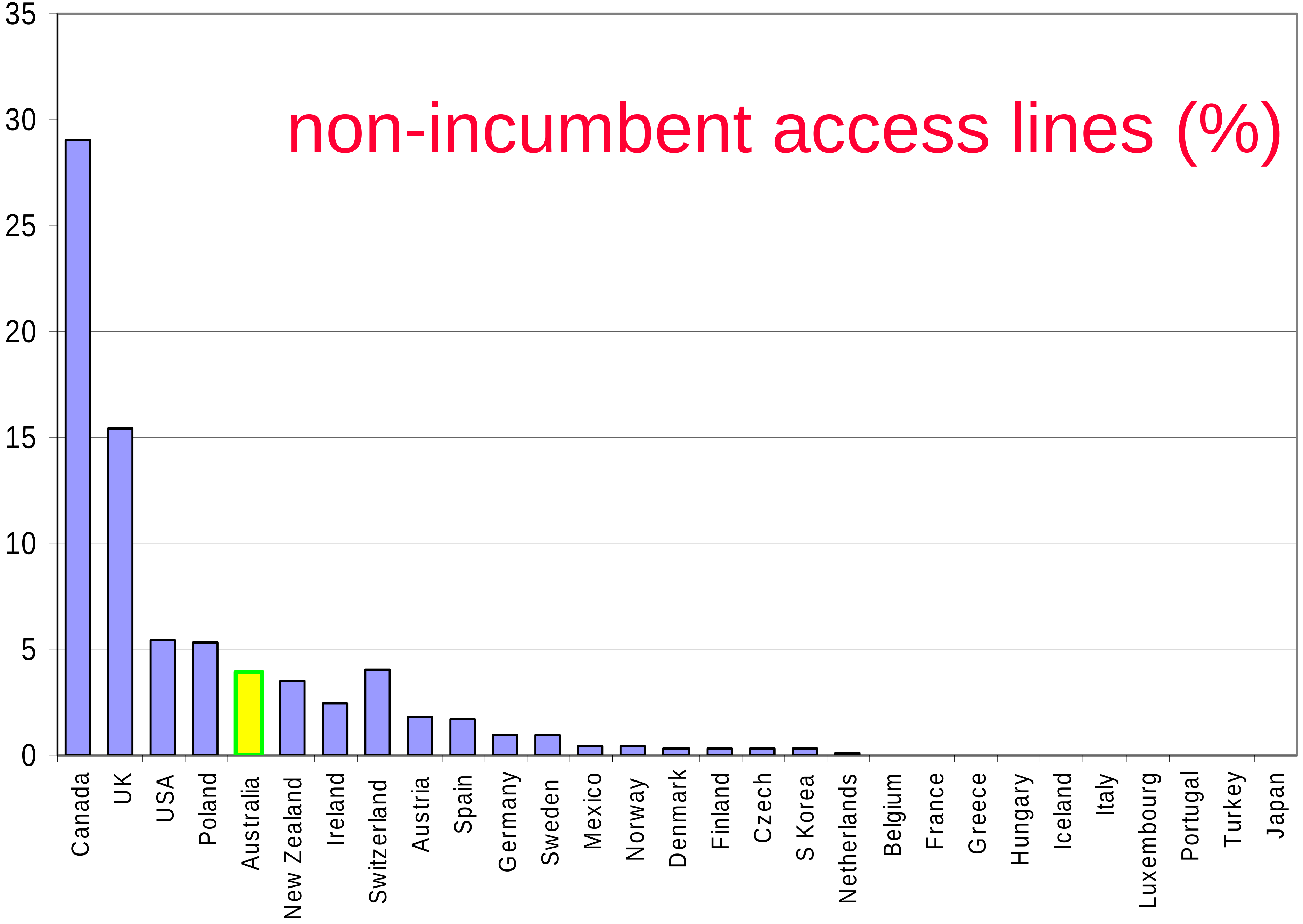
- introduction of competition
- ending the monopoly
- carrier selection
- carrier pre-selection
- number portability
- directory services
- yet still predominantly in the hands of the historic operators

