"DATA" - ICT Research Conference
Royal College of Physicians
Dublin, Ireland
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International ICT data collection, dissemination and challenges

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Topics

- Background
- ITU Data collection
- Challenges of ICT data collection
- WTI meeting recommendations
- ICT Development Index (IDI)
- Dissemination

ITU statistical work

- **Collection** and **dissemination** of telecom/ICT statistics (infrastructure and access, ICT households)
- **Setting standards** (definitions, manuals)
- **Analyses** (global, regional, thematic)
- **Cooperation** (UNSD, MDG, Partnership on Measuring ICT for Development, etc.)
- **Technical assistance** (NSOs, regulators/ministries)

Administrative data: Infrastructure and Access

HOW?

- Annual telecommunication Indicators questionnaire
  - Short questionnaire (March) – 10 indicators
  - Long questionnaire (July) – 100 indicators
- Government agencies responsible for ICT/telecom (regulators or ministries)
- Online research
- Annual reports

WHAT?

- Fixed telephone network
- Mobile cellular network
- Data network
- Traffic
- Tariffs (fixed, mobile, internet)
- Staff
- Quality of Service
- Revenue & Investment
- Community Access
- Broadcasting

PARTNERSHIP ON MEASURING ICT FOR DEVELOPMENT

Current members

International level

ITU
OECD
UNCTAD
UNESCO Institute for Statistics
World Bank

Regional level

ECA
ECLAC
ESCAP
ESCWA
Eurostat

Steering Committee: ITU, UNCTAD, ECLAC

strong institutional commitment
Memorandum of Understanding

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PARTNERSHIP ON MEASURING ICT FOR DEVELOPMENT

Core list of ICT indicators

Infrastructure and Access (9)
Household and individuals (13)
Businesses (12)
ICT sector and ICT trade (4)
ICT in education (9)

- 40th session of UN Statistical Commission, 24-27 February 2009

Household access and individual use data (ICT Household Survey)

- Proportion of households with:
  - Radio
  - Television
  - Telephone
    - Fixed only
    - Mobile cellular telephone only
    - Both fixed and mobile cellular telephone
  - Computer
  - Internet
    - Type of access
  - Electricity

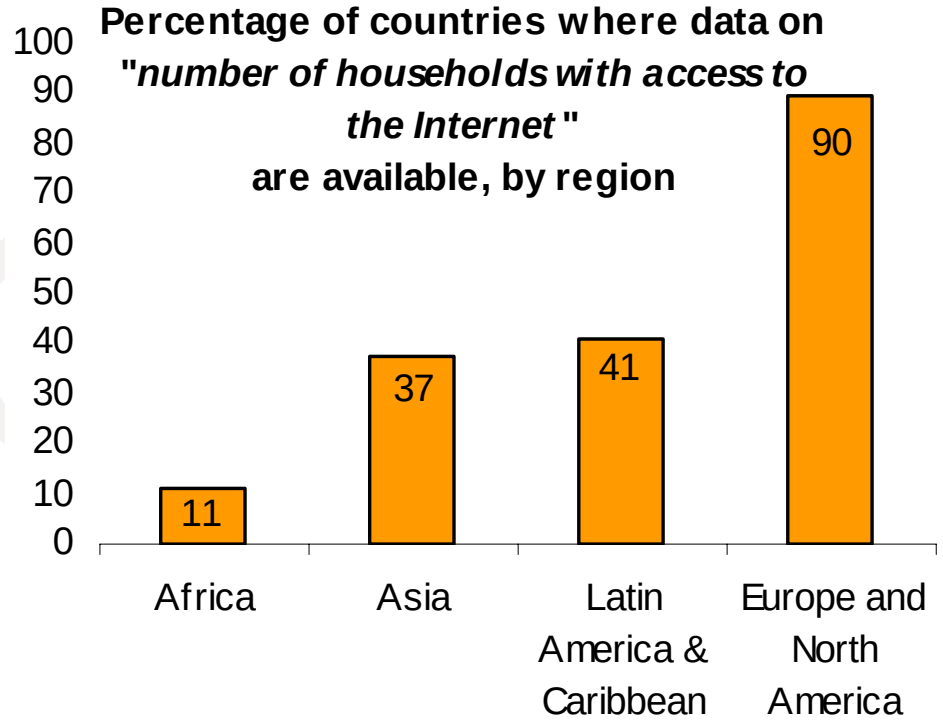
Household access and individual use data (ICT Household Survey)

- Proportion of individuals who used:
  - Computer
  - Internet
    - By Location of use
    - By Type of Internet activities
    - Frequency of use
  - Mobile cellular telephone

Challenges: Administrative data

- Maintaining list of ITU indicators and their definition (to reflect changes in technologies and services while ensuring global applicability)
- Not all countries return the questionnaires, not all questions get answered
- More work to aggregate operators' data or operators data/ reports not available
- Newer telecom/ICT data hard to obtain from developing countries
- Data received do not meet the ITU definition (subscriptions vs. subscribers)
- Limitations of administrative data (not able to show usage of ICTs, etc)
- Time-lag in publishing ICT infrastructure and access data

ICT Use – Limited availability of data



Source: Left chart: ITU World Telecommunication Indicators Database
Note: Data refer to 'latest available data as of 2007'.

Challenges: ICT household statistics

...in developing countries

- Lack of awareness and cooperation at the national level
- Lack of capacity and technical expertise to collect ICT statistics
- Lack of funding to carry out ICT household survey, or to add an ICT module to existing survey

