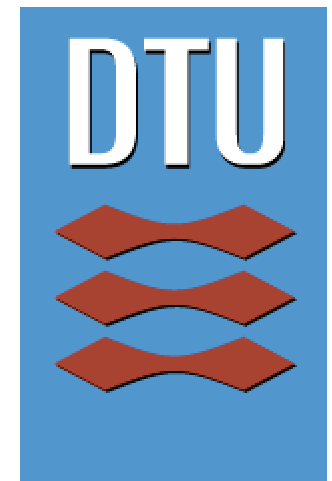


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Faster, faster, faster *Asian and European policies*

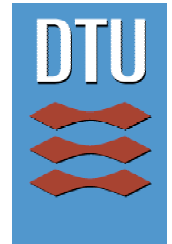
Ewan Sutherland
Executive Director
International
Telecommunications
Users Group
ewan@intug.net



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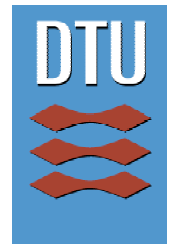
- faster broadband
- faster wireless
- faster roll-out
- policy or business models?



INTUG what is INTUG?

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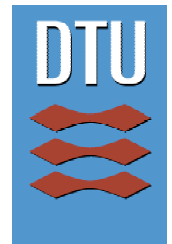
- members
 - national associations
 - corporations
 - individuals
- activities
 - ITU and WTO
 - OECD
 - APEC TEL, CITELE and EU



INTUG our aims

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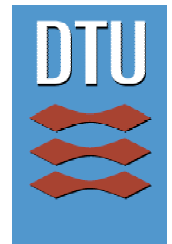
- real and effective competition
- genuine choice for users
- lower prices
- higher quality
- more innovative services
- constructive co-operation with
 - international bodies
 - governments
 - regulators



INTUG priorities

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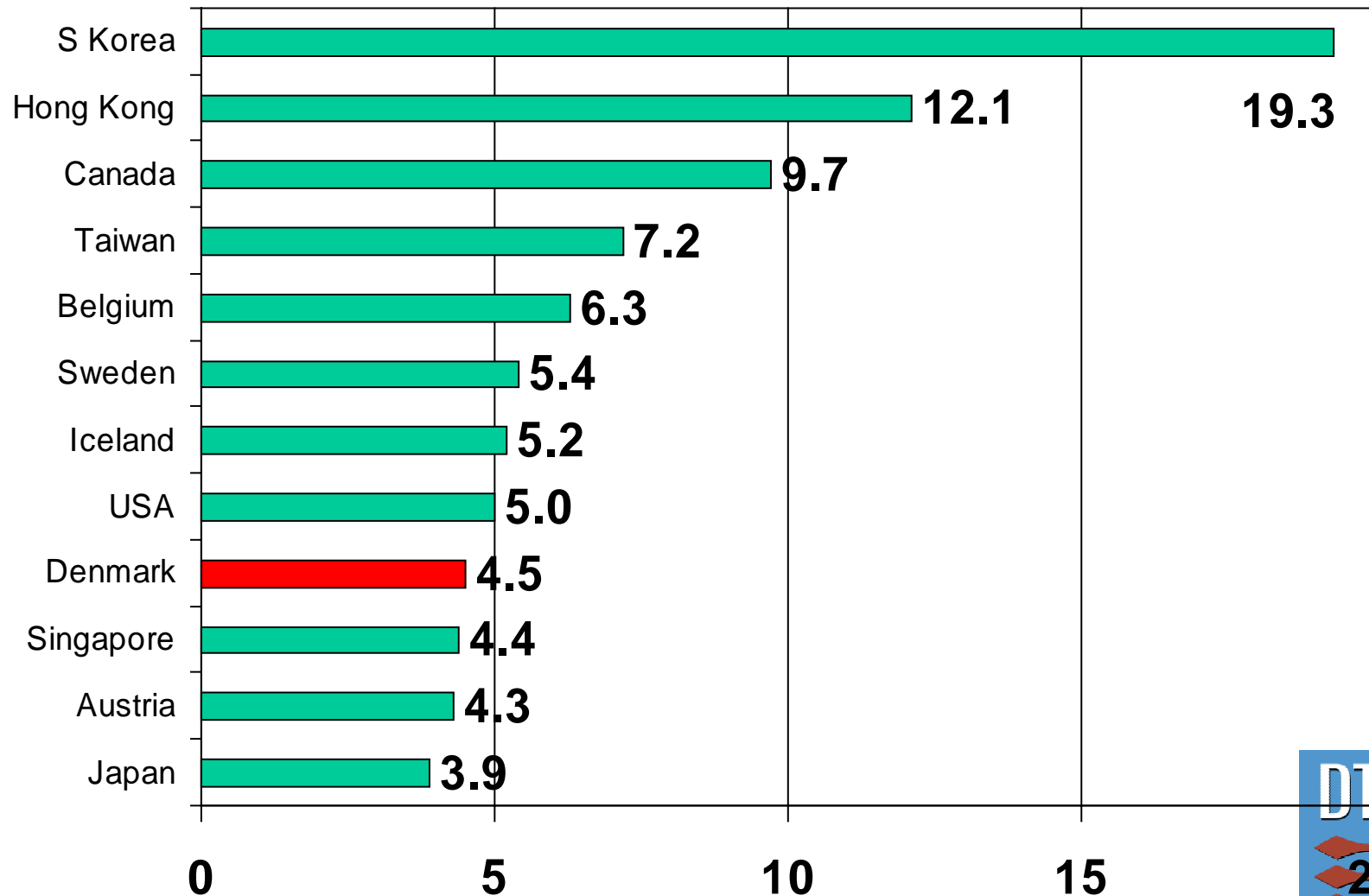
- open access to global mobile networks
- regulatory best practice
- liberalization
- leased lines
- IP telephony
- digital divide
- universal access
- numbering

