Second Meeting of the UN Committee of Experts on Business and Trade Statistics
New York, 11-13 June 2019

ITU’s work on ICT household statistics

ICT Data and Statistics Division
Telecommunication Development Bureau
International Telecommunication Union
History of ITU statistics

1871 Telephone statistics
1885 Radiocom statistics
1908 Telephone statistics
1956 Telex statistics
1968 Measuring the Information Society Report
1974 WTI database
1997 Yearbook of Statistics
2007 Today

All statistics combined into one publication
Dissemination of ICT data
Data analysis and research reports

Measuring the Information Society Report
Volume 1
2018
ITU statistics: data collection

Supply-side data

Telecom operators
(annual questionnaires)
Source: Regulators/Ministries

ICT Price Basket
(annual questionnaires)
Source: Regulators/Ministries

Demand-side data

ICT surveys
(annual questionnaires)
Source: National Statistical Offices
ITU Manual (2014, under revision)

- Chapter 1. Introduction
- Chapter 2. **Coordination** among national stakeholders in ICT measurement
- Chapter 3. **Planning and preparation** for ICT household surveys
- Chapter 4. **Statistical standards** and measurement topics for ICT household statistics
- Chapter 5. **Data sources** and **collection techniques** for ICT household statistics
- Chapter 6. Question and **questionnaire** design for ICT household surveys
- Chapter 7. **Designing** ICT household surveys
- Chapter 8. **Data processing** for ICT household statistics
- Chapter 9. **Data quality and evaluation** for ICT household statistics
- Chapter 10. **Dissemination** of ICT household data and metadata
Core household indicators, main concepts

- The indicators consist of those:
  - Referring to household access to ICT equipment and services
  - Referring to individuals’ use/ownership of ICT equipment and services
# Core ICT HH indicators (2016 rev.)

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>HH1</td>
<td>Proportion of households with a radio</td>
</tr>
<tr>
<td>HH2</td>
<td>Proportion of households with a television</td>
</tr>
<tr>
<td>HH3</td>
<td>Proportion of households with telephone</td>
</tr>
<tr>
<td>HH4</td>
<td>Proportion of households with a computer</td>
</tr>
<tr>
<td>HH5</td>
<td>Proportion of individuals using a computer</td>
</tr>
<tr>
<td>HH6</td>
<td>Proportion of households with Internet</td>
</tr>
<tr>
<td>HH7</td>
<td>Proportion of individuals using the Internet</td>
</tr>
<tr>
<td>HH8</td>
<td>Proportion of individuals using the Internet, by location</td>
</tr>
<tr>
<td>HH9</td>
<td>Proportion of individuals using the Internet, by type of activity</td>
</tr>
<tr>
<td>HH10</td>
<td>Proportion of individuals using a mobile cellular telephone</td>
</tr>
<tr>
<td>HH11</td>
<td>Proportion of households with Internet, by type of service</td>
</tr>
<tr>
<td>HH12</td>
<td>Proportion of individuals using the Internet, by frequency</td>
</tr>
<tr>
<td>HH13</td>
<td>Proportion of households with multichannel television, by type</td>
</tr>
<tr>
<td>HH14</td>
<td>Barriers to household Internet access</td>
</tr>
<tr>
<td>HH15</td>
<td>Individuals with ICT skills, by type of skills</td>
</tr>
<tr>
<td>HH16</td>
<td>Household expenditure on ICT</td>
</tr>
<tr>
<td>HH17</td>
<td>Proportion of individuals using the Internet, by type of portable device and network used to access the Internet</td>
</tr>
<tr>
<td>HH18</td>
<td>Proportion of individuals who own a mobile phone</td>
</tr>
<tr>
<td>HH19</td>
<td>Proportion of individuals not using the Internet, by type of reason</td>
</tr>
</tbody>
</table>
SDG ICT indicators

• Target 4.1: Proportion of schools with access to the Internet for pedagogical purposes (UIS)
• Target 4.1: Proportion of schools with access to computers for pedagogical purposes (UIS)
• Target 4.4: Proportion of individuals with ICT skills, by type of skills (ITU)
• Target 5b: Proportion of individuals who own a mobile telephone, by sex (ITU)
• Target 9c: Percentage of the population covered by a mobile network, broken down by technology (ITU)
• Target 17.6: Fixed Internet broadband subscriptions, broken down by speed (ITU)
• Target 17.8: Proportion of individuals using the Internet (ITU)
Sustainable Development Goal indicators should be disaggregated, where relevant, by:

- income
- sex
- age
- race
- ethnicity
- disability
- geographic location
- other characteristics, in accordance with the Fundamental Principles of Official Statistics