ATUG

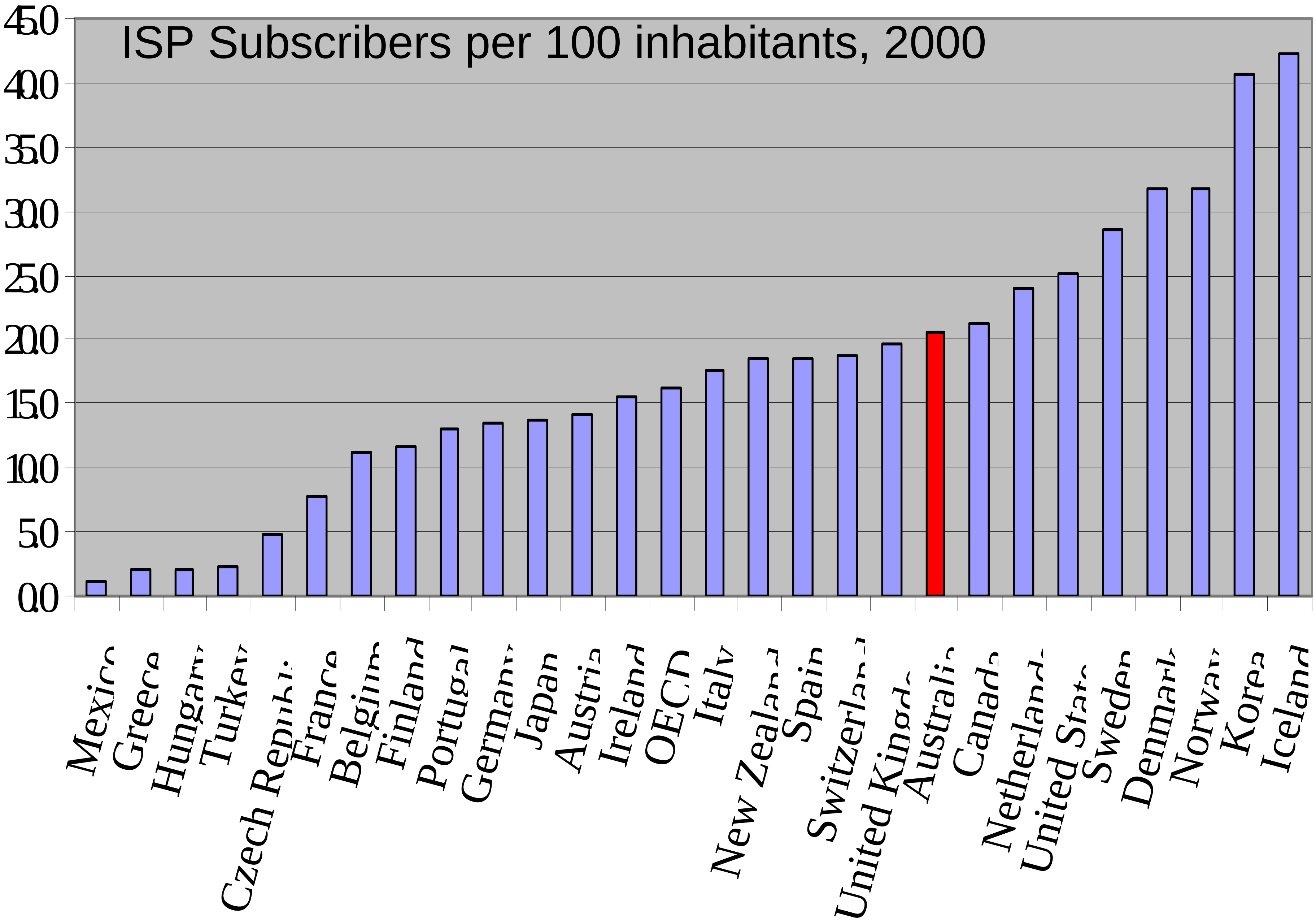
INTUG subscriber lines in EU



Source: Sixth Report.