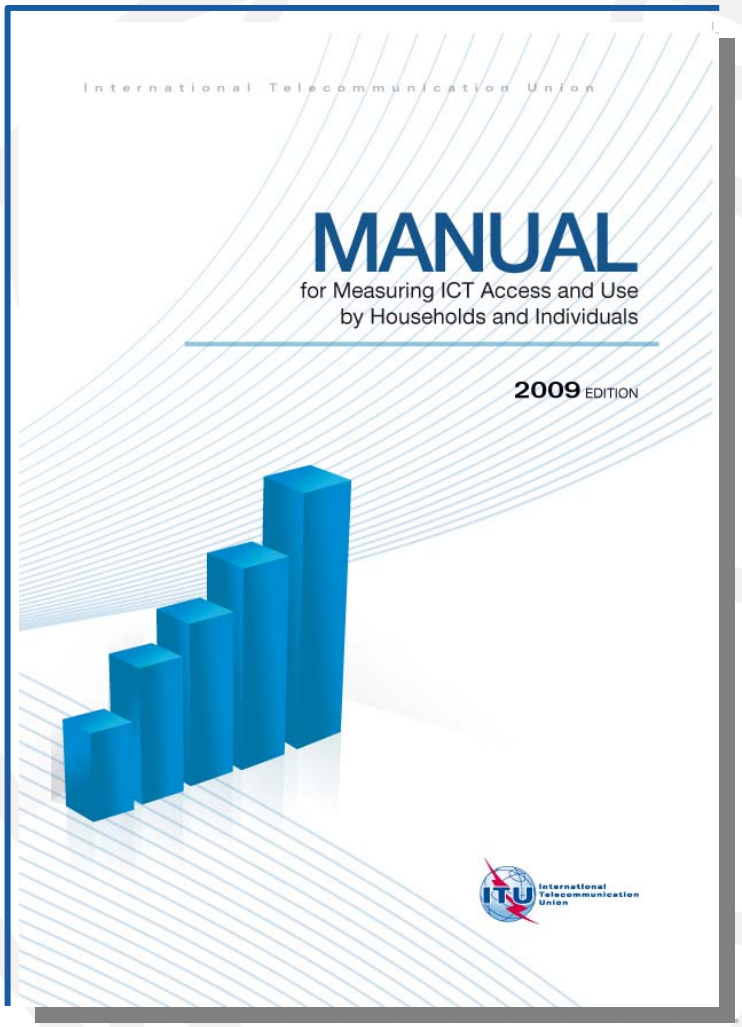
World Telecom / ICT Indicators meeting 2009 (recommendations)

- ✓ Creation of an Expert Group on Telecommunication/ICT indicators
- ✓ Collection of ICT statistics through household surveys based on the internationally agreed core list of ICT indicators
- ✓ To build capacity in ICT household statistics through training courses
- ✓ Further work to be carried out at the national and international level to measure the impact of ICT on socio-economic development
- ✓ Continue collaborative work of the Partnership on Measuring ICT for Development to improve ICT statistics data availability
- ✓ To increase the cooperation between ICT national policy makers in identifying indicators and collecting ICT statistics
- ✓ To synchronize data collection and data dissemination of ICT data

ITU Manual

for Measuring ICT Access and Use by Households and Individuals

2009 Edition



Main objective:

- Assist countries to measure ICT access and use by households and individuals
- Production of high quality and internationally comparable data.
- Released last week

Available online:
http://www.itu.int/ITU-D/ict/partnership

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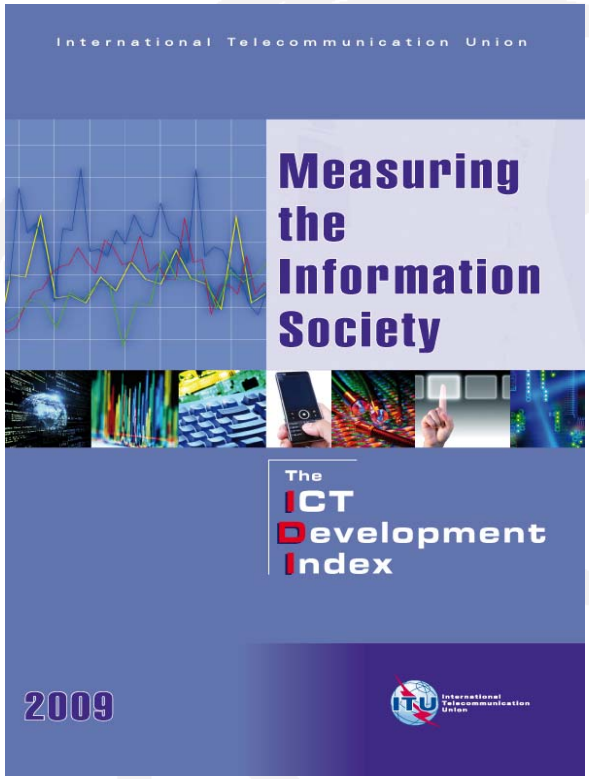
ICT Development Index (IDI)



- ✓Track ICT progress *over time*
- ✓Address all countries - *global* index
- ✓Measure *digital divide*
- ✓Capture ICT *development potential*
- ✓11 indicators
- ✓Two years: 2002 and 2007
- ✓154 economies
- ✓Released on 2 March 2009

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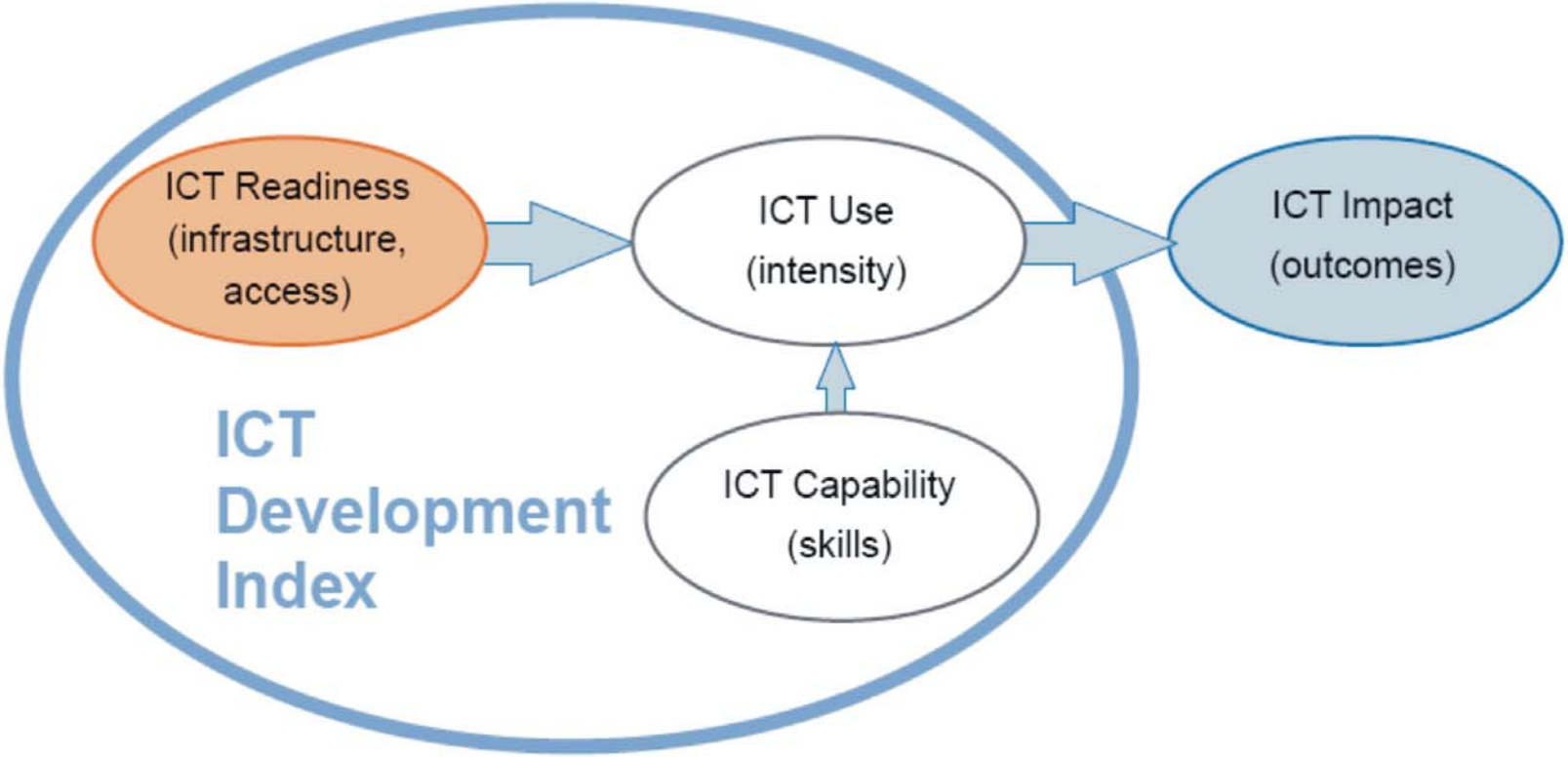
Three stages in the evolution towards an information society