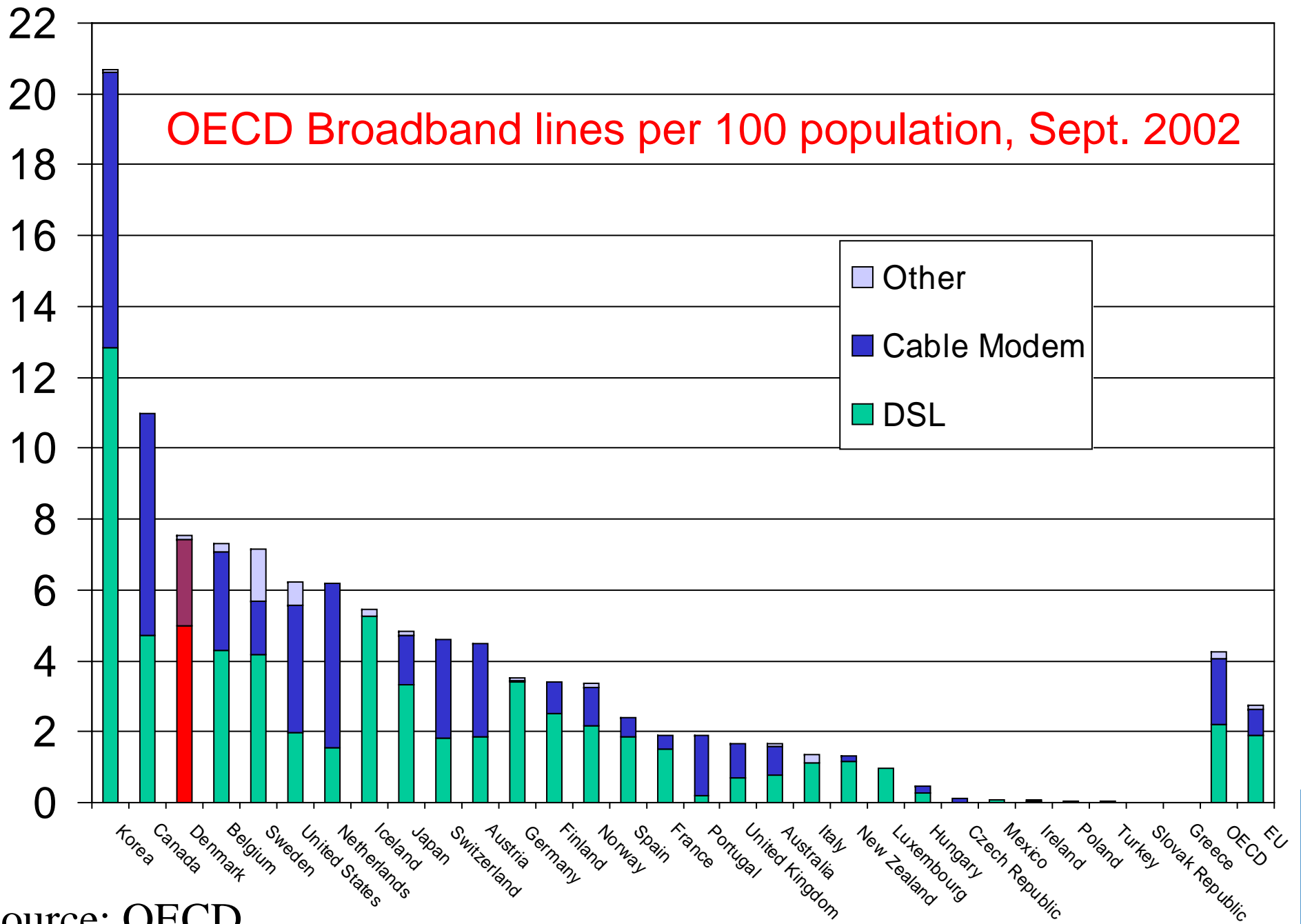


INTUG broadband rankings June 2002

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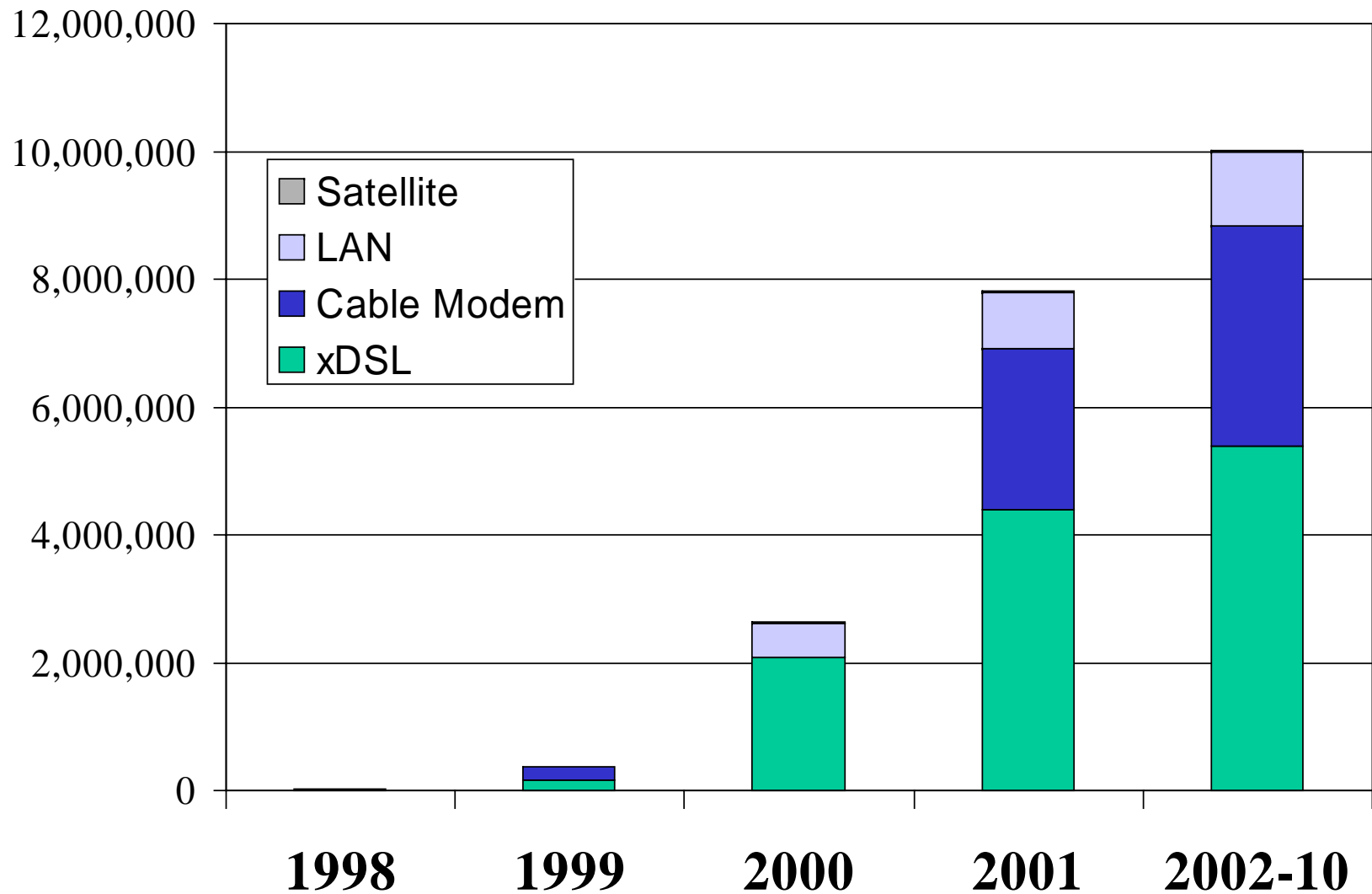




Source: OECD.

