ITU Statistical Activities

Korea National Statistical Office (NSO) and Ministry of Commerce, Industry & Energy (MOCIE)

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International Telecommunication Union

Topics

- ITU Telecommunication/ICT Indicators data collection
- Challenges
- Meetings/Workshops
- International Cooperation
- Forms of data dissemination
- Digital Access Index (DAI)
- Conclusion

ICT Indicators: data collection (for telecom regulators, ministries)

i. Telephone Network
ii. Mobile Services
iii. Other services
iv. Traffic
v. Staff
vi. Quality of Service
vii. Tariffs
viii. Revenue and Expense
ix. Capital Expenditure
x. Broadcasting
xi. Information Technology

ICT Indicators: data collection (National statistical offices)

- Until last year, we did not send any questionnaire directly to NSOs
- This year, there will be a metadata collection on ICT statistics availability in countries to be conducted by UN Economic Commissions (i.e. UNESCAP for Asia)
- Indicators we collect:
  - **Households with:**
    - Electricity
    - Radio
    - Television
    - Telephone (only fixed, only mobile, both fixed and mobile)
    - personal computer
    - Internet access from the home

Challenges

- Not every country returns/answers questionnaire
- Incomplete data: Not all questions get answered
- More work to aggregate operators' data since the fall of monopoly
- Operators' data or annual reports sometimes not available
- Newer ICT data hard to obtain from developing countries
- Not all national statistical agencies collect ICT statistics

ITU Telecom/ICT Meeting

- World Telecommunication/ICT meeting (every 2 years, next meeting in February 2005)
  - Last meeting revised the list of indicators and definitions
  - http://www.itu.int/ITU-D/ict/material/Top50_e.doc
- Indicators workshop on community access to ICTs (Mexico, Planned November 2004)
  - Last workshop discussed and identified indicators on community access to ICTs
    - http://www.itu.int/ITU-D/ict/mexico03/rc/Recomendaciones%20Taller_e.pdf
- Regional workshops (Africa, Americas, Asia)
  - November 2004 – Africa
  - Aim to discuss ICT data collection at regional levels and to choose pilot countries in Africa to conduct ICT household survey

International cooperation

- **UN Millennium Development Goals Monitoring** (UN MDG)

http://millenniumindicators.un.org/unsd/mi/mi_goals.as

- **WSIS Statistical Side Event** (Geneva, December 8-9, 2003)

http://www.unece.org/stats/documents/2003.12.wsis.htm

- **Other**
  - World Bank, OECD, EUROSTAT, UNCTAD, UNDP
- **Partnership**

Partnership on Measuring ICT for Development

- Partners: ITU, OECD, UNCTAD, UNESCO, other international organizations, National Statistics Offices
- Launched: UNCTAD XI, Sao Paolo, June 16, 2004
- Objectives:
  - *to identify a set of core ICT indicators at the business and household level that would be collected by all countries, and harmonized at the international level*
  - *to assist developing countries in building capacity and competence to produce ICT statistics and monitor ICT developments at the national level*
  - *to develop a database of core indicators and make it available on the Internet, including links to relevant supporting information*

ICTs and UN Millennium Development Goals

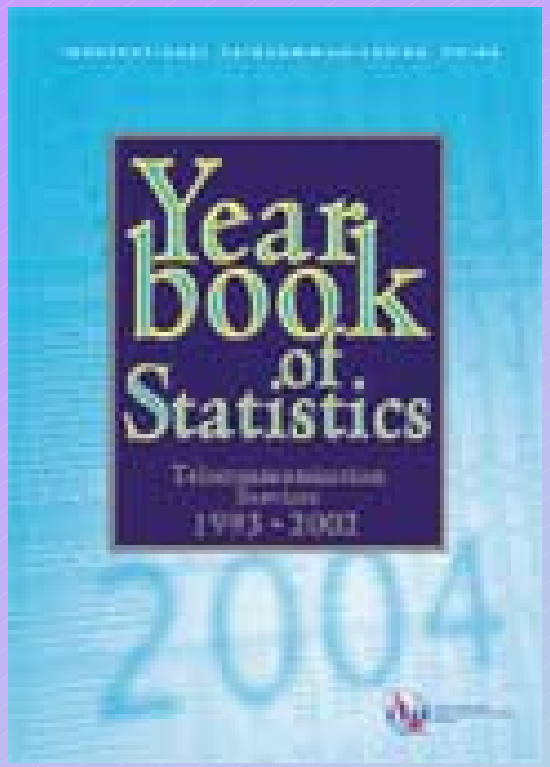
"Target 18: In cooperation with private sector make available the benefits of new technologies, specifically information and communication"