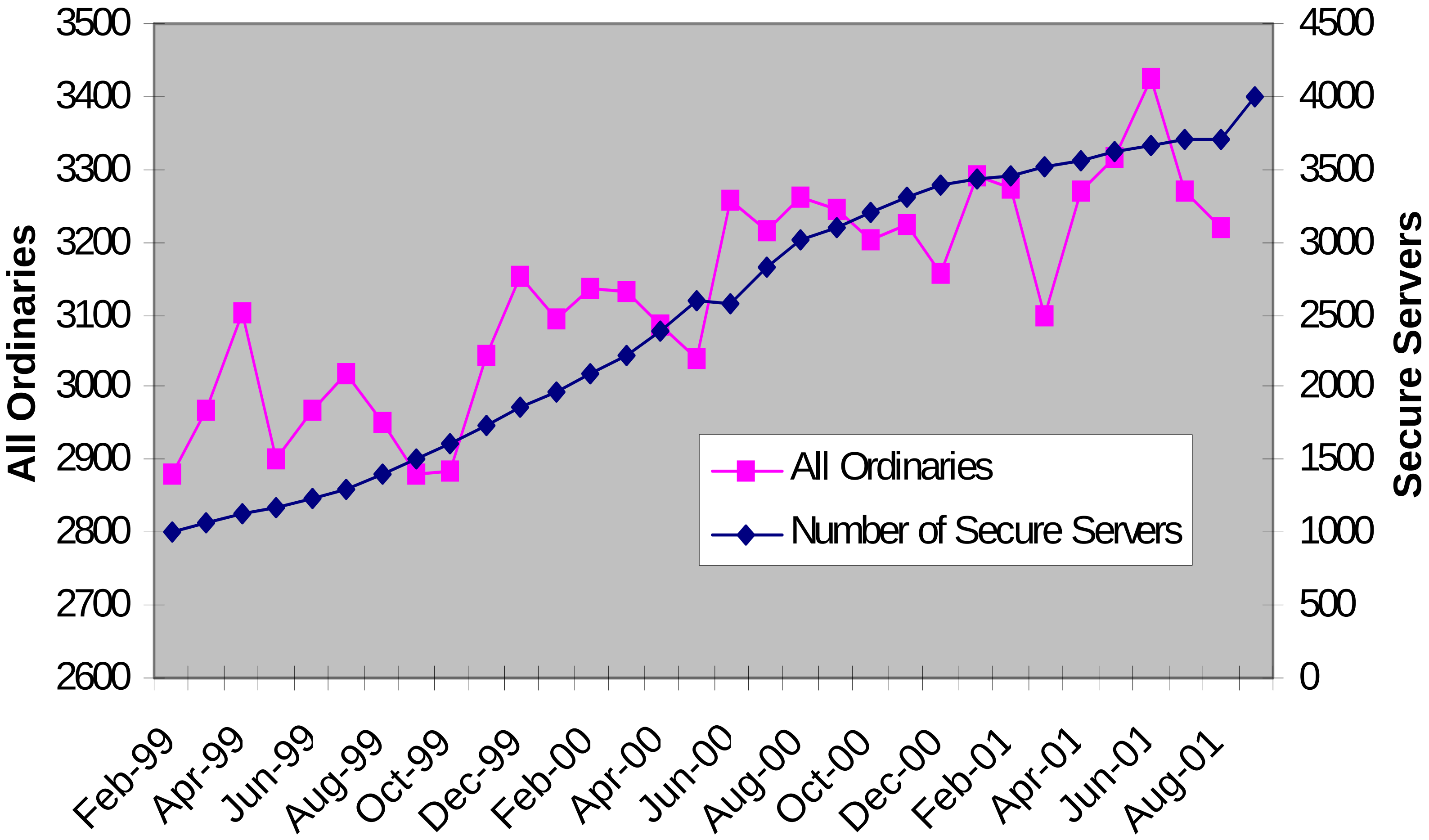
Source: OECD, 2001.


