IV Ibero-American Seminar for Information Society Indicators
Ibero-American Network of
Science and Technology Indicators (RICYT)
Lisbon, 11-12 September 2008
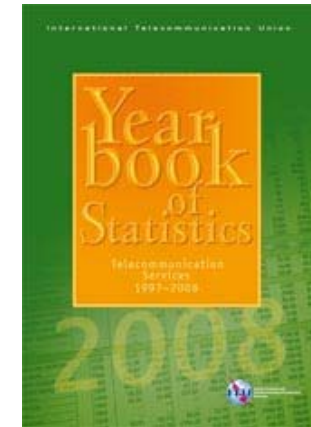
Partnership on Measuring ICT for Development

ITU Manual on ICT Household Statistics

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International Telecommunication Union

International Telecommunication Union

- United Nations specialized agency for telecommunications

- Oldest inter-governmental organization

- Global organization with broad membership

- Mandate includes promoting the development of telecom/ICT worldwide

- Main inter-governmental agency collecting and disseminating telecom/ICT _infrastructure and use_ statistics for all countries and regions

www.itu.int/ict

ITU statistical work

- **Collection** and **dissemination** of telecom/ICT (infrastructure and access, ICT households) statistics

- **Setting standards** (ITU Handbook of Telecom Indicators, ITU Manual on ICT Households statistics)

- **Analysis** (global, regional, thematic)

- **Cooperation** (UNSD, MDG, Partnership on Measuring ICT for Development, etc.)

- **Technical assistance** (NSOs, regulators/ministries)

Partnership on Measuring ICT for Development

- A response to the WSIS's call to measure the information society
- Multi-stakeholder partnership launched in June 2004 to identify a core set of ICT indicators and help guide countries in collecting and disseminating ICT statistics
  - ➤ Common set of core ICT indicators
  - ➤ Enhance capacity of NSOs
  - ➤ Global database for ICT indicators
- Includes key stakeholders working on ICT statistics
- A framework for raising additional resources to assist developing countries
- Focus of Partnership is on **developing countries**

Current members

International level

- ITU
- OECD
- UNCTAD
- UNESCO Institute for Statistics
- World Bank

Regional level

- ECA
- ECLAC
- ESCAP
- ESCWA
- Eurostat

Strong Institutional Commitment
Memorandum of Understanding

Steering Committee & Task Groups

Steering Committee

- ITU
- UNCTAD
- UNECLAC
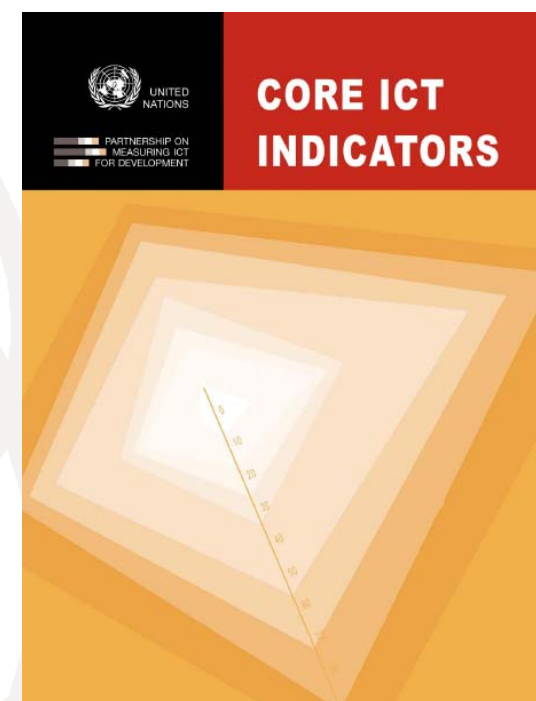
1ˢᵗ term (2006-2008)
2ⁿᵈ term (2008-2010)

Task Groups

- Capacity Building (UNCTAD)
- Education (UIS)
- E-Government (UNECA)
- Database Development (World Bank)
- ICT Impact (OECD) New!!

Core list of ICT indicators

Type	Basic core	Extended core	Total
ICT infrastructure and access	10	2	12
ICT access and usage by households and individuals	10	3	13
ICT access and usage by businesses	8	4	12
ICT sector	4	-	4
Total	**32**	**9**	**41**

CORE ICT INDICATORS

Note: Apart from the 41 ICT indicators, there is one 'reference' indicator to measure the 'proportion of households with electricity'.