- ITU reports three indicators to UN MDG indicators database (per 100 inhabitants)
  - Telephone subscribers (fixed and mobile)
  - Personal computers
  - Internet users
- How ICTs can help achieve the Millennium Declaration Goals and Targets (with suggested indicators)

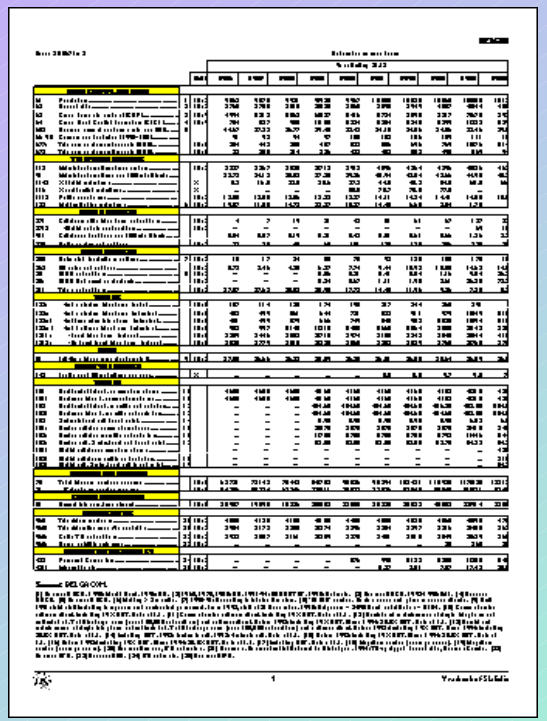
Forms of data dissemination

- ITU Statistical Publications
  - (Yearbook of Statistics, World Telecommunication Development Report, Regional Telecommunication Indicators reports)
- ITU CD-ROM (World Telecommunication Indicators Database)
- Free statistics published in our ICT website for basic indicators, cellular subscribers, information technology and data for top operators (http://www.itu.int/ITU-D/ict/statistics/)
- Requests made by users either by phone, fax or email