ICT Development Index

ICT access	Ref. Value	(%)
1. Fixed telephone lines per 100 inhabitants	60	20
2. Mobile cellular telephone subscriptions per 100 inhabitants	150	20
3. International Internet bandwidth (bit/s) per Internet user	100'000*	20
4. Proportion of households with a computer	100	20
5. Proportion of households with Internet access at home	100	20

40

ICT use	Ref. Value	(%)
6. Internet users per 100 inhabitants	100	33
7. Fixed broadband Internet subscribers per 100 inhabitants	60	33
8. Mobile broadband subscriptions per 100 inhabitants	100	33

40

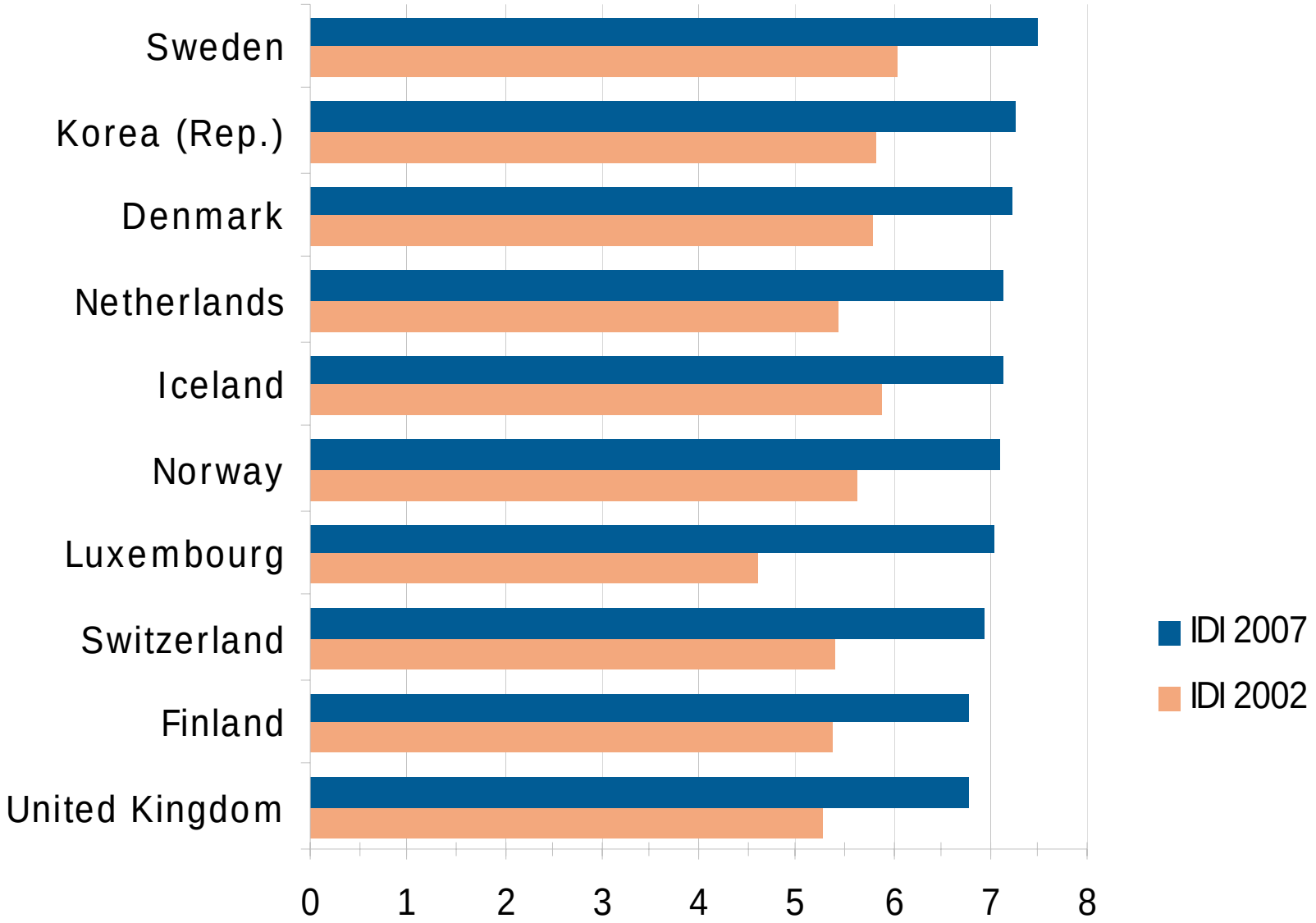
ICT skills	Ref. Value	(%)
9. Adult literacy rate	100	33
10. Secondary gross enrolment ratio	100	33
11. Tertiary gross enrolment ratio	100	33

20

ICT Development Index

* This corresponds to a log value of 5, which was used in the normalization step.