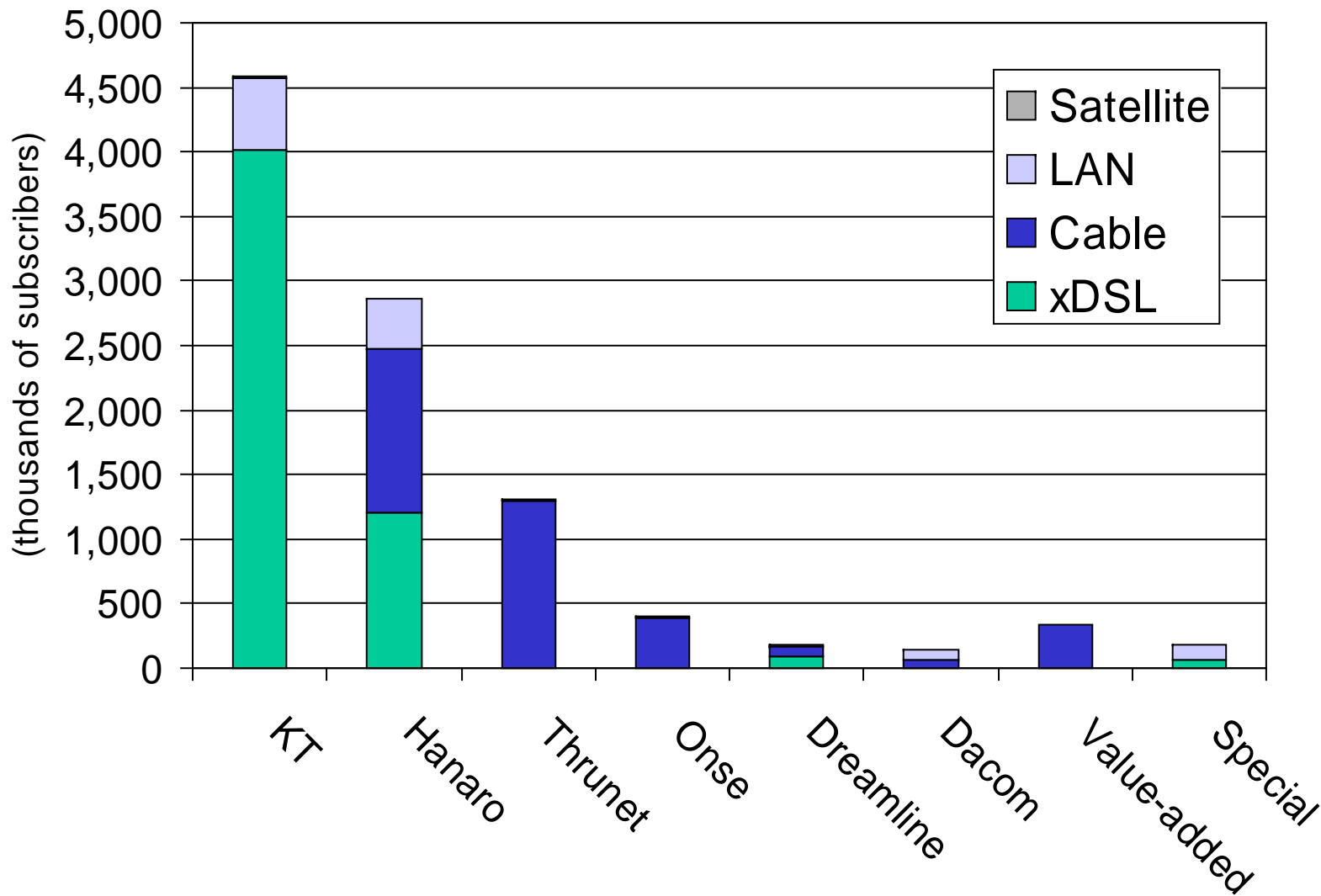
INTUG broadband in South Korea

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www.INTUG.net



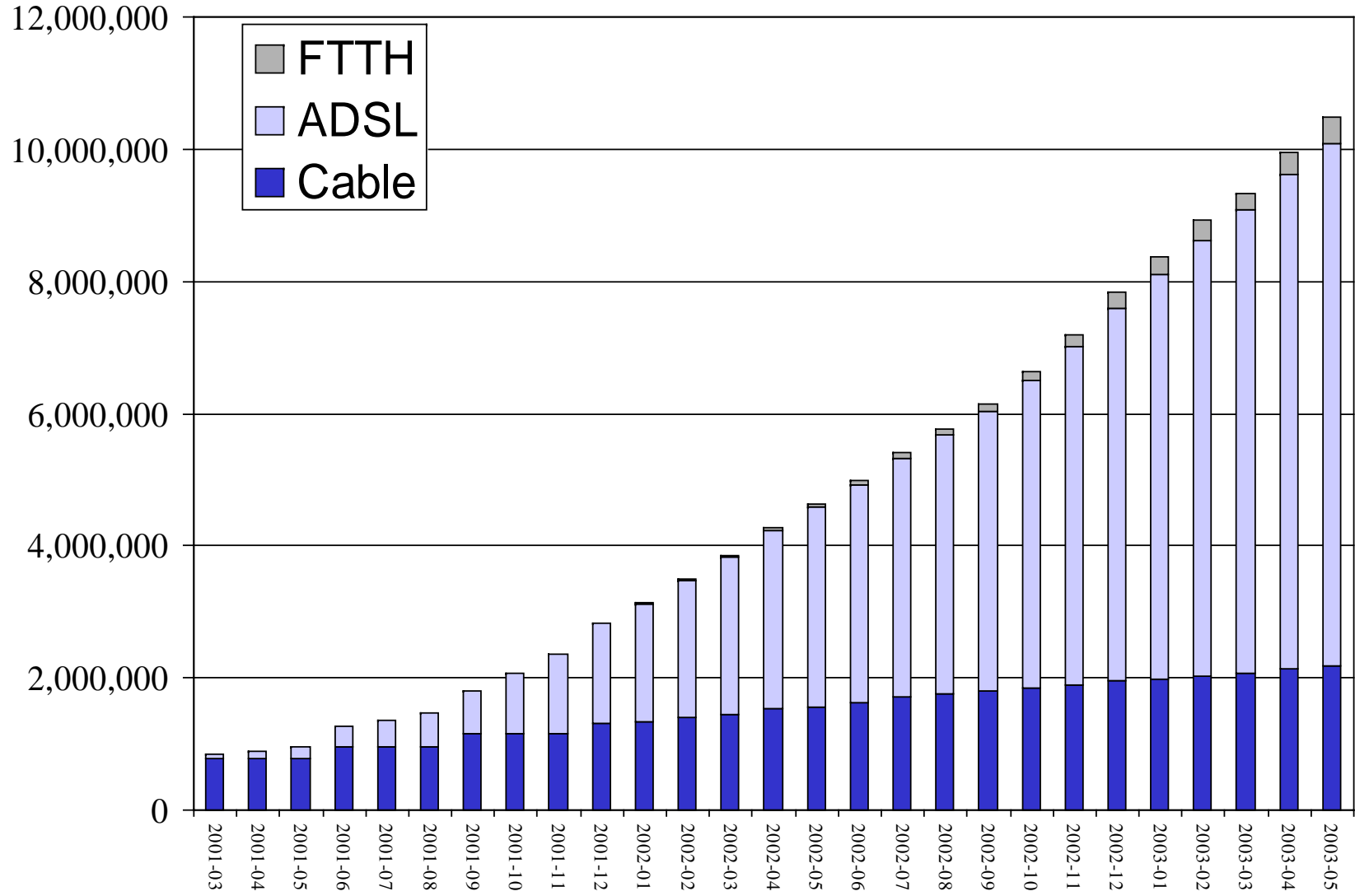
INTUG market shares