ISP Subscribers per 100 inhabitants, 2000
0.0
5.0
10.0
15.0
20.0
25.0
30.0
35.0
40.0
45.0
Mexico
Greece
Hungary
Turkey
Czech Repub
France
Belgium
Finland
Portugal
Germany
Japan
Austria
Ireland
OECD
Italy
New Zealand
Spain
Switzerland
United Kingd
Australia
Canada
Netherlands
United Stat
Sweden
Denmark
Norway
Korea
Iceland

INTUG broadband penetration

- Chart will be updated shortly

INTUG Australian secure servers



Source: OECD based on Netcraft (www.netcraft.com) and ASX

ATUG, Brisbane 11 October 2001

www.INTUG.net

INTUG local loop unbundling

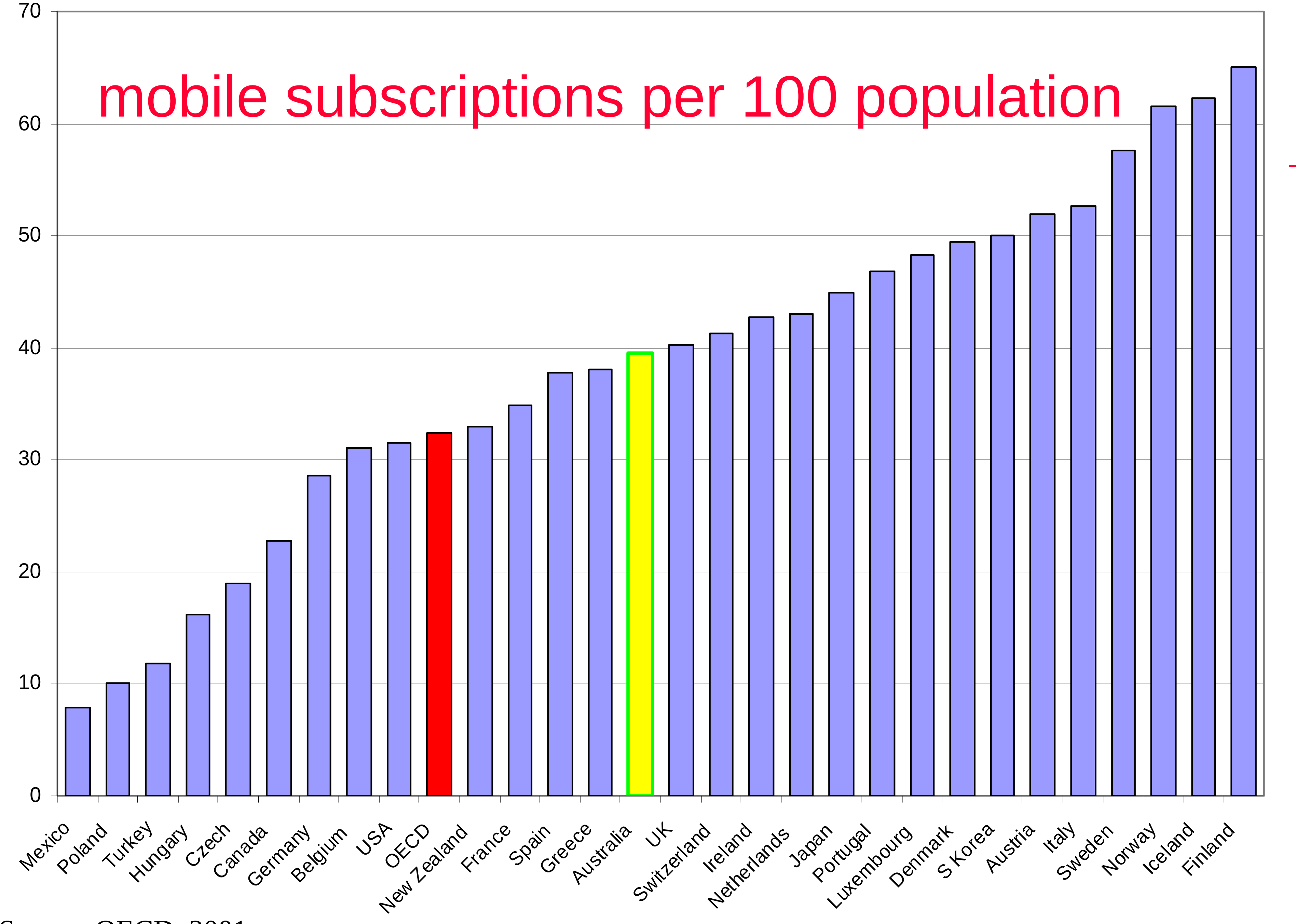
- historic operators' response:
  - deny, delay and degrade (3D)
  - saturation with their own services
- has made it very hard to regulate
- collapse of several operators in USA
  - financial markets
  - tactics of RBOCs

