

INTUG



TUANZ, Auckland 30 May 2001

www.INTUG.net

Competition & access

a user perspective

Ewan Sutherland

Executive Director

ewan@intug.net

INTUG contents



TUANZ, Auckland 30 May 2001

www.INTUG.net

- what is INTUG?
- competition and choice
- business demands
- leased lines
- local loop unbundling
- wireless local loop
 - licence allocation
 - lessons from around the world
- conclusions

INTUG what is INTUG?



TUANZ, Auckland 30 May 2001

www.INTUG.net

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

INTUG our aims



TUANZ, Auckland 30 May 2001

www.INTUG.net

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

INTUG competition and choice



TUANZ, Auckland 30 May 2001

www.INTUG.net

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

INTUG business demand



TUANZ, Auckland 30 May 2001

www.INTUG.net

- Intranet
- Access networks
- Extranet

each company
buying from
only a very few
suppliers

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

INTUG operators' choices



TUANZ, Auckland 30 May 2001

www.INTUG.net

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

Driven by availability, quality and cost

INTUG leased lines



TUANZ, Auckland 30 May 2001

www.INTUG.net

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

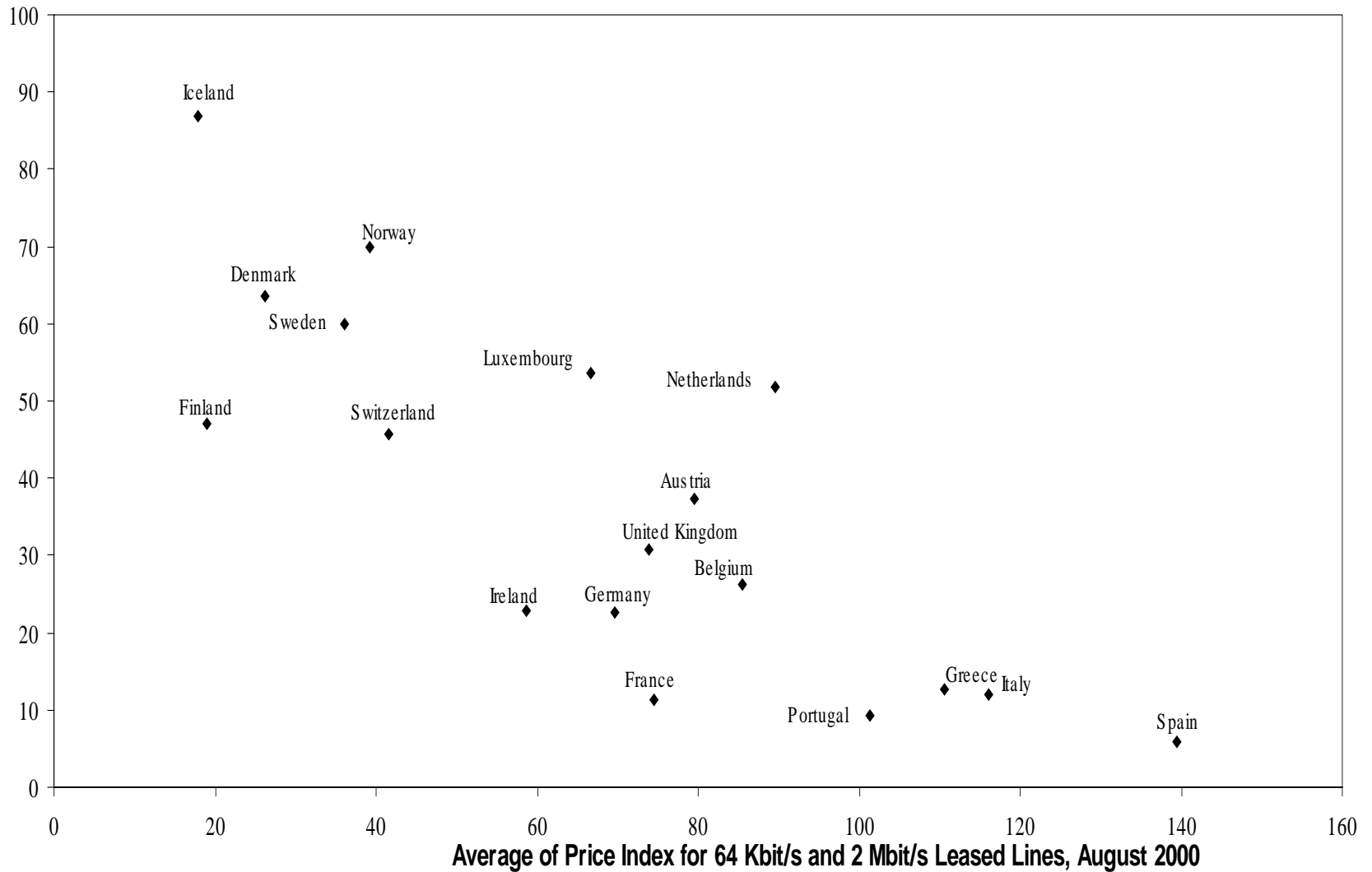
INTUG geography of leased lines



TUANZ, Auckland 30 May 2001

www.INTUG.net

Leased Line Connections to the Internet per 100000 inhabitants, December 2000

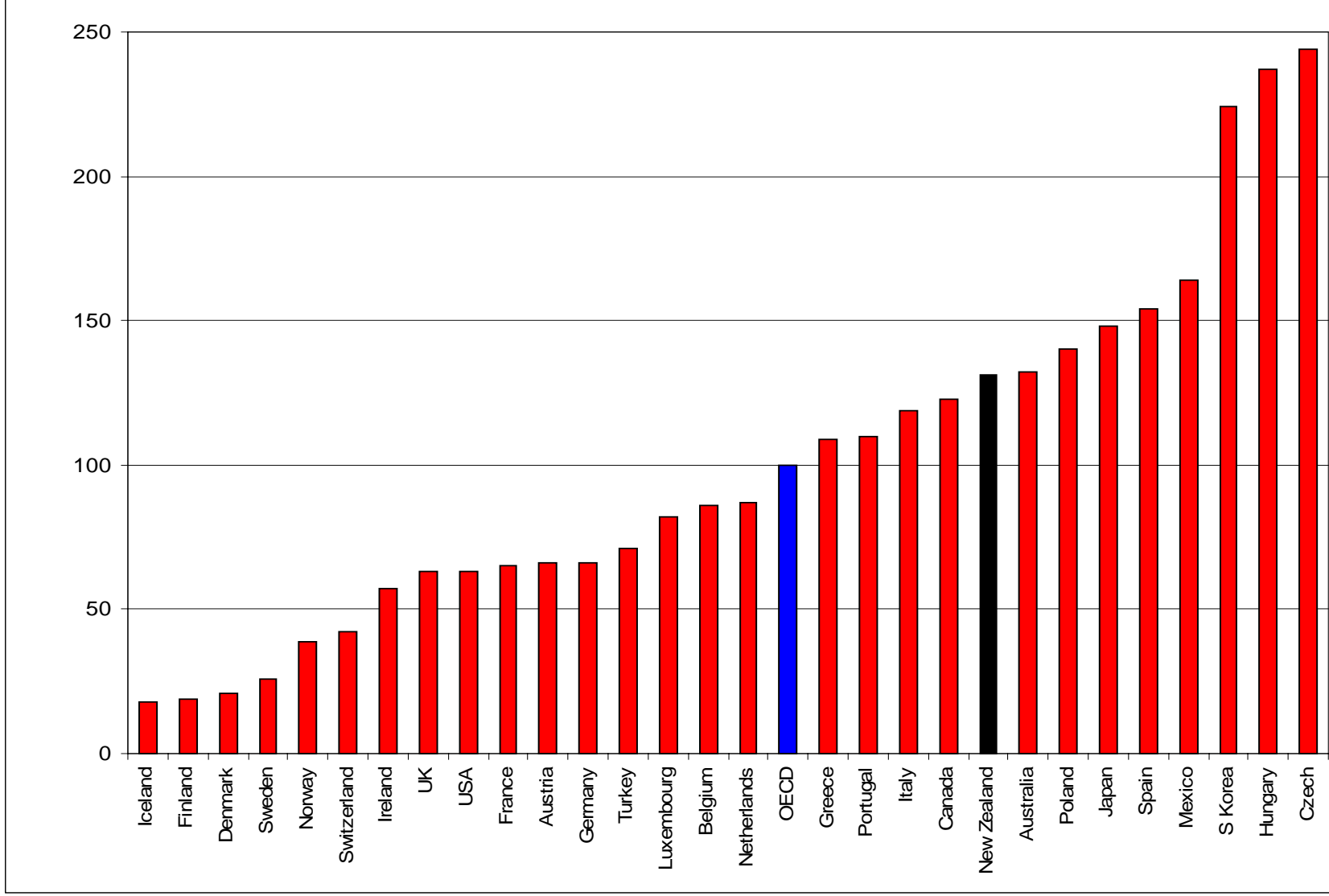


INTUG basket of leased line charges



TUANZ, Auckland 30 May 2001

www.INTUG.net



INTUG market failures



TUANZ, Auckland 30 May 2001

www.INTUG.net

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