Core list of ICT indicators

- Adopted in 2005
- Endorsed by the 38th session of the UN Statistical Commission (New York, March 2007)
- Should be used as a basis internationally
- Revised during the Partnership Global meeting in May 2008
  - ➢ Addition of education indicators
- To be expanded to include:
  - ➢ Government indicators (ECA)
- To be submitted again to the UN Statistical Commission (New York in February 2009)
  - ➢ to show revisions made
  - ➢ to include education indicators

Revised Basic ICT infrastructure & access indicators (ITU)

A-1   Fixed telephone lines per 100 inhabitants

A-2   Mobile cellular subscribers per 100 inhabitants

A-3   Total fixed Internet subscribers per 100 inhabitants

A-4   Total fixed broadband Internet subscribers per 100 inhabitants

A-5   Total mobile broadband subscribers per 100 inhabitants

A-6   International Internet bandwidth (bits) per inhabitant

A-7   Percentage of population covered by mobile cellular telephony

A-8   Broadband Internet access tariffs in $US, and as a percentage of per capita income

A-9   Mobile cellular tariffs (OECD low-user basket) in $US, and as a percentage of per capita income

A-10   Percentage of localities with public Internet access centres

Deleted: Extended core

A-11   Radio sets per 100 inhabitants

A-12   Television sets per 100 inhabitants

Indicators on access to, and use of, ICT by households and individuals (ITU)

HH-1   Proportion of households with a radio

HH-2   Proportion of households with a TV

HH-3   Proportion of households with a fixed line telephone

HH-4   Proportion of households with a mobile cellular telephone

HH-5   Proportion of households with a computer

HH-6   Proportion of individuals that used a computer

HH-7   Proportion of households with Internet access at home

HH-8   Proportion of individuals that used the Internet

HH-9   Location of individual use of the Internet

HH-10   Internet activities undertaken by individuals

HH-11   Proportion of individuals with use of a mobile cellular telephone

HH-12   Proportion of households with access to the Internet by type of access from home

HH-13   Frequency of individual use of the Internet in the last 12 months

Indicators on use of ICT by businesses (UNCTAD)

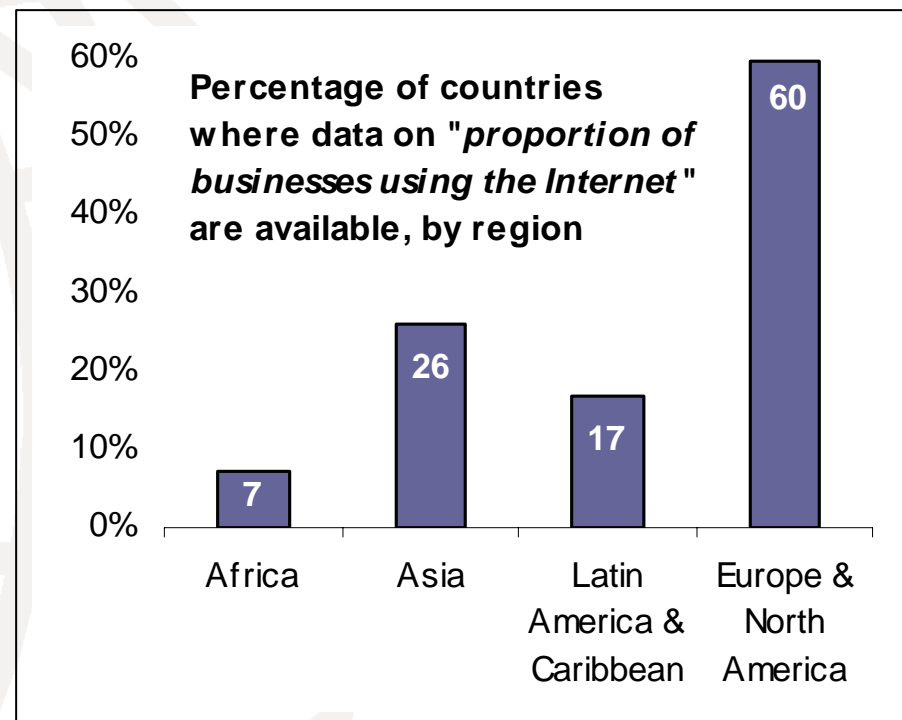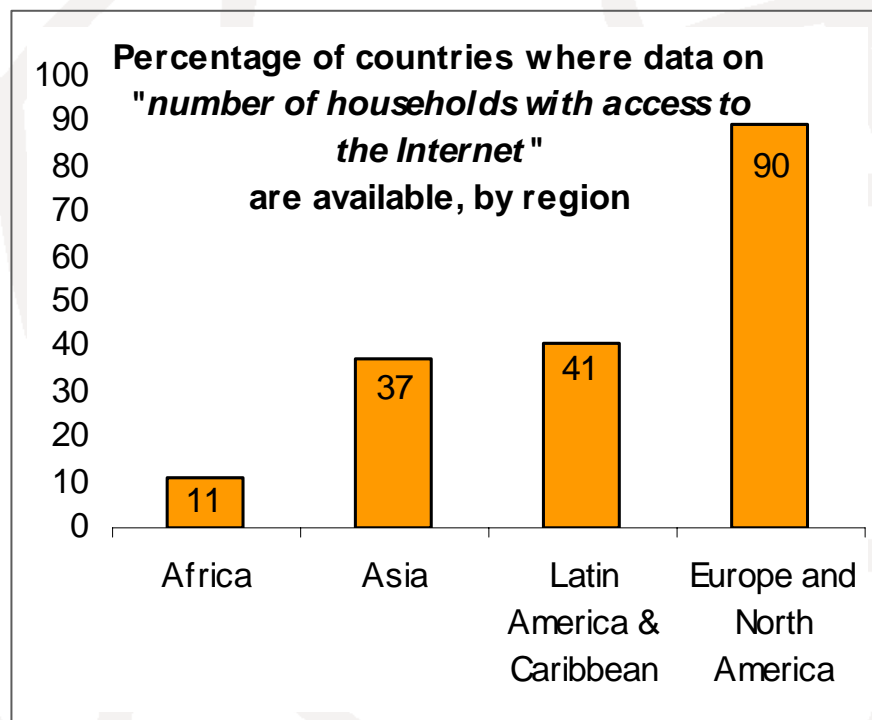|	
B-1	Proportion of businesses using computers
B-2	Proportion of persons employed routinely using computers
B-3	Proportion of businesses using the Internet
B-5	Proportion of persons employed routinely using the Internet
B-6	Proportion of businesses with a Web presence
B-6	Proportion of businesses with an intranet
B-7	Proportion of businesses receiving orders over the Internet
B-8	Proportion of businesses placing orders over the Internet
B-9	Proportion of businesses using the Internet by type of access
B-10	Proportion of businesses with a LAN
B-11	Proportion of businesses with an extranet
B-12	Proportion of businesses using the Internet by type of activity
B-13	Proportion of businesses with a mobile cellular telephone

