



## Celebrating 10 years of developing ICT statistics



- Eurostat
- International Labour Organization (ILO)
- International Telecommunication Union (ITU)
- Organisation for Economic Co-operation and Development (OECD)
- United Nations Conference on Trade and Development (UNCTAD)
- United Nations Department of Economic and Social Affairs (UN-DESA)
- United Nations Economic and Social Commission for Western Asia (UNESCWA)
- United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP)
- United Nations Economic Commission for Africa (UNECA)
- United Nations Economic Commission for Latin America and the Caribbean (UNECLAC)
- United Nations Educational, Scientific and Cultural Organization's Institute for Statistics (UIS)
- United Nations Environment Programme (UNEP) Secretariat of the Basel Convention (SBC) on the Control of Trans boundary Movements of Hazardous Wastes and their Disposal
- United Nations University Institute for Sustainability and Peace (UNU-ISP)
- World Bank



## I. 10 years of ICT statistics

- The Partnership on Measuring Information and Communication Technology (ICT) for Development was launched in 2004 to improve the availability of internationally comparable ICT statistics.
- One of the main achievements of the Partnership has been the establishment of a core list of ICT indicators and its endorsement by the United Nations Statistical Commission (UNSC).
- The core list currently covers indicators in the following areas: ICT infrastructure and access; access and use of ICT by households and individuals; use of ICT by businesses; the ICT sector; trade in ICT goods; ICT in education; and e-government.
- Its main purpose is to help countries that collect (or are planning to collect) ICT statistics to produce high quality and internationally comparable data. In order to achieve this, the indicators have associated statistical standards and metadata.
- The Partnership and its members have also developed training material, drafted technical notes, and produced a number of methodological documents to help countries acquire the knowledge to produce ICT statistics.
- With donor support, Partners have delivered training courses for producers of official statistics and workshops that bring together stakeholders in the production of ICT statistics, including policy makers and statisticians.
- The Partnership has addressed the issue of national coordination in its technical assistance, and training courses, in its statistical manuals, and in regional and global ICT statistics events. Such coordination is crucial to improve the availability and quality of official ICT statistics, since ICTs are cross-cutting and permeate all sectors of society.<sup>1</sup>
- The Partnership has played a key role in monitoring progress towards the achievements of the World Summit on the Information Society (WSIS) outcomes, goals and targets. Highlights include the following publications:
  - *Monitoring the WSIS Targets: a mid-term review* (2010) marked the midpoint between the 2005 Tunis phase of WSIS and the deadline for achieving the WSIS targets, providing policy makers with a comprehensive assessment of achievements and what remained to be done.

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<sup>1</sup> The issue of national coordination has been addressed in the UNCTAD and ITU training courses and Manuals, the 10th WTIM in 2012, a side event of the ESCAP Statistical Commission meeting in 2012, and the 11<sup>th</sup> WTIS in 2013. ECLAC, as technical secretariat of the Action Plan on the Information Society for Latin America and the Caribbean (eLAC2015) and the ICT working group of the Statistical Conference of the Americas-ECLAC, has supported the creation of an indicators commission within the framework of eLAC2015, involving national statistical offices and ICT ministries of Latin America and the Caribbean, in order to encourage national coordination at the regional and country level.

- *Measuring the WSIS Targets. A Statistical Framework* (2011) became the main reference document for the WSIS+10 quantitative review.
- *Final WSIS Targets Review: Achievements, Challenges and the Way Forward* (2014), which was presented at the WSIS+10 High Level Event in June 2014, provides a comprehensive evaluation of the achievements made towards the WSIS Targets and makes recommendations on a future ICT measurement framework, linked to the post-2015 Development Agenda.

## II. Recent ICT measurement work by the Partnership

### ***Revision of indicators***

- The Partnership core indicators are subject to continuous revision in order to reflect changes in the ICT landscape.
- Most recently, the core ICT household indicators were revised and the list is reflected in the revised ITU *Manual for Measuring ICT Access and Use by Households and Individuals* (January 2014).<sup>2</sup>

### ***Gender and ICT***

- A Task Group on Measuring ICT and Gender aims to build on previous work and improve the availability of internationally comparable indicators on gender and ICT and sex-disaggregated data, especially in developing countries.
- Its 2014 report "Measuring ICT and Gender: An Assessment " looked at existing work and available indicators disaggregated by sex, assesses data availability and identifies main gaps based on an evaluation of needs and demand for such indicators. It also identifies potential new areas where sex-disaggregated data are desirable and suggests revisions of existing indicators.
- The Partnership and its members are developing definitions and other methodological specifications to improve the collection of sex-disaggregated data. They are also conducting further research on sex-disaggregated employment statistics that could lead to related indicators.

### ***E-Waste***

- A Task Group on Measuring e-Waste aims to respond to requests from policy analysts and the industry to measure the significant cross-border movement of electronic equipment for refurbishment, recycling or wastage (e-waste).
- For health and environmental issues, the trans boundary movements and treatment of e-waste must be conducted in a safe and an environmentally sound manner.

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<sup>2</sup> The list was endorsed by the 11th WTIS in 2013, held in Mexico City in December 2013.