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

INTUG geography of competition



TUANZ, Auckland 30 May 2001

www.INTUG.net

- competitive
 - financial districts of largest cities
- non-competitive
 - smaller cities
 - outer suburbs
 - homes
 - farms
- can vary from street to street

INTUG INTUG activities



TUANZ, Auckland 30 May 2001

www.INTUG.net

- survey comparing international *versus* national prices
- instigated the EU Competition inquiry
- national association activities
 - Denmark
 - United Kingdom

INTUG subscriber lines



TUANZ, Auckland 30 May 2001

www.INTUG.net

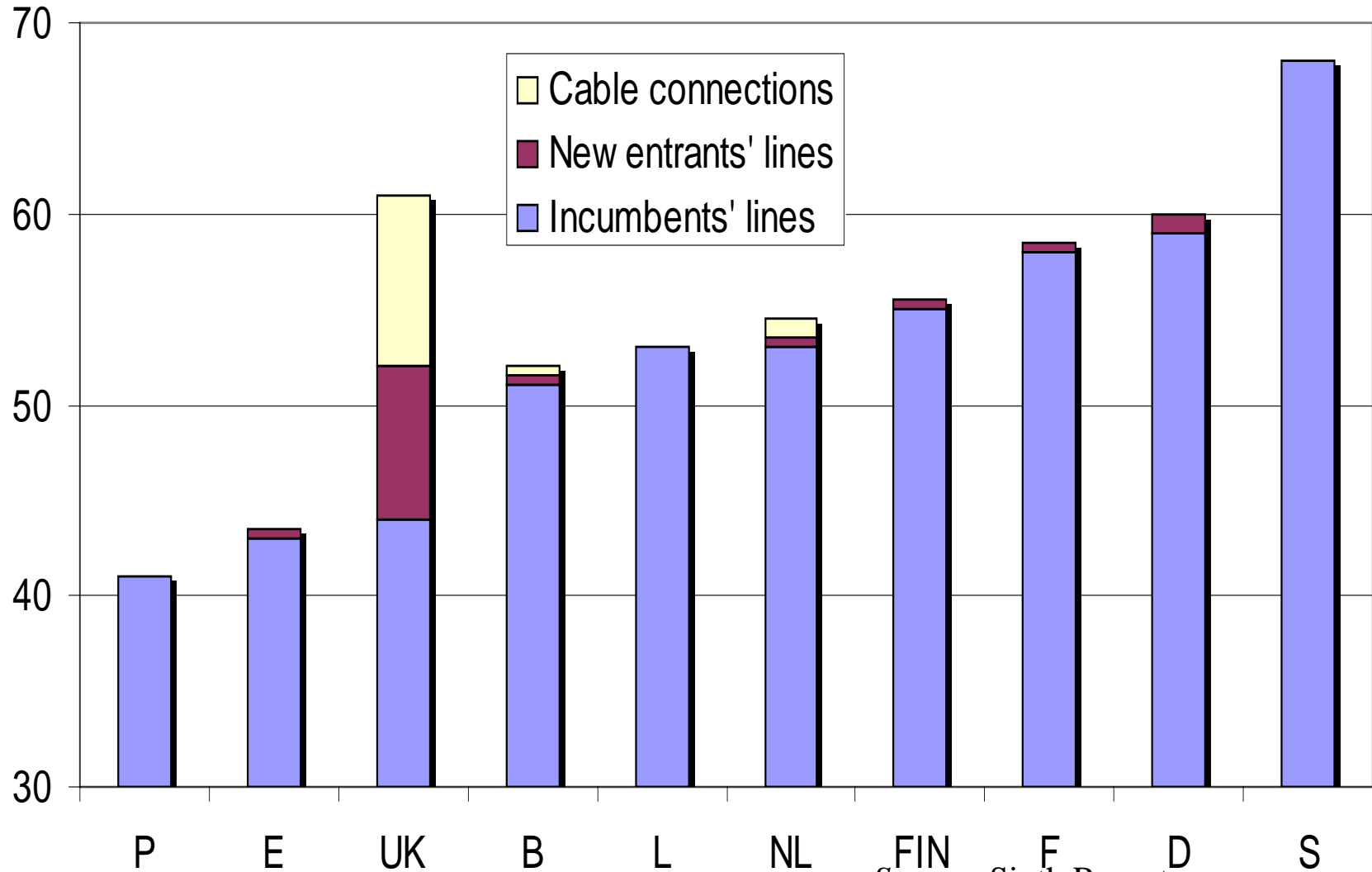
- introduction of competition
- ending the monopoly
- carrier selection
- carrier pre-selection
- number portability
- directory services
- yet still predominantly in the hands of the historic operators