Top ten IDI countries mainly from Europe



Source: ITU

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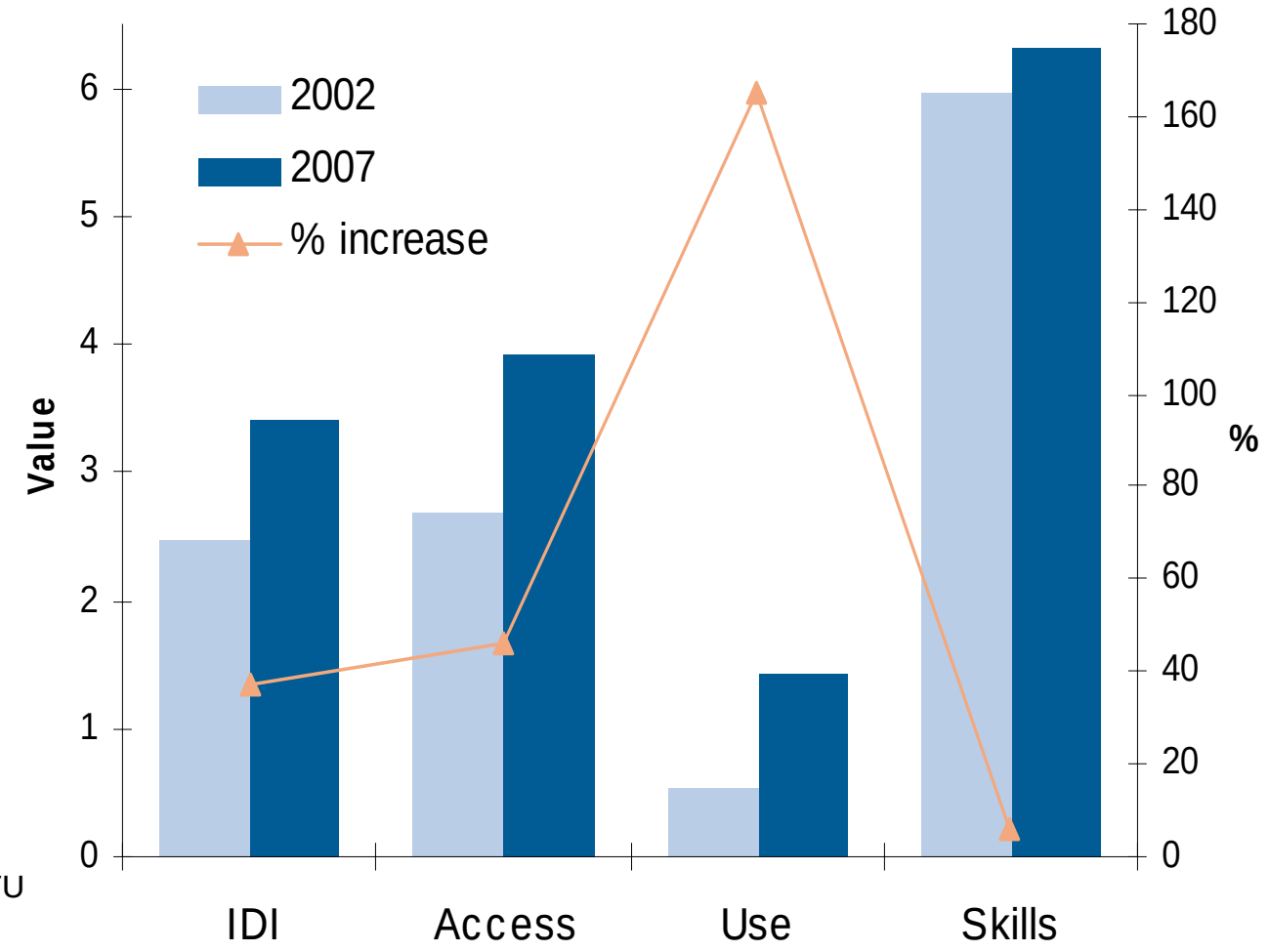
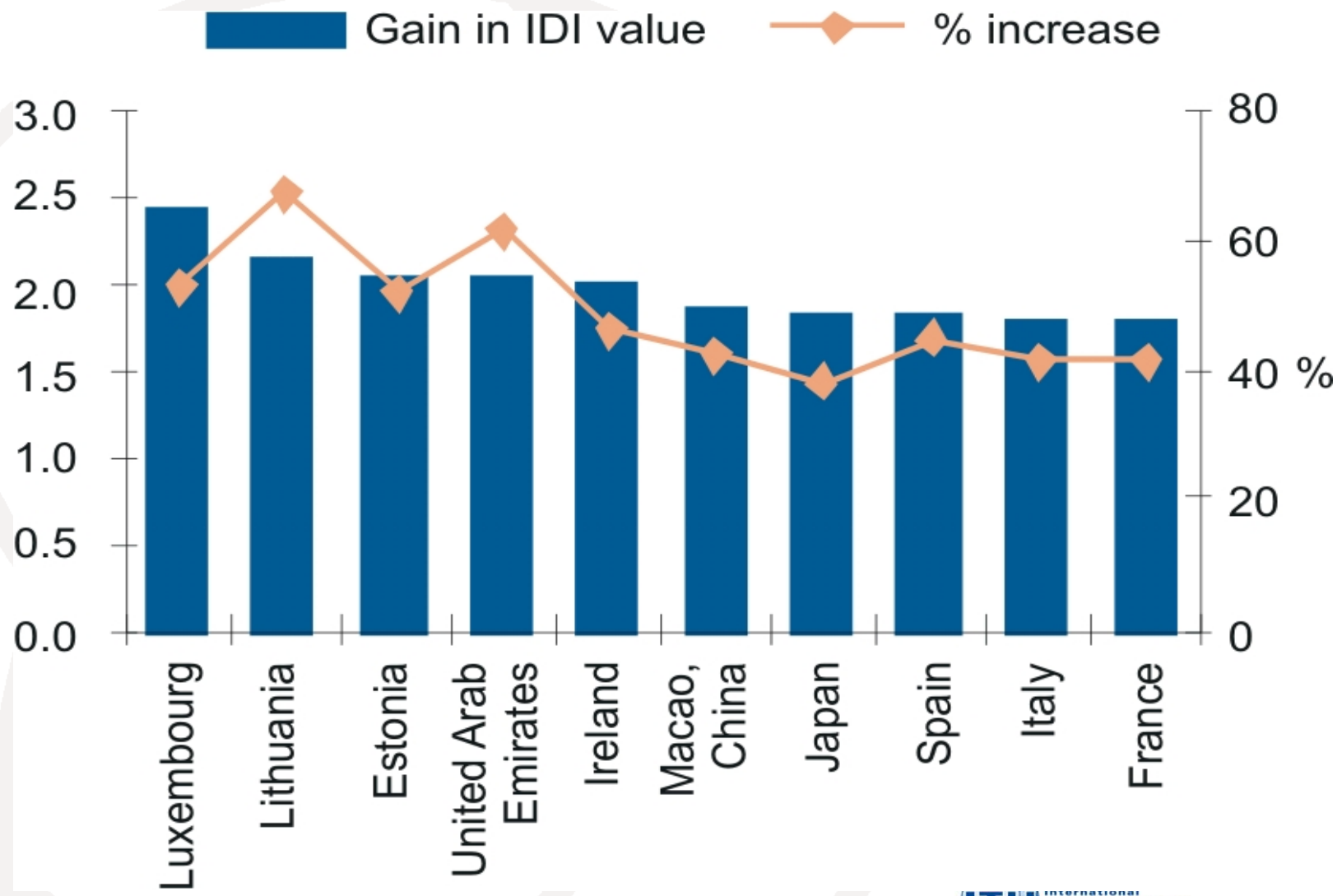
Biggest relative increase in ICT use, but still low intensity