Yearbook of Statistics

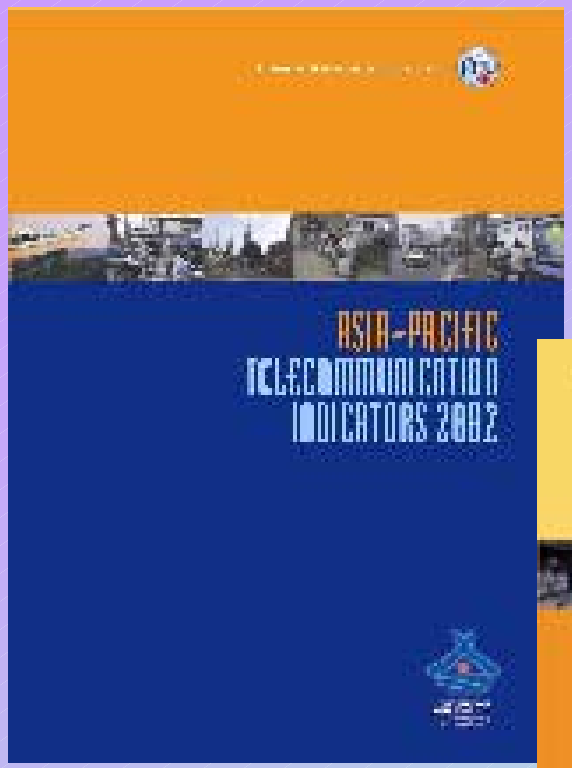


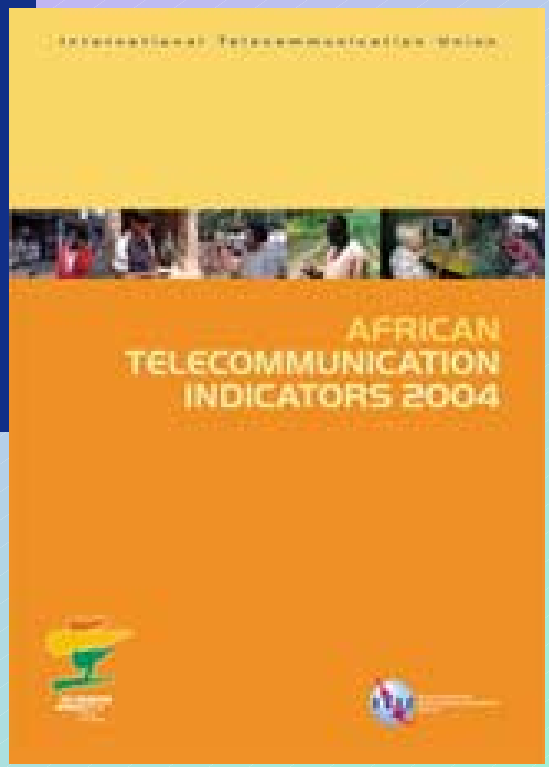
Yearbook of Statistics
Telecommunication
Services
1993-2002



- First Statistical Yearbook issued 40 years ago
  - Published towards the end of each year
  - Containing country pages for around 180 countries
  - Each country page contains data for 10 years
  - Latest edition contains data until 2002
  - Available in paper and electronic (PDF) format.

Regional Publications



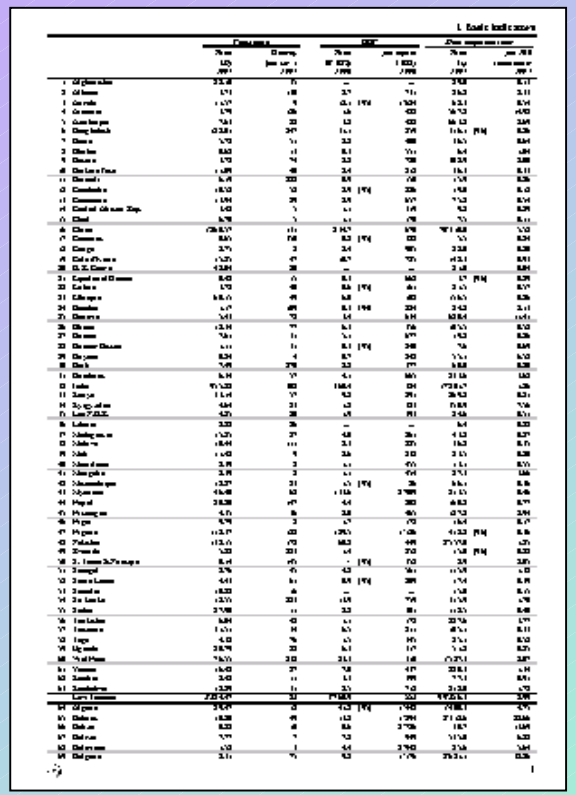


- Regional Telecommunication Indicators
  - Specifically prepared for regional Telecom events
  - Contains 3 parts: Overview, regional statistics and directory of telecommunication operators
  - Latest is Africa Telecom Indicators 2004 released in Africa Telecom 2004
  - Upcoming Asia Pacific Indicators for Asia Telecom, September 2004

World Telecommunication Indicators Database

- Released every year
- Available in CD-ROM and electronic download via ITU bookshop
- Contains around 100 indicators for more than 200 economies
- Ability to extract, chart, export and map data
- Next release end of June 2004 and will contain some 2003 data

World Telecommunication Development Report 2003



- 7th Edition
- Published every year
- Contains analysis and latest ICT/Telecommunication indicators tables for around 180 economies
- Released last December 2003 on the occasion of WSIS Statistical Side Event
- Available in paper and electronic (PDF) format.