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INTUG broadband in Japan

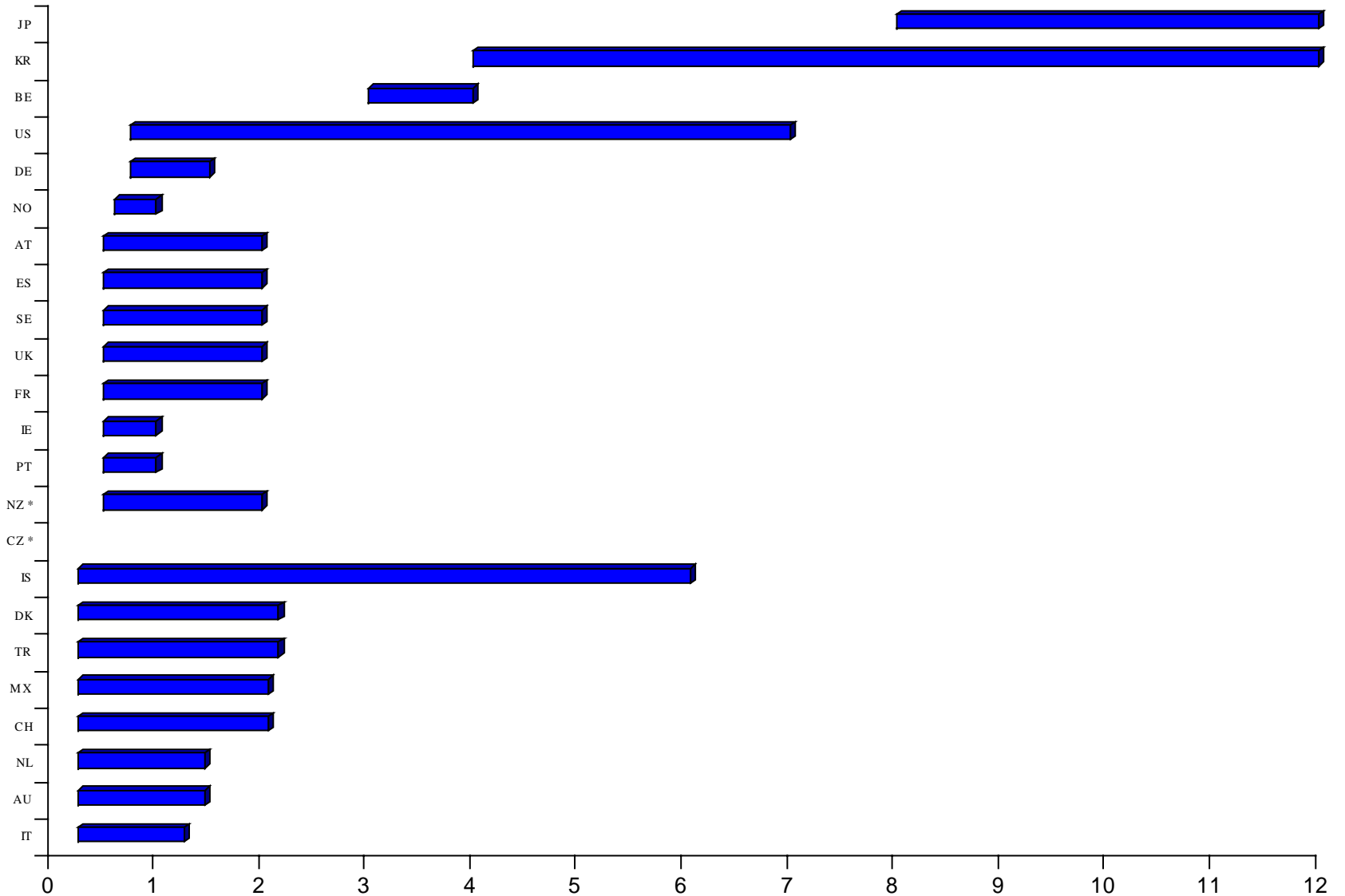
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Source: OECD.

INTUG

range of broadband speeds available (Mbit/sec)