INTUG subscriber lines in EU



TUANZ, Auckland 30 May 2001

www.INTUG.net



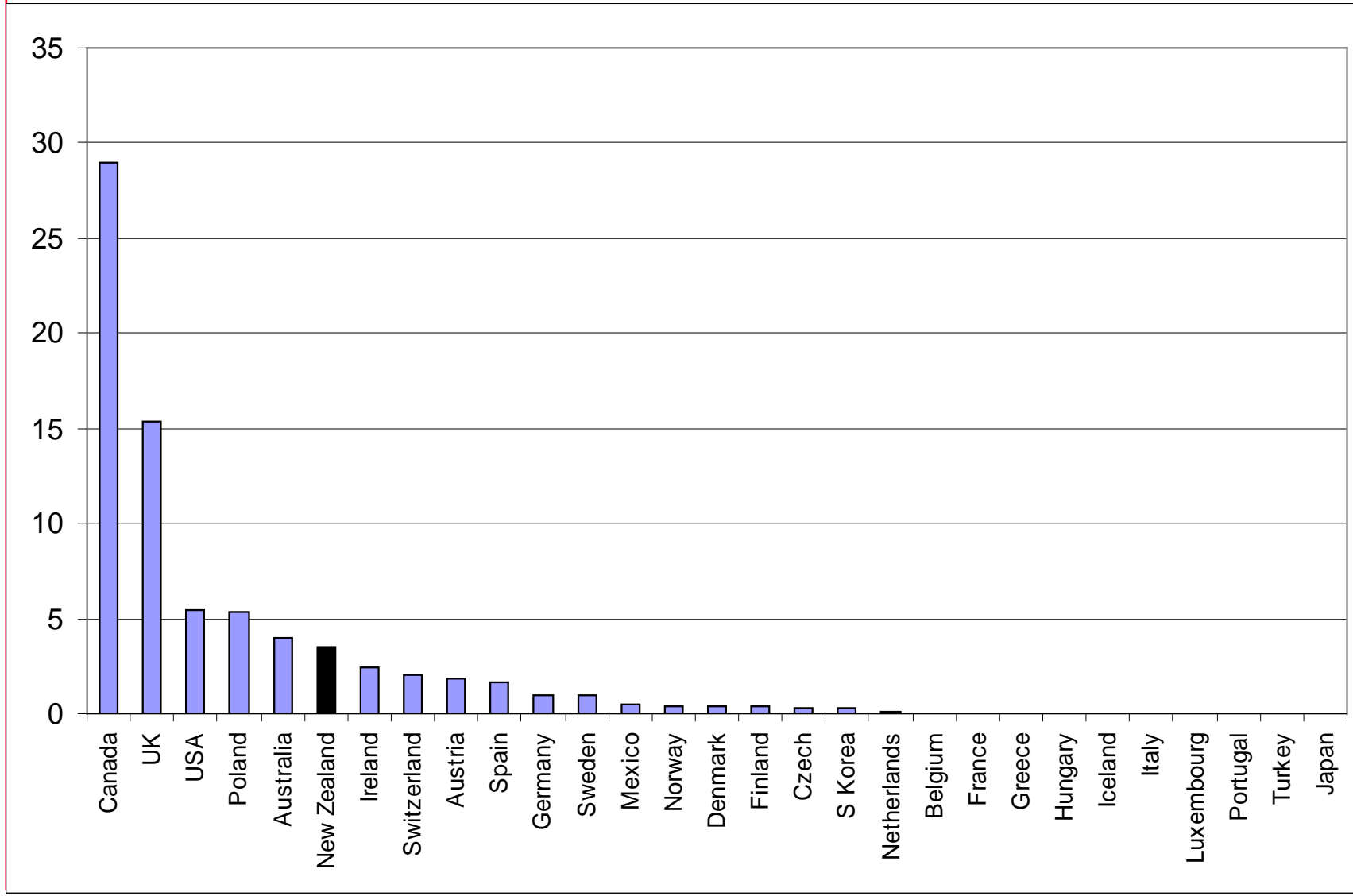
Source: Sixth Report.