Indicators on the ICT sector and trade in ICT goods (UNCTAD)

ICT1   Proportion of total business sector workforce involved in the ICT sector

ICT2   ICT sector share of gross value added (expressed as a percentage of total business sector value added)

ICT3   ICT goods imports as a percentage of total imports

ICT4   ICT goods exports as a percentage of total exports

Proposed core indicators for Measuring ICT in education (UIS)

ED1   Proportion of schools with a radio used for educational purposes

ED2   Proportion of schools with a TV used for educational purposes

ED3   Proportion of schools with a telephone communication facility, by type

ED4   Student-to-computer ratio

ED5   Proportion of schools with Internet access, by type

ED6   Proportion of students who have access to the Internet at school

ED7   Proportion of students enrolled by gender at the tertiary level in ICT-related fields (for ISCED levels 5 and 6)

ED8   Proportion of ICT-qualified teachers in primary and secondary schools

EDR1   Proportion of schools with electricity

PARTNERSHIP ON
MEASURING ICT
FOR DEVELOPMENT

Helping the world communicate

International
Telecommunication
Union

Limited availability of data

Percentage of countries where data on "*number of households with access to the Internet*" are available, by region

Africa	Asia	Latin America & Caribbean	Europe and North America
11	37	41	90

Percentage of countries where data on "*proportion of businesses using the Internet*" are available, by region

Africa	Asia	Latin America & Caribbean	Europe & North America
7	26	17	60

Source: Left chart: ITU World Telecommunication/ICT Indicators Database. Right chart: UNCTAD.
Note: Data refer to 'latest available data'.

PARTNERSHIP ON
MEASURING ICT
FOR DEVELOPMENT

Helping the world communicate

International
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2006-2008: capacity building

- Task Group on Capacity Building (TGCB): all Partners are members

  - Questionnaire on ICT statistical capacity building needs in countries (45 requests from NSOs)

  - Roster of experts (mainly NSOs from OECD)

  - Workshops and seminars, advisory missions, guiding materials (UNCTAD and ITU manuals)

  - Coordination of technical assistance activities among Partners, especially at country level (technical advice, training, workshops)
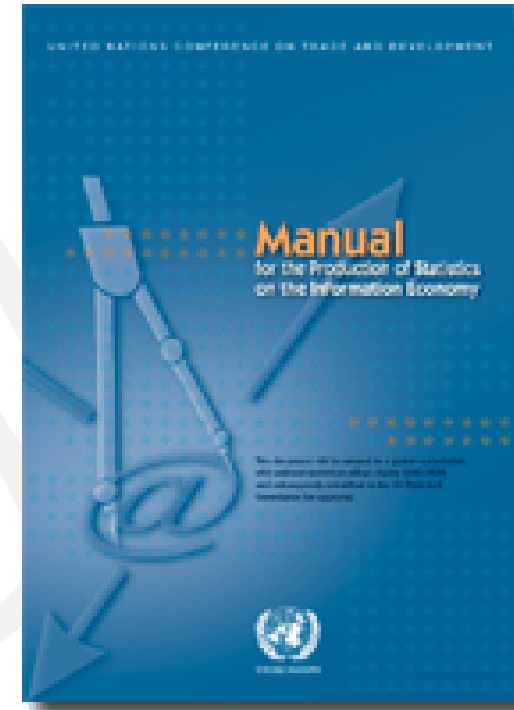
Outlook