INTUG wireless local loop

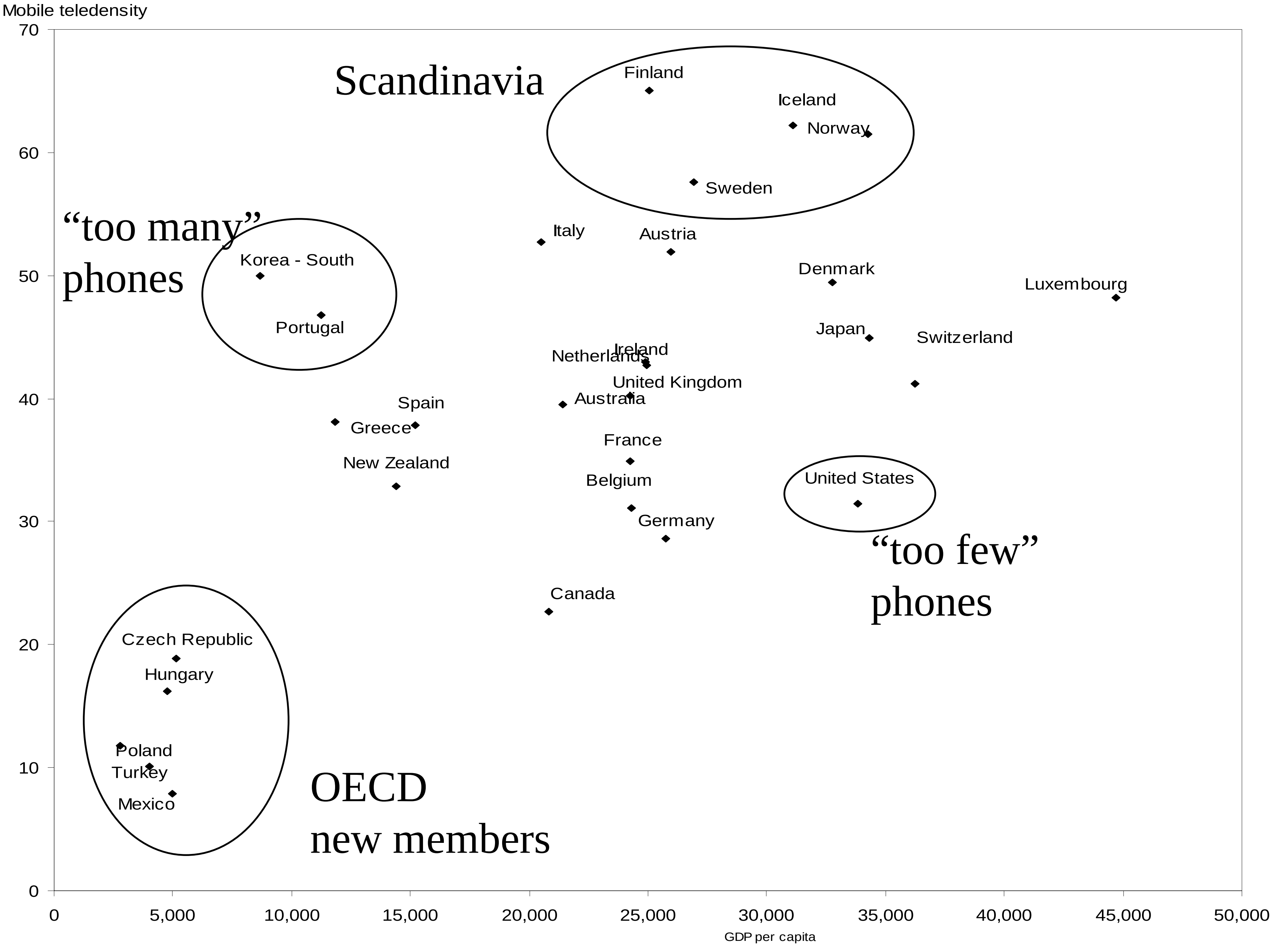
- slow allocation process
- different frequencies and technologies
- successes and failures
- knock-on effects of:
  - 3G spectrum allocation
  - dot.com crash
- only a few historic operators have been allowed into WLL market