INTUG non-incumbent access lines (%)



TUANZ, Auckland 30 May 2001

www.INTUG.net



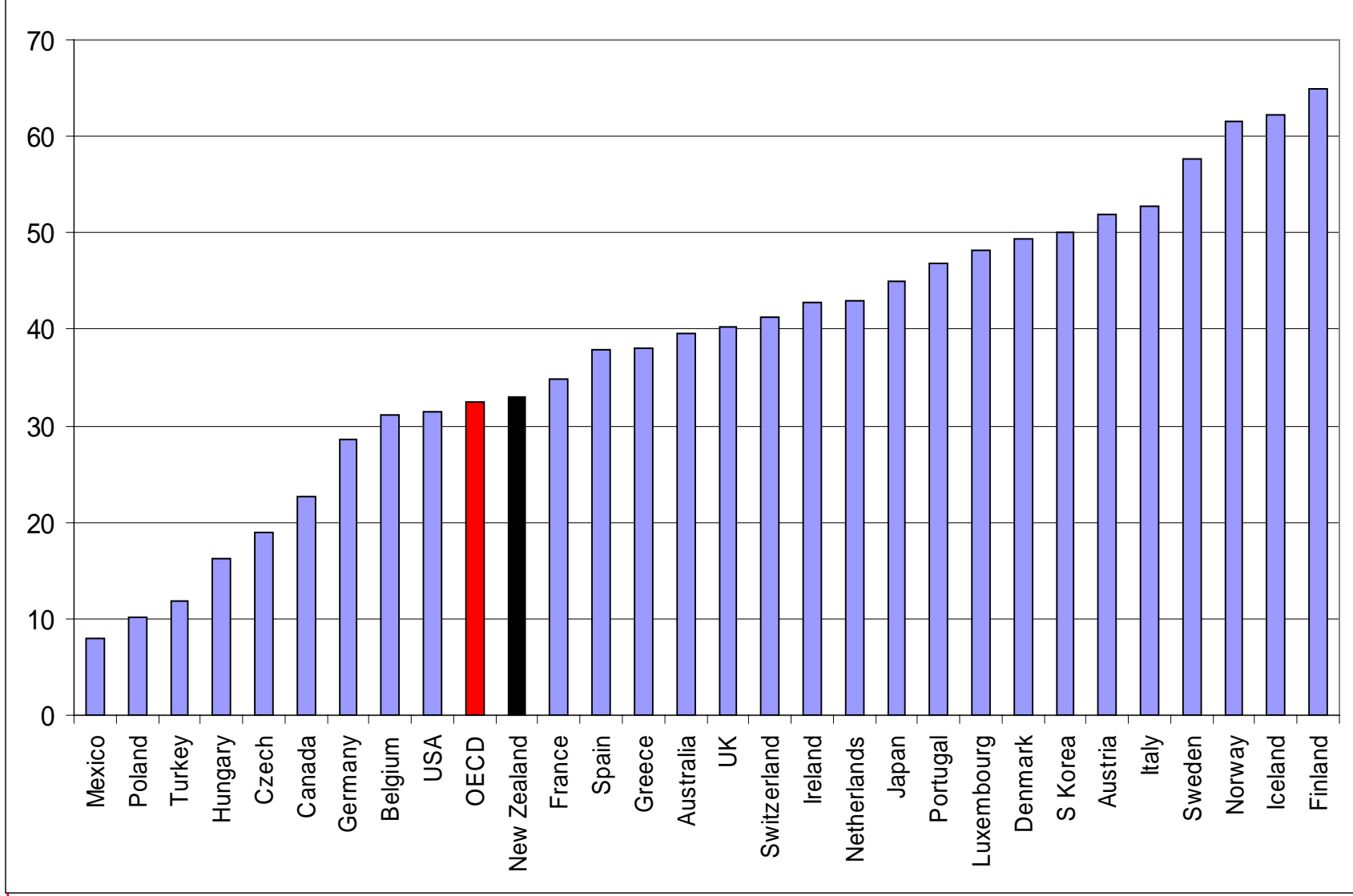
INTUG

mobile subscriptions per 100 popn.