Leaving no one behind
Disaggregating the data by socio-demographics: why and how

- Important to policy-makers
- Disaggregation shows socio-economic problems that create barriers to use of ICT by individuals. These problems are diverse and broadly cover lack of opportunity and lack of ability. They include illiteracy and other linguistic limitations, socio-cultural barriers, lack of ICT and other skills, lack of confidence or awareness and low income.
- Gives more information i.e. who is using the ICTs i.e. male/ female, age, location (urban/ rural) etc
Main individual characteristics

Sex:
▪ Sex disaggregation of data is a fundamental requirement for gender statistics and in particular for the analysis of the gender gap in the use of ICT. A MUST HAVE FOR ALL CORE INDICATORS

Age:
▪ Age is a strong determinant of ICT use so a common age cut-off and categories are important

▪ Recommended ranges: under 5; 5–9; 10–14; 15–24; 25–34; 35–44; 45–54; 55–64; 65–74 and 75 and over
**Education levels:**
For international comparisons, countries required to classify education as International Standards Classification of Education follows:
- primary education or lower (ISCED levels 0, 1),
- lower secondary education (ISCED level 2),
- upper secondary education or post-secondary non-tertiary education (ISCED levels 3, 4),
- tertiary education (ISCED levels 5, 6), and
- post-tertiary education (ISCED levels 7, 8).

**Labour Force:**
Based on the International Labour Organization (ILO) International Classification of Status in Employment (ICSE-93), with additional categories for those who are unemployed or outside the labour force.
- Employee;
- Self-employed (includes the four categories: employers, own-account workers, members of producers' cooperatives, and contributing family workers);
- Workers not classifiable by status (for whom insufficient relevant information is available, and/or who cannot be included in the preceding categories);
- Unemployed; and
- Outside the labour force. i.e student, retired.
Further classification may be given as per occupation.
Main Household Characteristics

- Household composition (*households with children under 15 and households without children under 15*). Household composition is relevant to measuring the digital divide in households with children.

- Household size (number of household members, including those outside any age scope imposed).

- Geographical disaggregation such as urban/ rural. Countries use their own definition for the urban/ rural and include it in the metadata. Countries can disaggregate this to towns, districts, counties to match their local needs.

- Household with electricity can be used especially for the household ICT access indicators.

- Household income
Cross-classification of data

Can produce information that is very useful for analytical purposes as is more detailed

- example: Internet use by young women (data are cross-classified by age and gender).

ITU proposes the following cross-classification:

- household composition by rural/urban
- rural/urban by sex
- age by sex
- educational attainment by sex
- status in the labour force by sex
- occupation by sex
# 2018 ITU Questionnaire Schedule

<table>
<thead>
<tr>
<th>Questionnaire</th>
<th>Launch</th>
<th>Open</th>
<th>Deadline</th>
</tr>
</thead>
<tbody>
<tr>
<td>HH Short</td>
<td>14-Jan-2019</td>
<td>3 months</td>
<td>15-Apr-2019</td>
</tr>
<tr>
<td>WTI Short</td>
<td>14-Jan-2019</td>
<td>3 months</td>
<td>15-Apr-2019</td>
</tr>
<tr>
<td>ICT Prices</td>
<td>15-Mar-2019</td>
<td>2 weeks</td>
<td>30-Mar-2019</td>
</tr>
<tr>
<td>WTI Long</td>
<td>15-Sep-2019</td>
<td>6 weeks</td>
<td>30-Oct-2019</td>
</tr>
</tbody>
</table>
Expert Group on ICT Household Indicators (EGH)

- Launched in May 2012, following a decision by the 9th World Telecommunication/ICT Indicators Meeting (7-9 December 2011, Mauritius)
- Main objectives: revision of the household core ICT indicators and of the ITU Manual for Measuring ICT Access and Use by Households and Individuals
- Open to all ITU members and experts in the field of ICT statistics and data collection
- Works through an online forum
- Meets once a year and reports back to the World Telecommunication/ICT Indicators Symposium (WTIS)
- Register at: http://www.itu.int/net4/ITU-D/forum/expertgrouponenthouseholds/forum
2019 EGH topics

- Further work on ICT skills (subgroup)
- Better measuring Internet users
- Cybersecurity
- Community connectivity indicators
- Developing questionnaire modules for new areas of measurement (e.g. cybersecurity, IoT, e-waste, mobile money/financial inclusion)
- Child online protection, IoT, e-waste, Big data
- Country experiences
- National coordination

7th EGH meeting: 19-20 September 2019, Geneva
Partnership on Measuring ICT for Development

- Global initiative to improve internationally comparable ICT statistics
- Main mechanism for the coordination of ICT statistics internationally (Steering Committee, Task Groups)
- Members: 14 international and regional agencies involved in official ICT statistics
THANK YOU

For more information:
http://www.itu.int/ict
indicators@itu.int