- Regional workshops and training
  - ➢ (e.g. UNCTAD Manual on ICT Business Indicators and <u>ITU Manual on ICT Household Statistics</u>)

- Country advisory missions/technical assistance

UNCTAD Manual on Information Society

(ICT Business Indicators)

Provides a guide to:

• data collection and analysis

• international standards

• definitions

• model questions for surveys on ICT use in businesses

• reviews important institutional issues related to compiling ICT statistics
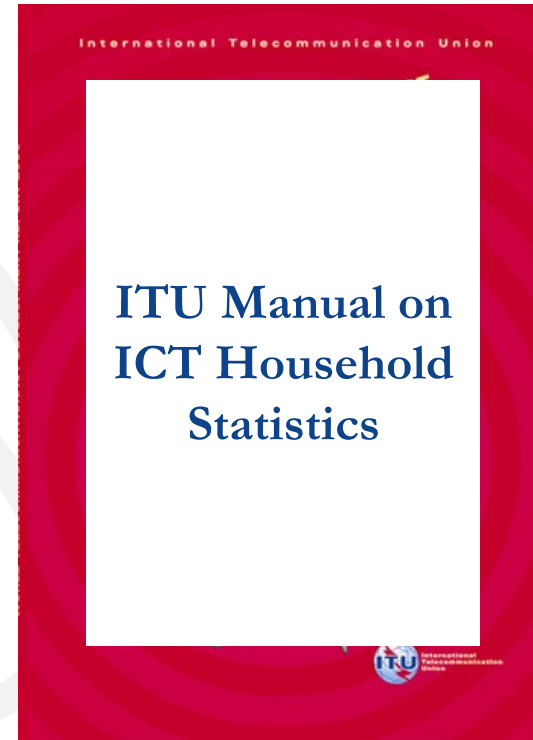
• complemented by a training course material

• Released in 2007

• Available in English and Spanish

• http://new.unctad.org/templates/ Page_____885.aspx

ITU Manual for measuring access to, and use of, ICT by households and individuals

Includes topics on:

- Survey planning and preparation

- Statistical standards and topics

- Data sources and collection techniques

- Questions and questionnaire design

- Survey design

- Data processing and dissemination

- Data quality and evaluation

- Model questionnaire

International Telecommunication Union

ITU Manual on ICT Household Statistics

- Will be available by November 2008

- English, French, Spanish

- http://www.itu.int/ITU-D/ict/methods/

ITU Manual on ICT Household Statistics

- deals mainly with **household surveys** as a tool for measuring the core ICT indicators on household access to ICT, and individual use of ICT

- reviews important institutional issues related to compiling ICT household statistics

- Users of the manual:
  - national statistics office who are designing or re-designing their ICT household surveys
  - policymakers, analysts and other data users

ITU Manual on ICT Household Statistics

- Emphasis on the practical – what has worked...
- Emphasis on the core indicators and associated standards
  - but other indicators of interest to developing economies may be included in national surveys
  - Useful references and links included
    - annexes include model questionnaires (e.g. OECD, Eurostat and selected national examples)
    - links to country metadata
    - a full bibliography
- A **training course material**:
  - will also be produced and will include a model questionnaire/module of questions corresponding to the core indicators

ITU Manual on ICT Household Statistics
Specific statistical <u>issues:</u>

- Budgeting (cost) and planning issues
- Statistical standards for households surveys <u>in general</u> and <u>specific</u> to ICT households statistics
- Most suitable data collection methods
  - ➤ (modules, stand-alone survey)
- Questionnaire design issues
- Survey scope and coverage, target population, population and survey frames, sample design
- Processing of survey results, editing, imputation, data weighting, derivation of core ICT indicators
- Sampling, data assurance frameworks and evaluation
- Dissemination of data and metadata

Conclusion

- Importance of international/regional cooperation to avoid duplication

- Importance of cooperation of all ICT stakeholders at national level (policymakers, regulators, NSO)

- Encourage countries to use core ICT indicators when designing or re-designing an ICT survey

- Importance of using available materials/manuals that are based on international consultation and consensus

- Other areas that need to be explored such as e-government and impact measurement

Thank you

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