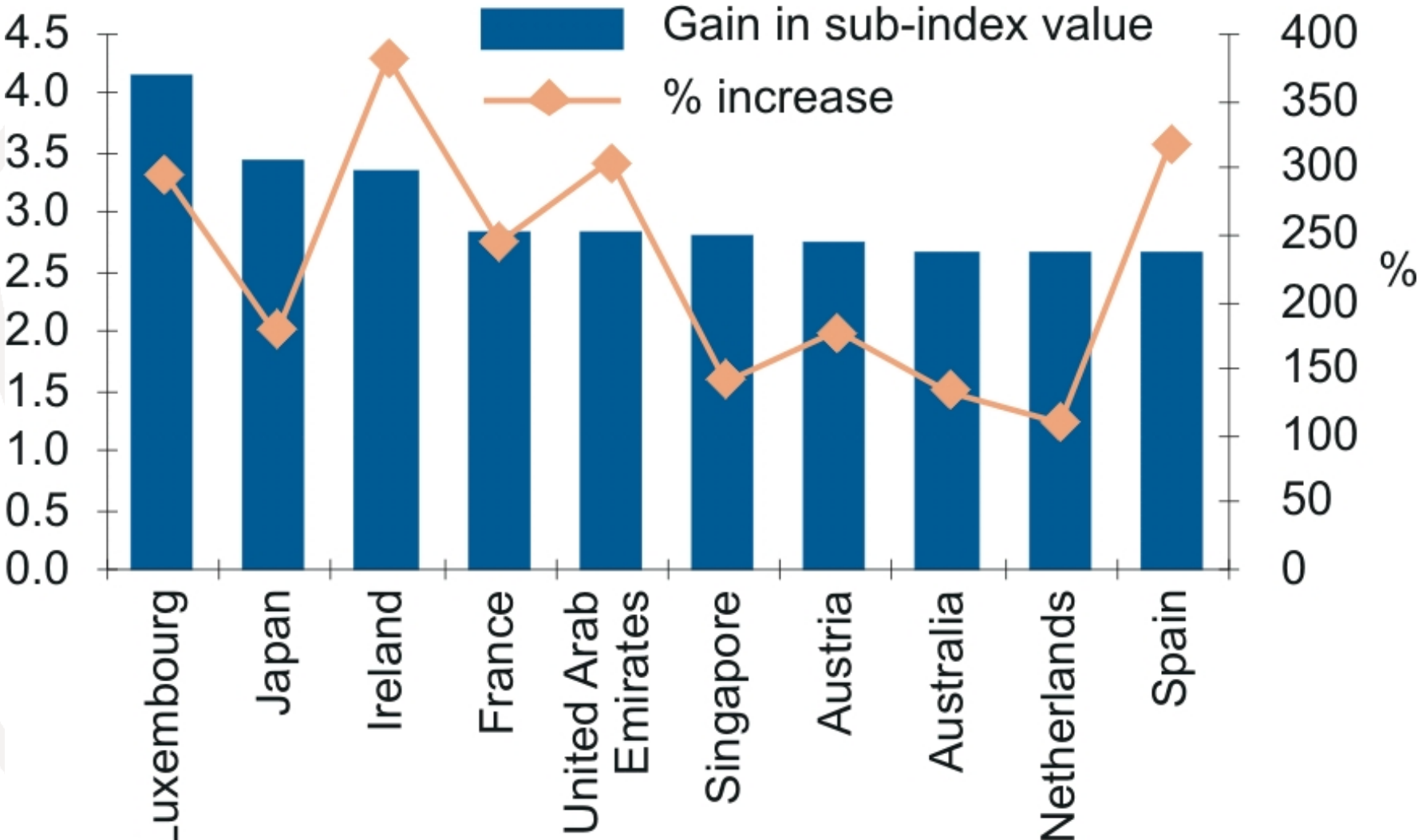
Source: ITU

Economies with highest absolute IDI increases, 2002-2007



Source: ITU

Countries with highest absolute gains in IDI use



Source: ITU

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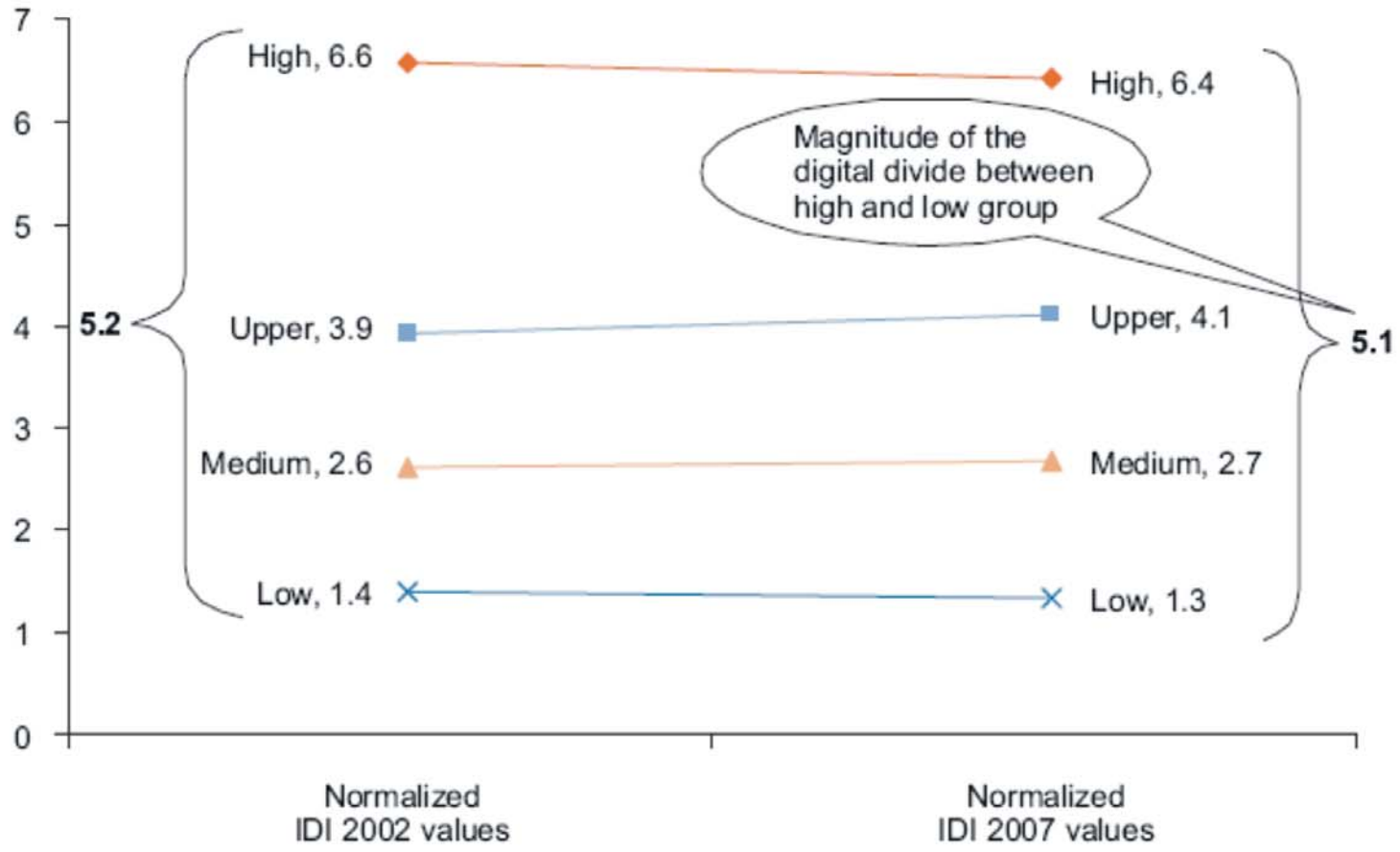
The digital divide remains significant



Source: ITU

But how much do ICT services cost?

The ICT Price Basket

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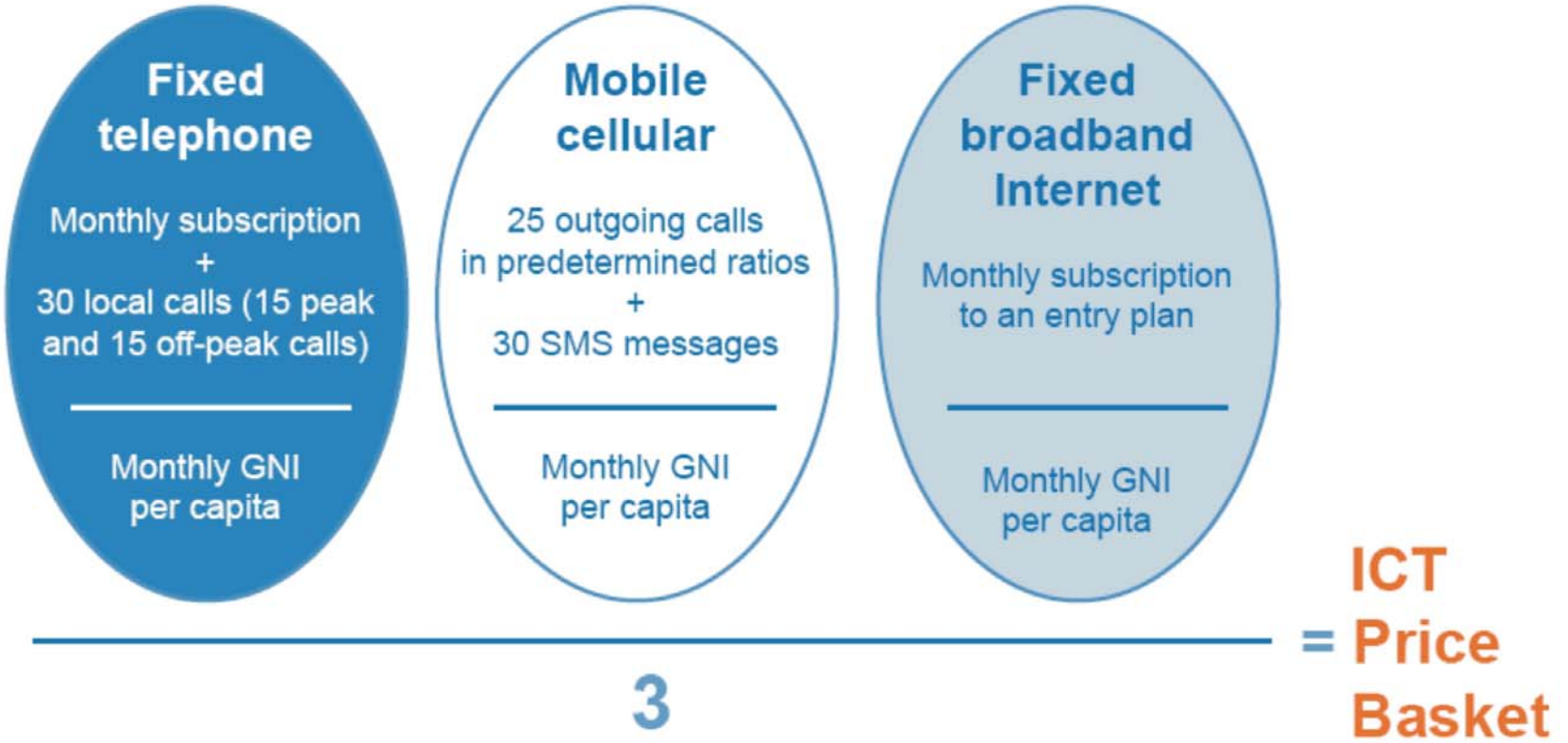
The ICT Price Basket - objectives

- To illustrate, and raise awareness of, the importance of ICT prices for ICT uptake
- To allow policy makers evaluate the cost of ICTs in their countries
- To provide a tool for benchmarking ICT prices globally
- To monitor ICT prices and affordability over time

ICT Price Basket methodology

- Three sub-baskets: fixed telephone, mobile cellular, fixed broadband Internet
- Three calculations per sub-basket: US$, PPP$, % monthly GNI p.c.
- Final ICT Price Basket: average of the three sub-baskets (US$) **as % of monthly GNI p.c.**
- 2008 data collected by ITU