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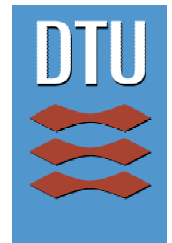
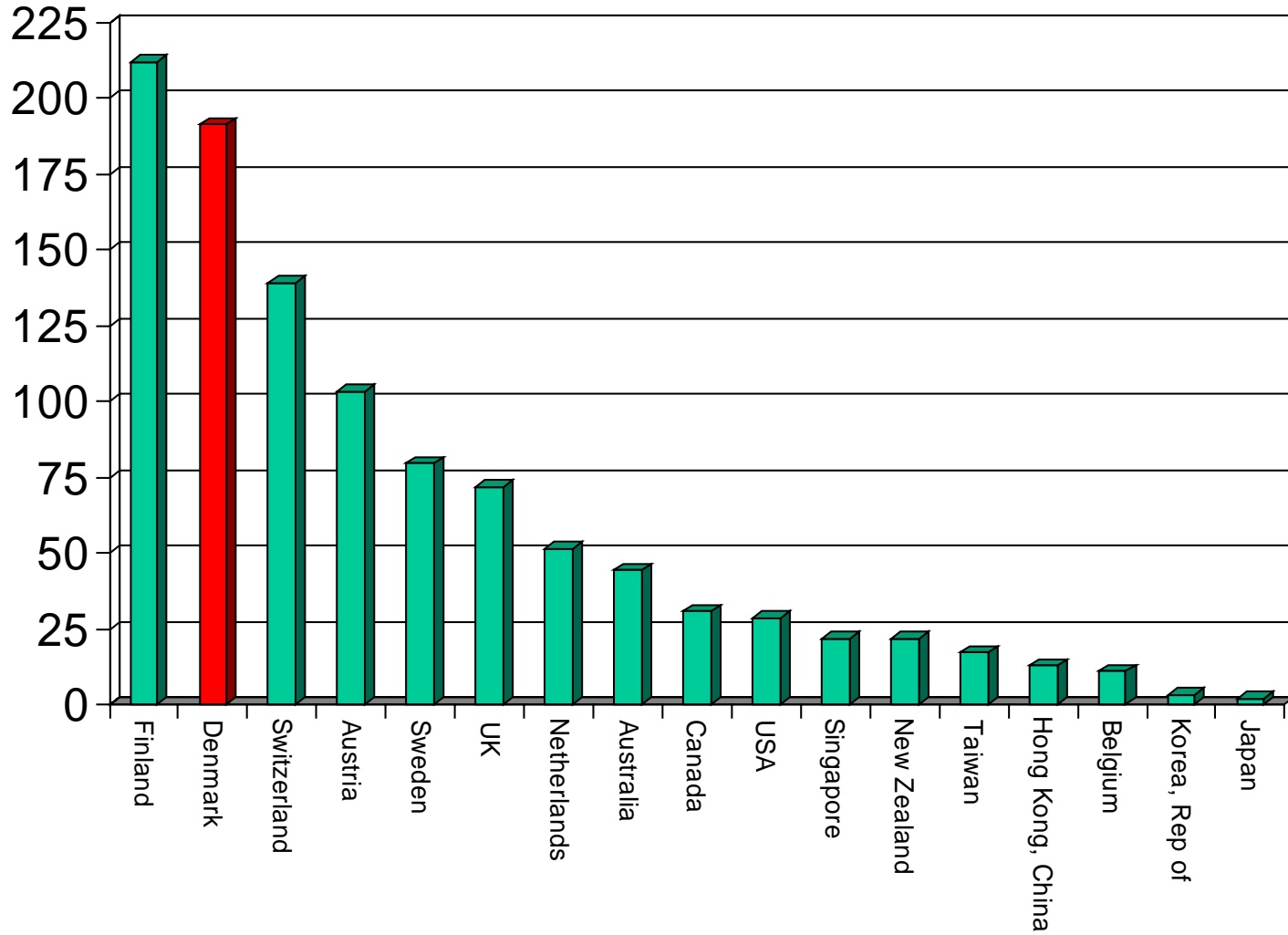
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Price (US\$) per 1Mbit/s per month, April 2003

Source: ITU.