TUANZ, Auckland 30 May 2001

www.INTUG.net



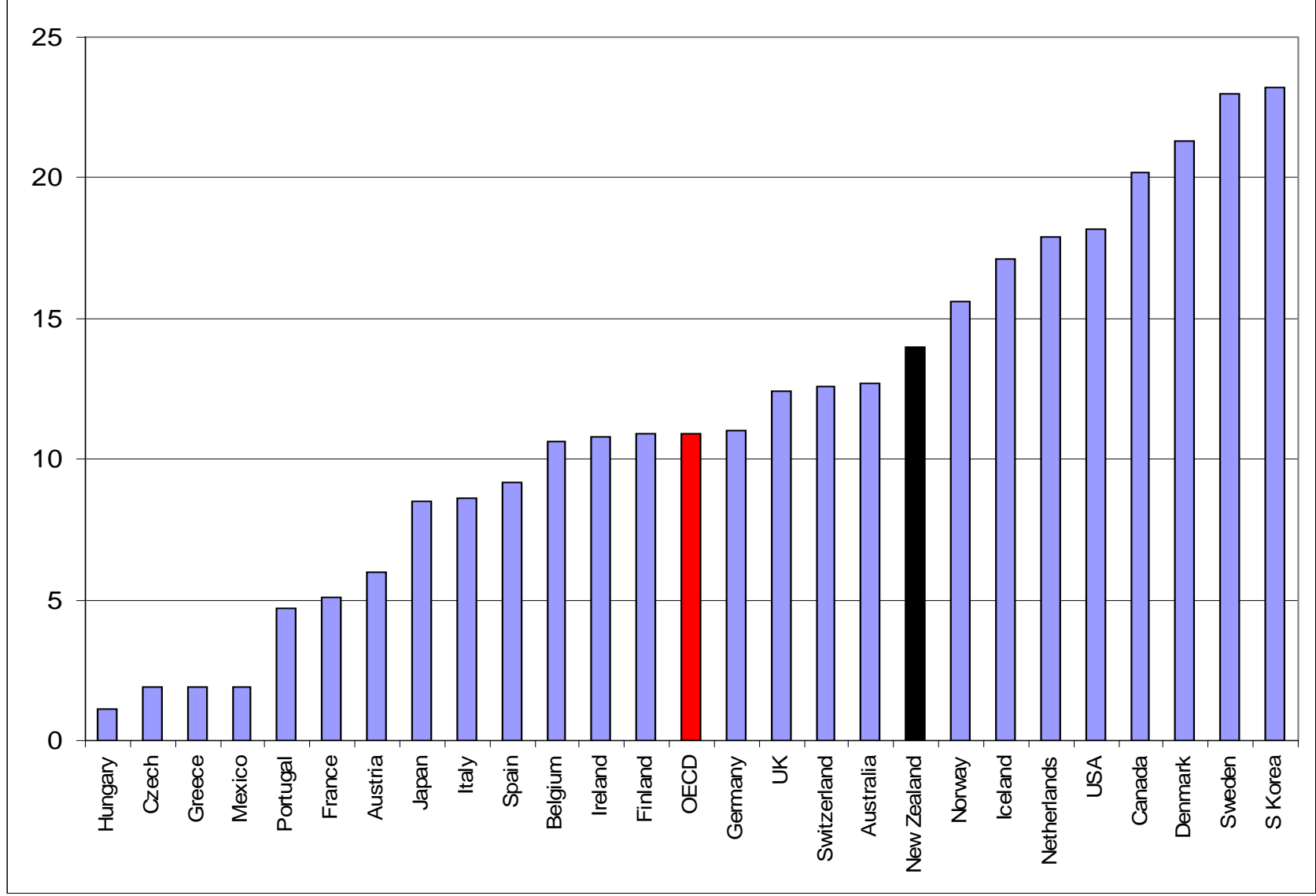
INTUG

Internet subscribers per 100 inhabitants



TUANZ, Auckland 30 May 2001

www.INTUG.net



INTUG local loop unbundling



TUANZ, Auckland 30 May 2001

www.INTUG.net

- historic operators' response
 - resistance and delay
 - saturation of the market with their own services
- uncertain efficacy of EU Regulation
- need for additional measures by NRAs and governments
- collapse of several operators in USA

INTUG EU Regulation on LLU



TUANZ, Auckland 30 May 2001

www.INTUG.net

- a *Communication* in March 2000
- political impetus given by the Lisbon Summit in March 2000
- presented to Parliament and Council as a *Regulation* in July 2000
- came into effect 2 January 2001
- supporting document from Independent Regulators Group (IRG)

INTUG monitoring progress



TUANZ, Auckland 30 May 2001

www.INTUG.net

- report to and *tour de table* of the ONP Committee in early February
- report to and *tour de table* of the Telecommunications Council on 5th April
- closely followed by member states, NRAs, new entrants and users

INTUG wireless local loop



TUANZ, Auckland 30 May 2001

www.INTUG.net

- 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 allocations - EU



TUANZ, Auckland 30 May 2001

www.INTUG.net

- Austria
- Belgium
- Denmark
- Finland
- France
- Germany
- Greece
- Ireland
- Italy
- Luxembourg
- Netherlands
- Portugal
- Spain
- Sweden
- UK

Incumbents allocated WLL in Belgium, Greece, Spain & Sweden.