ICT Price Basket methodology



Source: ITU

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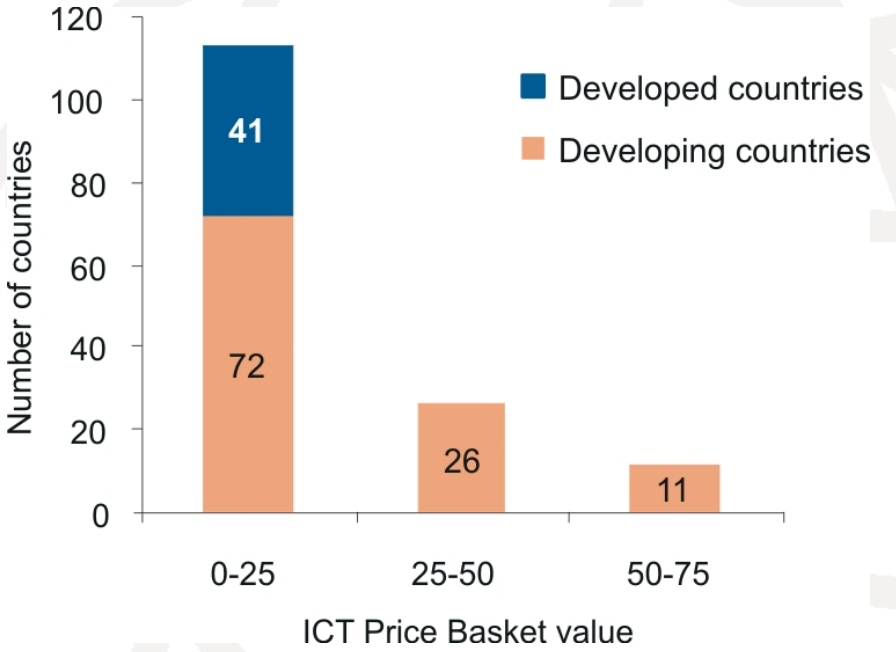
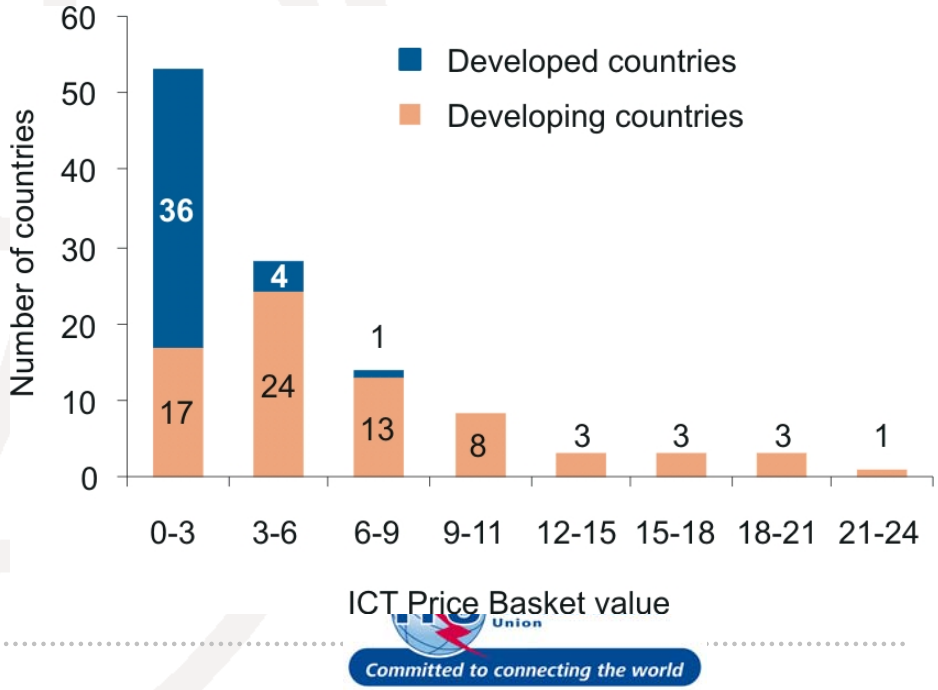
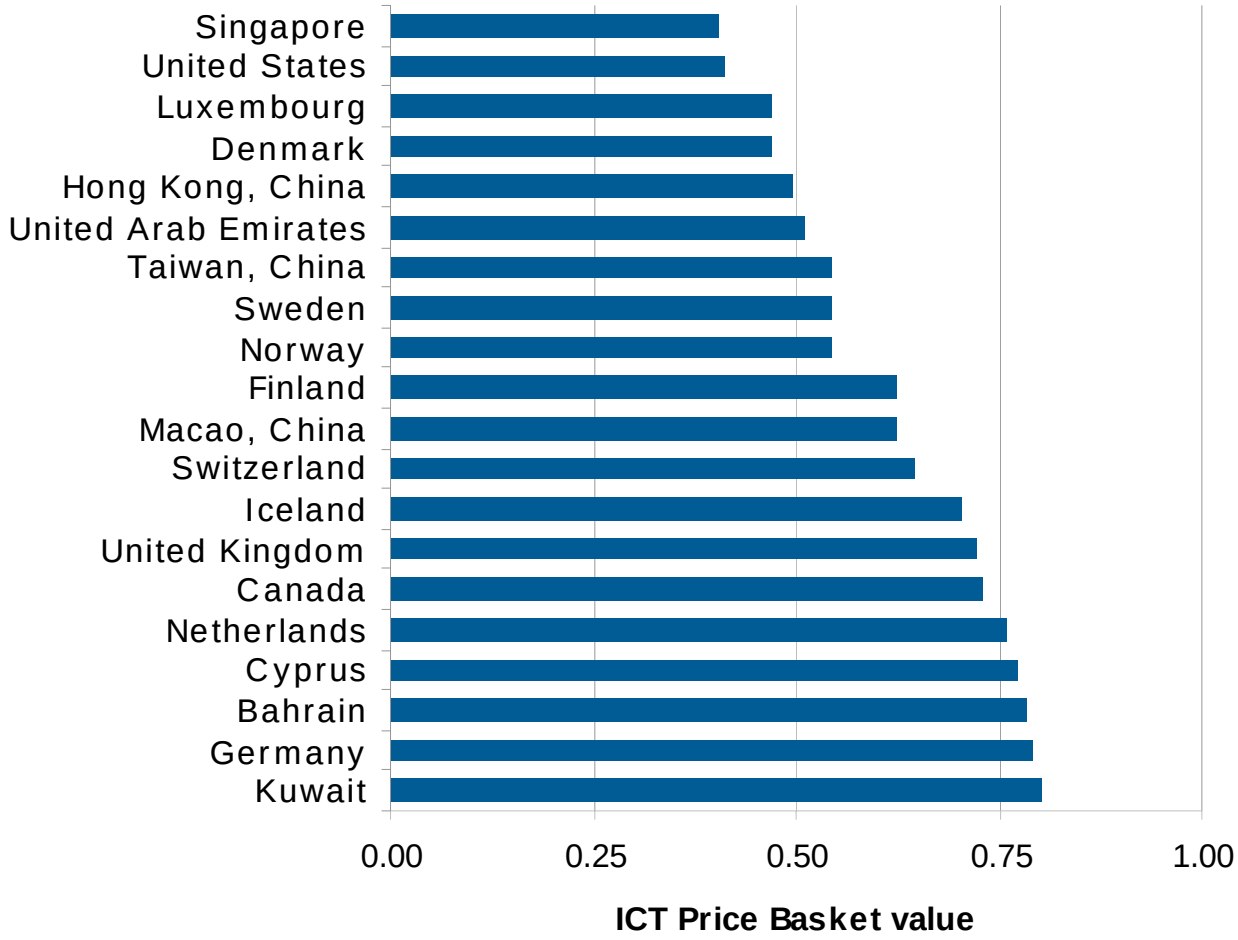
Developing countries are paying more