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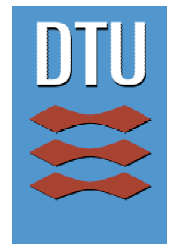
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INTUG Belgium and Denmark

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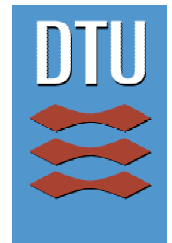
- similar in geography
- apparently two of the European leaders in broadband
- enormous difference in practice:
 - Belgium is EUR 35 per month for 3Mbit/s
 - Denmark is EUR 47 per month for 0.25Mbit/s
- mysterious TDC speed limit of 2Mbit/s
- competition for Belgacom from Telenet, offering 4Mbit/s



INTUG Belgium

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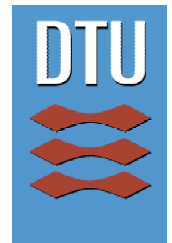
- Telenet cable modem service only in Flanders
- UPC/Chello in Brussels and Leuven (Flanders)
- cable modems:
 - Flanders 306,000 lines (for 5.973 M) = 5.1%
 - Brussels 20,000 (for 0.978M) = 2.0%
 - Wallonie about 60,000 (for 3.359 M) = 1.8%
- small Wallonian cable companies unable to get into Internet access
- plus 500,000 lines of Belgacom ADSL
- differences in PC ownership
 - 22 per 100 population in Wallonie
 - 30 per 100 population in Flanders
- no figures for German speaking community



INTUG beyond 20Mbps

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- Video DSL in Korea
 - 12 to 50 Mbps for High Definition TV
 - 750,000 lines in May 2003
- Fibre To The Home (FTTH) in Japan
 - 100 Mbps
 - 350,000 lines in May 2003
 - NTT launched 26Mbit/s VDSL
- new business model:
 - cheap access
 - cheap telephony
 - video on demand

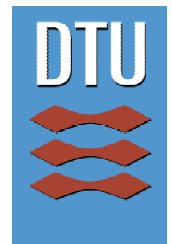


INTUG public WLAN

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- for a few dollars more
- an incremental service for fixed broadband customers
- fits well with fixed business
- no need for complex billing systems
- not attractive to venture capitalists

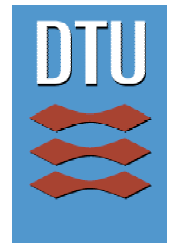
Note. Recent OECD report on public WLANs.



INTUG mobile sector

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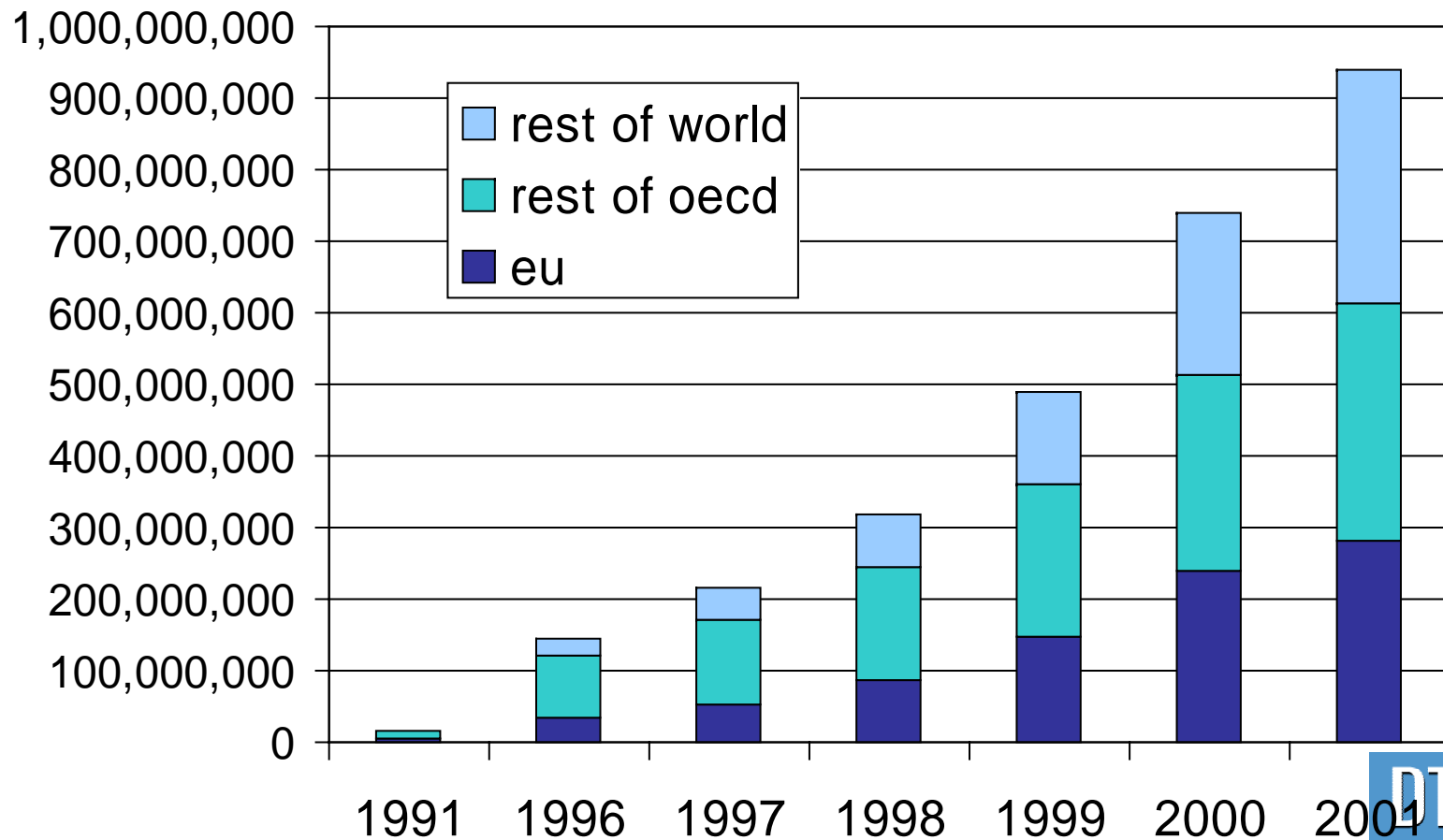
- global growth is largely found in Asia and Latin America
- Europe is characterised by:
 - customer churn
 - stable ARPU
 - replacement handsets
- MNOs focus on revenue sharing for VANS
- acquisitions and privatisation processes not yet resumed, because financial markets continue to be hostile