INTUG lessons from Sri Lanka

- extremely low teledensity
- WLL introduced in order to:
  - to stimulate SLT
  - to open new markets
- doubled the size of the market
- improved quality



Source: OECD, 2001.


Mobile teledensity
70
60
50
40
30
20
10
0
Scandinavia
Finland
Iceland
Norway
Sweden
"too many" phones
Korea - South
Portugal
Italy
Austria
Denmark
Luxembourg
Japan
Switzerland
Ireland
Netherlands
United Kingdom
Australia
Spain
Greece
New Zealand
France
Belgium
United States
Germany
"too few" phones
Canada
Czech Republic
Hungary
Poland
Turkey
Mexico
OECD new members
0
5,000
10,000
15,000
20,000
25,000
30,000
35,000
40,000
45,000
50,000
GDP per capita

INTUG success of GSM

- state support for adoption of a standard
- spread out from Europe to most of the world (with some CDMA and PHS)
- consolidation
- oligopolistic practices lead to exorbitant international roaming and termination charges

INTUG roaming inquiry

- European Commission is the competition authority
- instigated by INTUG
- preliminary findings against operators
- dawn raids on 11 July 2001 on:
  - British Telecom
  - Deusche Telekom
  - France Telecom (Orange)
  - Vodafone
- not just a European problem
  it is global!

INTUG failure of 3G?

- self-immolation of operators in German and UK auctions
- out of favour with financial markets
- attempting to control downstream service markets
- poor brand names
- have to succeed with GPRS first, but roll-out looks very bad

INTUG wireless LANs

- different standards
  - IEEE 802.11b Wi-Fi
  - Hyperlan
  - other forms of 802.11
- in "unlicensed" spectrum
  - 2.4 GHz
  - 5.8 GHz
- needs additional security measures

where are WLANs?

- campuses, factories and offices
- hotels
- airport lounges
- motorway service stations and railway stations
- trains?
- Starbucks' coffee shops
- pizza and hamburger bars

INTUG m-commerce

- does it exist?
- how is it different from E-commerce?
  - customisation?
  - location-based services?
- is ubiquitous commerce more accurate?
- what is the business mode for this?

INTUG a common global pattern

- persistent market failures (e.g., leased lines and roaming charges)
- incumbents have world class delaying tactics
- competition law is very slow
- a continuing need for regulation
- collapse of high-tech share prices has:
  - blunted competition
  - stunted R&D

INTUG summary

- pressing need for new entrants to create and increase competition
- we must press on with LLU, WLL and other alternative means of access
- we still do not know what the Mobile Internet and broadband services will really be so we must allow for all possibilities

INTUG consolidation

- an oligopoly of operators
- common behaviours
- searching for global business models
- regulators and users face recurring problems