Numerous obstacles have been identified, in particular within developing countries and countries with economies in transition, in achieving this goal. These obstacles include a lack of easily accessible national information and statistics on flows, quantities, available technology, legislative and trade requirements.

- The Task Group developed guidelines to support countries in their efforts to collect and disseminate information on e-waste through internationally-approved standards and definitions. The methodology aims to measure the magnitude of a country's e-waste market, trans boundary movement of e-waste and the recycling performance of disposed equipment. To be published in 2015, the guidelines will help policymakers to formulate evidence-based policies, in order to create the necessary management systems and infrastructure to manage e-waste in their countries. This can support the creation of green jobs, the eradication of poverty, closing the digital divide and effectively retrieving valuable materials from e-waste.
- The e-waste indicators will be added to the Partnership's core list of ICT indicators. The methodology is being implemented first in Europe and CIS countries. Additional data gathering will take place among OECD member countries. New regions where the task group can help facilitate improved data gathering via workshops are highly welcome.

### ***E-Government***

- A Task Group on e-Government indicators developed a *Framework for a set of e-government core indicators* and a *Manual for measuring e-government*. The work was carried out in response to the WSIS emphasis on e-government and a UNSC recommendation that the *Partnership* should extend its core list of ICT indicators to include indicators on ICT use in government.

### ***Trade in ICT Services and in ICT-enabled services***

- A Task Group on ICT services and ICT-enabled services aims to evaluate data gaps in measuring international trade in ICT services and in ICT-enabled services, paying particular attention to developing countries and linking to the information needs of policy makers. It builds on existing definitions and data collection exercises.
- A report to be published in 2015 will assess the feasibility of developing statistical indicators to measure international trade in these services, developing a methodological framework and the related indicators that could be agreed upon internationally.

### ***ICT in Education***

- UIS has conducted five regional data collections following capacity-building workshops in Latin America and the Caribbean (2010), Arab States (2011), Asia

(2012), Francophone Africa (2013), and Anglophone sub-Saharan Africa (2014). Analytical reports have been produced and published based on data collections conducted in the regions.

- UIS is organising a Technical Advisory Panel meeting in December 2014 that brings together ICT in education thematic and statistical experts to discuss the evolving policy needs of developed and developing countries to inform the survey redesign and identify a new list of core indicators.

### ***National coordination of ICT statistics***

- In March 2014, the Partnership reported on ICT statistics to the United Nations Statistical Commission, paying particular attention to the issue of enhancing the production of ICT statistics and national coordination.<sup>3</sup>
- Based on its experience of the past 10 years and feedback from countries, the Partnership recommended to strengthen national coordination involving all relevant actors in ICT statistics. In particular, national statistical offices should take an active role in coordinating the collection and dissemination of ICT statistics.
- ICT statistics need to be incorporated in statistical work programmes also in developing country regions.

### ***Monitoring international development goals***

- The topic of ICT development and the collection of related statistical indicators is also part of the discussions on future international development goals post 2015. ICTs have become critical economic infrastructure, and ICT-related services and solutions contribute to the achievement of social and sustainable development goals, having a direct impact on quality of life of the poor and an indirect impact on poverty alleviation.

## **III. What's next in Measuring ICT for Development?**

- ICTs are key development enablers, accelerating the achievement of development goals across sectors. Therefore, they feature in the debate on emerging data issues in the post 2015 development agenda. The year 2015 is also the target date for the targets set by the WSIS and by the Broadband Commission for Digital Development.
- The Partnership will continue to contribute to monitoring and measurement of ICT developments to guide policies to ensure equal access, use and impact of ICTs, to support international development and information society goals.

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<sup>3</sup> The Partnership has brought ICT statistics to the UNSC agenda also in 2005, 2007, 2009, 2010 and 2012.

- Data will be required to identify different aspects of the digital divide and those who are left out of the information society. This will require a continuous and improved effort by the national and international statistical community to increase the availability of ICT statistics, in particular in developing countries.
- The Partnership will continue to revise ICT indicators to keep up with changing technologies, services and devices, and to develop new indicators in areas such as broadband infrastructure and usage, Internet of Things, ICT and gender equality, trade in ICT services and in ICT-enabled services, e-waste, e-skills, ICT-related occupations and e-health, and ICT in education. Development of new indicators includes methodological work on internationally comparable standards and definitions.
- Other data gaps that have been identified and could be addressed by future ICT statistics include impact, in particular economic contribution of ICT and mobile money, foreign direct investment in the ICT sector, as well as expenditure by Government and in public procurement.
- Donor support for capacity building to speed up the production of core indicators is essential for many developing countries.
- Efforts to strengthen the national coordination of ICT statistics must continue. Stakeholders include NSOs, telecommunication regulatory authorities, and Ministries responsible for ICT policies. The Partnership and its members can facilitate discussions at the national level and provide a forum for sharing experiences among countries.
- The statistical community needs to pay attention to new sources of data. The ICT sector in itself represents a new source of data, provided by, for example, Internet and telecommunication companies. Also, the spread and use of ICTs allow public and private entities across all economic sectors to produce, store, and analyze huge amounts of data, such as those considered as big data.