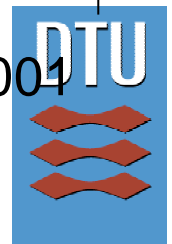
INTUG cellular mobile subscribers

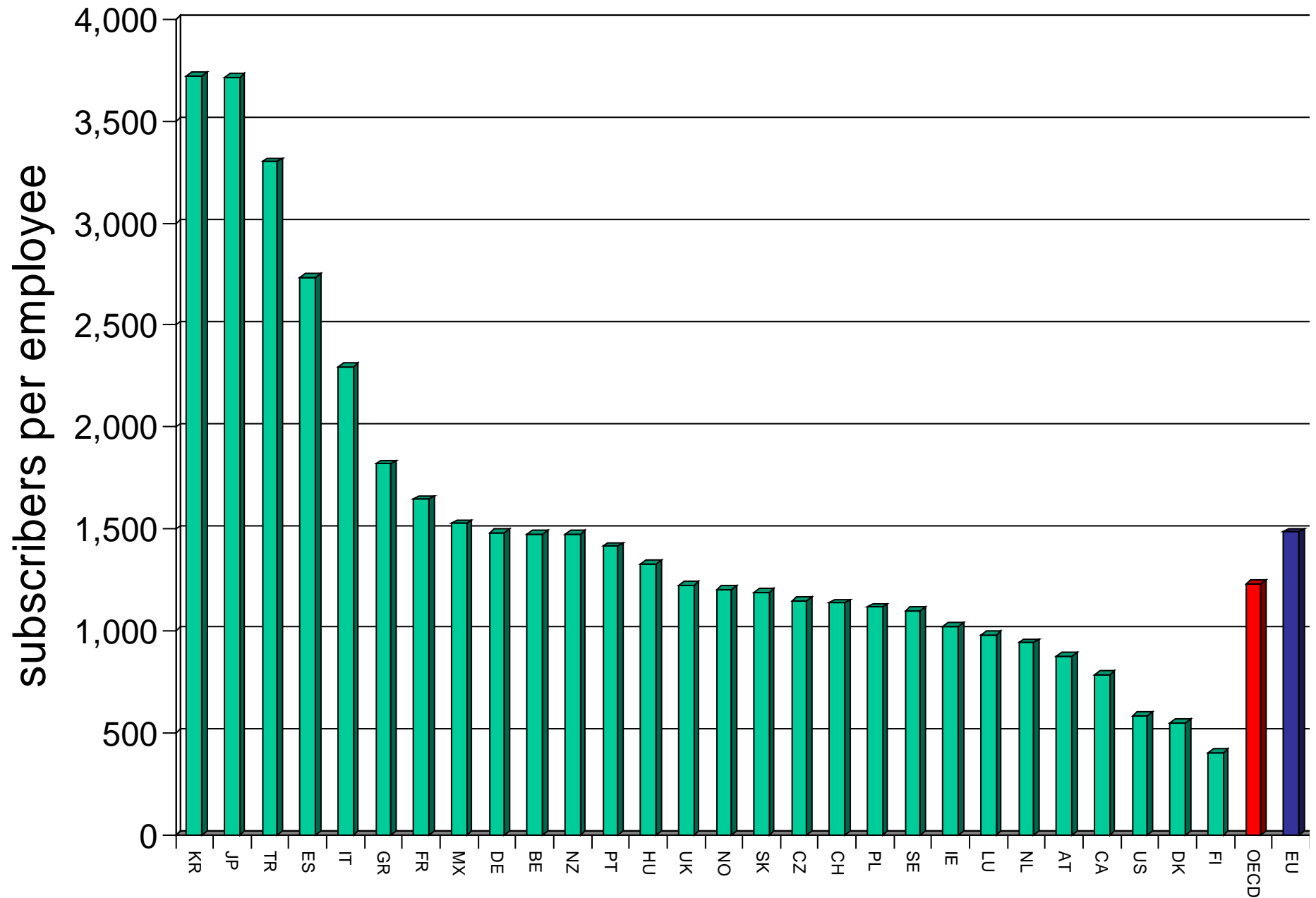
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Source: OECD, 2003.