World Telecommunication Development Report 2003: *Access Indicators for the Information Society*

- 1. Accessing the Information Society
- 2. Measuring Access to ICTs
- 3. ICTs in Business, Education and Government
- 4. ICTs and the Millennium Development Goals
- 5. The Digital Access Index
- 6. Conclusion

e-ITU Indicators:
Universal service

- **Households with:**
  1. electricity
  2. radio
  3. television
  4. Telephone (only fixed, only mobile, both fixed and mobile)
  5. personal computer
  6. Internet access from the home

e-ITU Indicators:
Universal access

- **Number of people:**
  7. covered by mobile telephony signal
  8. that use a personal computer
  9. with access to Internet (at home, at school, at work or a public facility)

e-ITU Indicators:

- Business:
  10. Businesses with computer
  11. Businesses with Internet
  12. Businesses with website
- Education
  13. Student to computer ratio (elementary and secondary)
  14. % of schools connected to Internet
- Government
  15. Government offices with Internet connection
  16. Government offices with website
  17. Government employees with Internet access

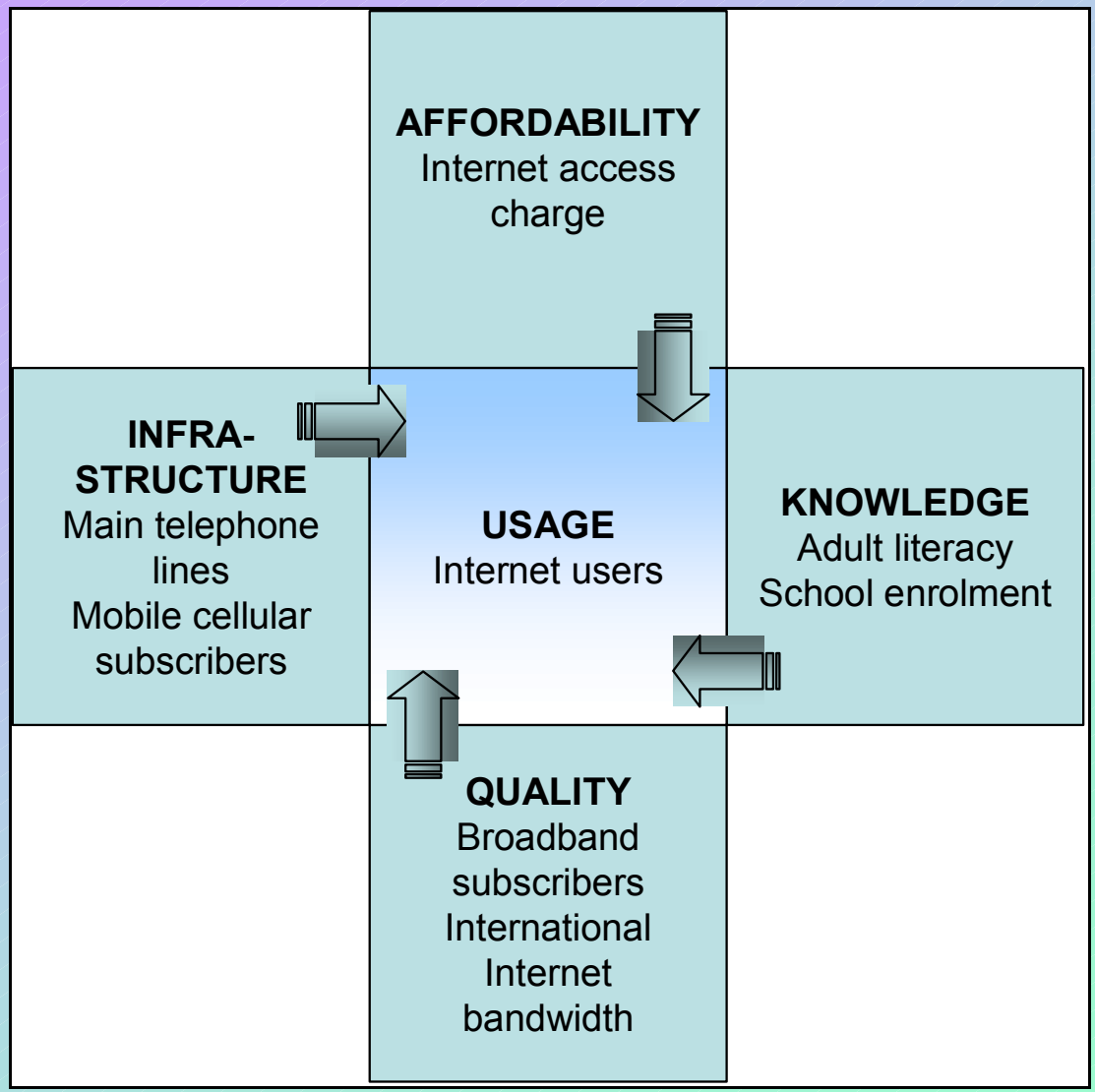
e-ITU Indicators:

Digital Access Index Indicators

18. Fixed telephone subscriber lines (PSTN +ISDN subscribers)
19. Mobile subscribers
20. Internet access tariffs
21. International Internet bandwidth
22. Broadband subscribers
23. Internet users

Digital Access Index (DAI)

Indicators making up the Index



Source: ITU

DAI: Methodology

- INFRASTRUCTURE
  - Fixed subscriber lines per 100 inhabitants / **60** * (1/2)
  - + Mobile cellular subscribers per 100 inhabitants / **100** * (1/2)
- AFFORDABILITY
  - 1 – ((20 hours Internet access per month / Gross National Income per month) / **100**)
- KNOWLEDGE
  - Literacy / **100** * (2/3)
  - + School enrolment / **100** * (1/3)
- QUALITY
  - International Internet bandwidth per 100 inhabitants / **10'000** * (1/2)
  - + Broadband subscribers per 100 inhabitants / **30** * (1/2)
- USAGE
  - Internet users per 100 inhabitants / **85**

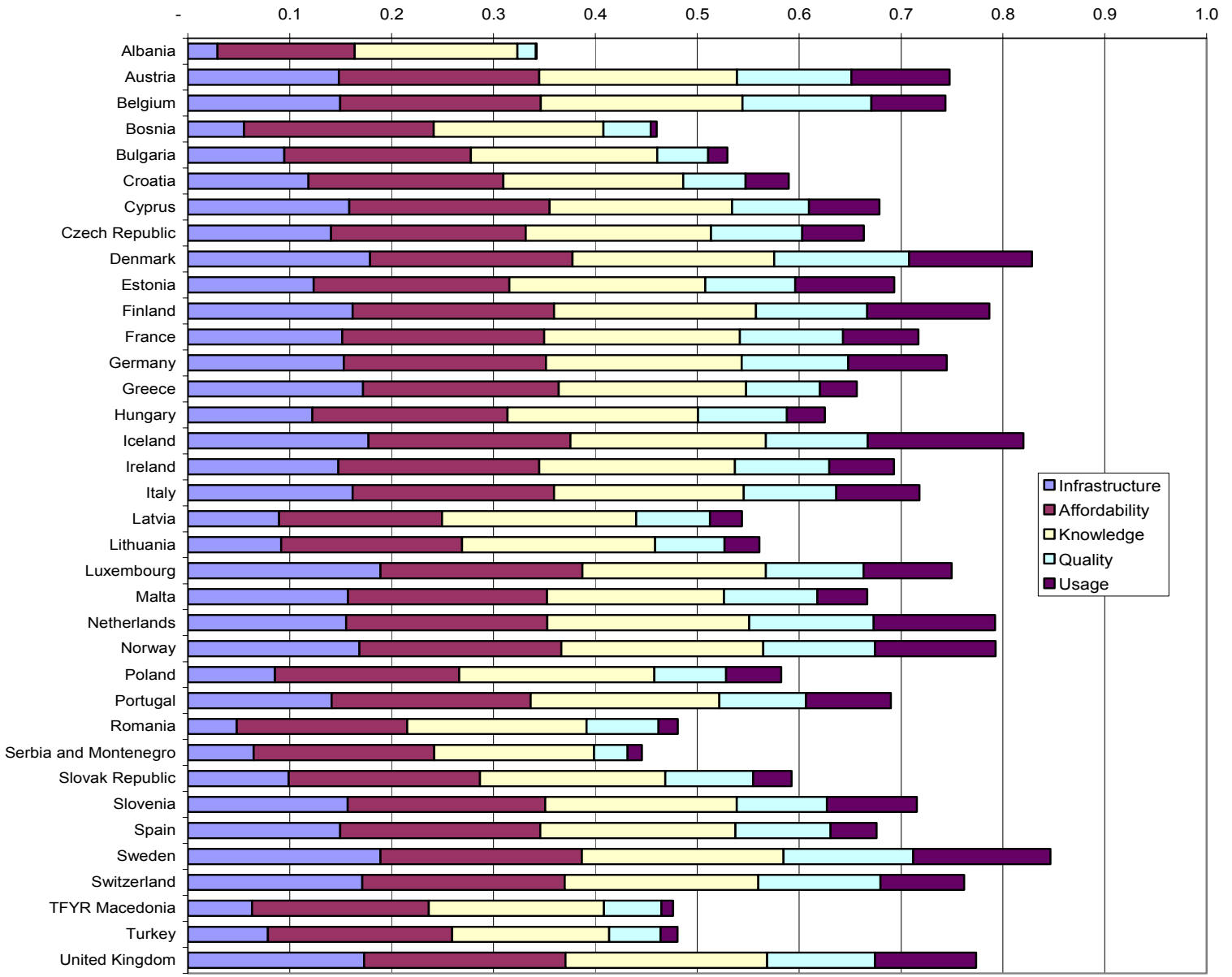
Rationale for goalposts

Indicator		Note
Main telephone lines per 100 inhabitants	60	The highest value was 69.3, by Sweden in 1998. This has since declined to 65.3 in 2002 .
Mobile subscribers per 100 inhabitants	100	The value of 100 has already been reached by two economies: Luxembourg and Taiwan, China.
Literacy, School enrolment	100	The UNDP establishes these values
Internet access price as percent of GDP per capita	100	It is not possible to spend more than one earns on Internet access.
Broadband subscribers per 100 inhabitants	30	The Republic of Korea leads the world with 21 broadband subscriptions per 100 inhabitants at the end of 2002. At a level of 30 per 100 inhabitants, more than 90 percent of households would have broadband.