Source: ITU

Economies with lowest ICT prices (2008)



Source: ITU

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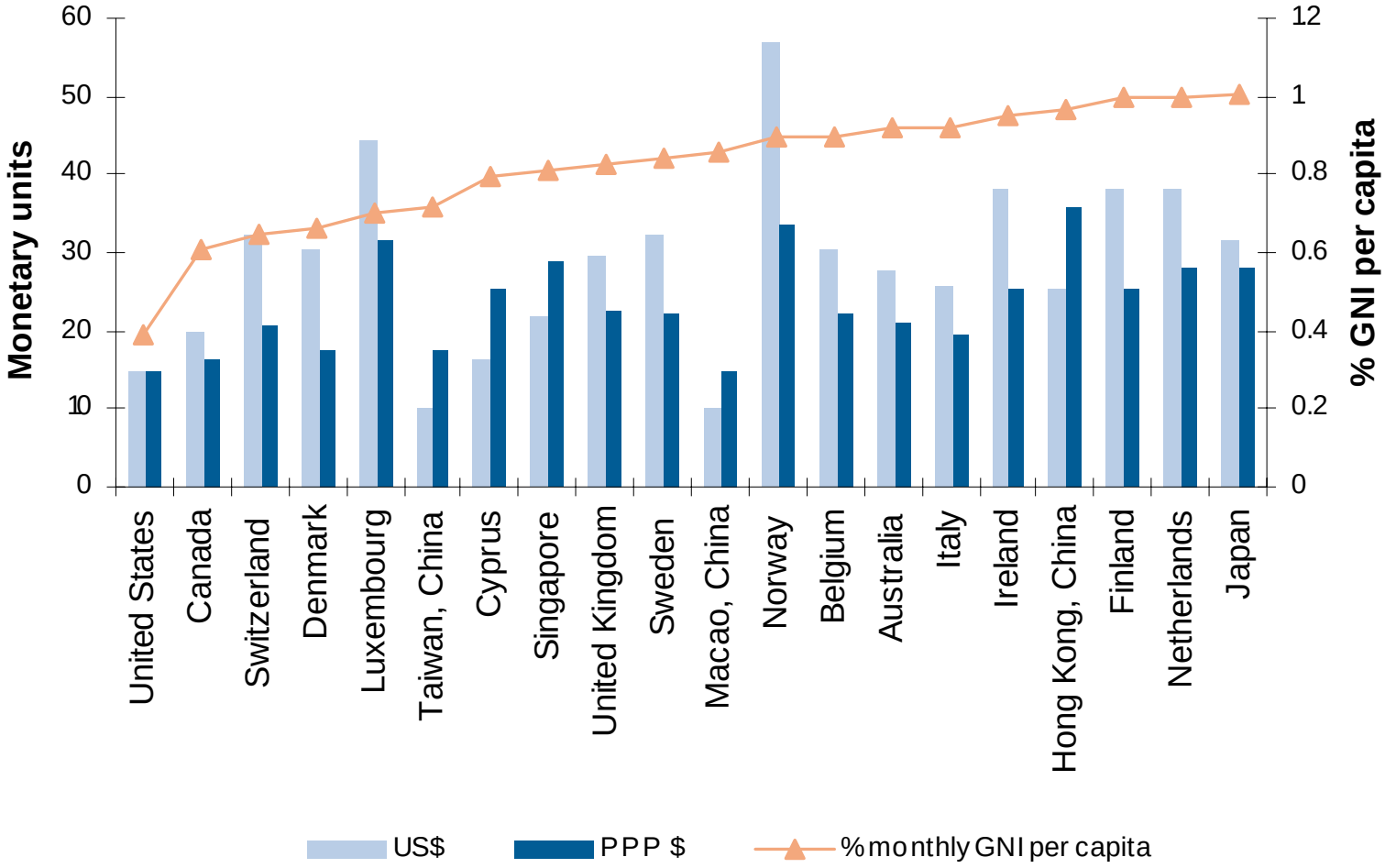
Economies with the lowest fixed broadband Internet prices



Source: ITU

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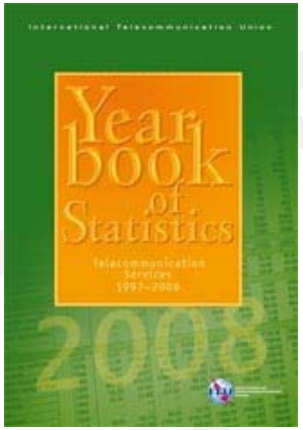
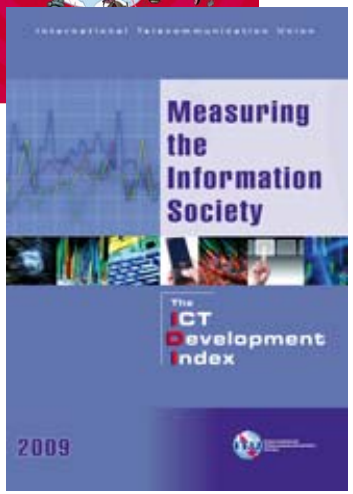
ITU dissemination



- **Yearbook of Statistics** (annually, since 1974)
- **World Telecommunication / ICT Indicators (WTI) database**
- **World Telecommunication / ICT Development Report (WTDR)**
- **Regional Telecommunication Indicators reports** (Africa, Asia-Pacific, Americas)
- **Measuring the Information Society : The ICT Development Index**
- **Online (free statistics)**

http://www.itu.int/ITU-D/ICTEYE/Indicators/Indicators.aspx



Thank you.

For further information, contact:
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visit www.itu.int/ict

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