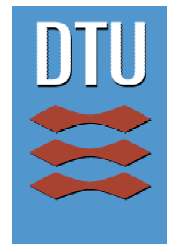


Source: OECD, 2003.

INTUG the value of mobility

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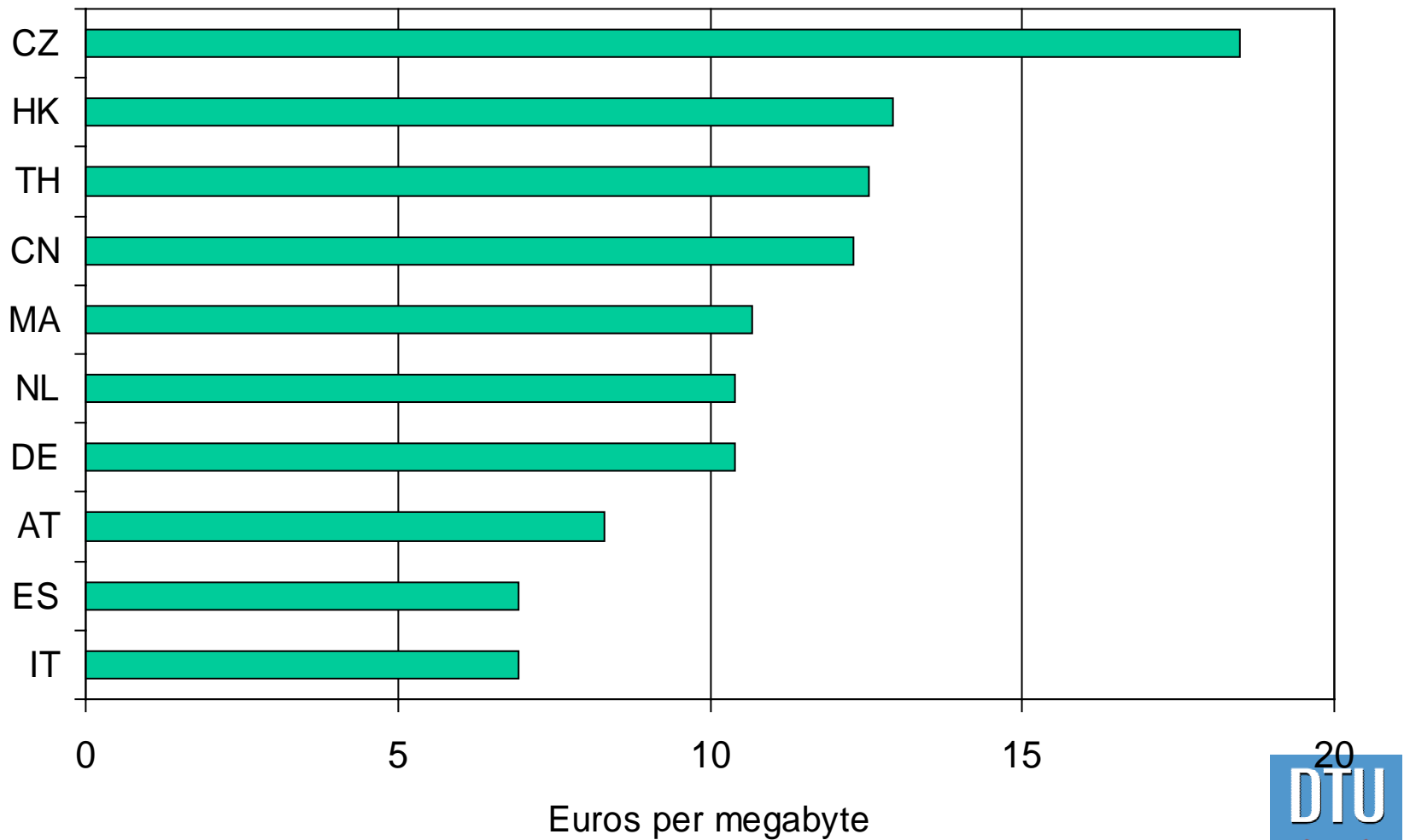
- Wireless Local Loop (WLL) can provide “limited” mobility:
 - CMDA/WLL, PAS, etc
 - China, India and South Africa
- causes loss of growth potential for MNOs:
 - customer numbers
 - revenue
- raises questions:
 - how many users really need global roaming?
 - how much of a premium will they pay?
- but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



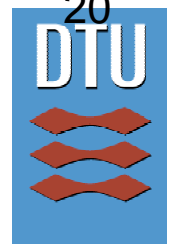
INTUG SingTel GPRS roaming rates

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www.INTUG.net



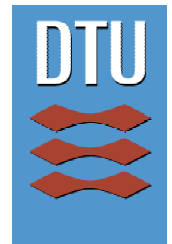
Source: Singtel. Currently "free" in AU, DK, FI, IN and ML.



INTUG 3G

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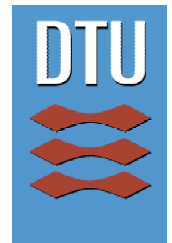
- Gambling, Games, Girls
- Greed, Gullibility, Grief
- very slow deployment
- no enthusiasm from financial markets
- little evidence of increased ARPU



INTUG Asia and Europe

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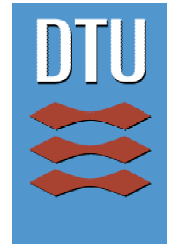
- rapid wireless growth
- rapid broadband growth
- fast beginnings of VDSL and FTTH
- rapid product cycles seen as the way to obtain
 - feedback
 - economies of scale
- mobile sector is churn and replacement
- broadband is embroiled in LLU disputes
- grinding defence of existing revenues:
 - leased lines
 - ISDN
 - second lines



INTUG conclusions

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- need to monitor Asia
- need to catch up
- need to learn and modify lessons



INTUG thank you

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