International Internet bandwidth per capita	10’000	This level has already been exceed in three countries most notably Denmark where the value is more than twice the goalpost.
Internet users per 100 inhabitants	85	The highest value for Internet penetration over the entire population in Iceland with a rate of 65 (81 percent of of those between age 12-80). A goalpost of 85 implies that all in that age range are using the Internet.

DAI Results (Top 10)

Economies	INFRA-STRUCTURE	AFFORD-ABILITY	KNOWLEDGE	QUALITY	USAGE	**Digital Access Index**
Sweden	0.944	0.985	0.990	0.636	0.674	**0.846**
Denmark	0.894	0.982	0.990	0.662	0.603	**0.826**
Iceland	0.886	0.990	0.960	0.501	0.763	**0.820**
Korea, Rep.	0.746	0.971	0.956	0.744	0.649	**0.813**
Norway	0.841	0.992	0.990	0.550	0.591	**0.793**
Netherlands	0.776	0.983	0.990	0.611	0.596	**0.791**
Hong Kong, China	0.930	0.998	0.833	0.682	0.506	**0.790**
Finland	0.809	0.976	0.990	0.546	0.599	**0.784**
Taiwan, China	0.979	0.973	0.950	0.557	0.450	**0.782**
USA	0.736	0.992	0.970	0.542	0.649	**0.778**

DAI Results



Source: ITU

Conclusions

- Use existing model surveys for collecting data on business and individual and household use of ICT
- Developed nations and multilateral agencies should assist developing nations to compile ICT indicators
- ICT policy makers should liaise with their NSOs to ensure required data are collected
- Surveys should be carried out on a regular basis and good statistical practice should be maintained

Thank You.

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http://www.itu.int/ITU-D/ict/informationsharing/index.html