INTUG allocations - OECD



TUANZ, Auckland 30 May 2001

www.INTUG.net

- Australia
- Canada
- Czech Republic
- Hungary
- Iceland
- Japan
- New Zealand
- South Korea
- Norway
- Poland
- Switzerland
- Turkey
- USA

Incumbent allocated WLL in South Korea.

INTUG lessons from Sri Lanka



TUANZ, Auckland 30 May 2001

www.INTUG.net

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

INTUG lessons from the USA



TUANZ, Auckland 30 May 2001

www.INTUG.net

- the 1996 Telecommunications Act
- pressure from market entrants
- retreat forced by financial markets
- licences issued by FCC
- Frost & Sullivan predict revenues of US\$842.3 million in 2000
- desire to deploy new technologies (UWB, WLAN 802.11, Bluetooth ...)

INTUG wireless LANs



TUANZ, Auckland 30 May 2001

www.INTUG.net

- IEEE 802.11 (a &b), Wi-Fi, Hyperlan
- “unlicensed” spectrum
 - 2.4 GHz
 - 5.8 GHz
- applications in hotels, airport lounges, motorway service stations, trains, etc
- Starbucks coffee shops

INTUG summary



TUANZ, Auckland 30 May 2001

www.INTUG.net

- persistent market failures in leased lines
- competition law is a very poor tool
- LLU is important but slow
- WLL is a very serious alternative
- leased lines remain a crucial building block

INTUG summary (2)



TUANZ, Auckland 30 May 2001

www.INTUG.net

- collapse of high-tech share prices has stunted competition
- pressing need for new entrants to create and increase competition
- other technologies are appearing, some in unlicensed spectrum