



## 10th World Telecommunication/ICT Indicators Meeting (Bangkok, 2012)

### Papers

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**10<sup>th</sup> World Telecommunication/ICT  
Indicators Meeting (WTIM-12)**  
Bangkok, Thailand, 25-27 September 2012



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***Contribution to WTIM-12 session***

**Document C/3-E  
20 September 2012  
English**

**SOURCE:** National Statistical Coordination Board (NSCB), Philippines

**TITLE:** Coordination and Production of ICT Statistics: Philippine Experience

# Coordination and Production of ICT Statistics: Philippine Experience

By Lina V. Castro<sup>1</sup>

## I. Background:

The Philippine Statistical System (PSS) is a decentralized statistical system composed of many data producing agencies with the National Statistical Coordination Board (NSCB) mandated as the over-all coordinator. Recognizing that statistical information is a strategic resource in the formulation of appropriate policies, plans and programs towards national development, the NSCB has put in place many coordination mechanisms and promoted good practices in the production, dissemination/communication and utilization of statistics produced by the PSS.<sup>2</sup>

## II. Statistical coordination mechanisms in the PSS relevant to the enhancement and improvement of the production and dissemination of ICT statistics

### 1. Philippine Statistical Development Plan (PSDP)

The Philippine Statistical Development Plan (PSDP) is a mechanism for setting the directions, thrusts and priorities of the PSS for the medium term. It defines the priority statistical programs and activities in the medium term designed to provide vital information support for the Philippine Development Plan (PDP) as well as promote efficiency of statistical operations through an optimum use of available resources and adoption of cost effective measures. Also, it is a tool for integrating and coordinating the statistical activities of the government and enjoins compliance and cooperation among various agencies. In the PSDP 2011-2017, the following statistical programs, designed to address the issues and challenges in the **Information Society (IS)** sector shall be undertaken:

1. To deliver more timely, accessible, coherent, comparable, comprehensive and relevant IS statistics;
2. To increase user understanding, capacity, and rational use of statistics;
3. To enhance statistical capacities of data producers and providers;
4. To improve coherence, effectiveness, and efficiency of the statistical system; and
5. To increase and sustain resources for statistics.

Specifically, the following are some of the major statistical programs on **IS** identified in the PSDP 2011-2017:

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<sup>2</sup> "Bridging the Gap between Data Users and Data Producers: Perspectives from the Philippines", by R.A. Virola and L.V. Castro, paper presented at the PARIS21 Consortium, November 2009, Dakar, Senegal

1. Institutionalization of the regular conduct of household-based ICT surveys and surveys of ICT usage in government, including local government units;
2. Enhancement of administrative reporting systems for the generation of IS statistics/ indicators;
3. Strengthening of institutional coordination within the PSS and between PSS and the Dep't of Budget and Management, legislative bodies, and development partners to ensure funding of the continuous improvement and production of critical statistics on ICT;
4. Development and compilation of the Satellite Accounts of the Information Economy to provide statistical information on the contribution and role of ICT in the country's economic structure and development; and
5. Assessment and improvement of IS statistics towards inclusion in the System of Designated Statistics.

## 2. Formulation of Statistical Policies

The NSCB Executive Board issues policy measures in the form of resolutions and memorandum orders designed to: 1) introduce new statistical frameworks and activities; 2) enhance existing methodologies; and 3) improve the quality and accessibility of government-produced statistics.

The following Resolutions and Memorandum Orders relating to ICT statistics were issued by the Board:

- NSCB Memorandum Order No. 05 series of 2006 - **Creation of an Interagency Committee on ICT Statistics**
- NSCB Memorandum Order No. 02 series of 2008 - **Reconstituting the Interagency Committee on ICT Statistics**
- NSCB Resolution No. 2 series of 2008 - **Approving and Adopting the Concepts and Definitions for Statistical Purposes for the ICT Sector** – Batch 1, defining the following: E-Commerce, Business Process Outsourcing, Value Added Service Provider, Internet Service Provider, Broadband Internet Subscriber, Web Presence, Public Internet Access Centers, and Telephone Density
- NSCB Resolution No. 21 series of 2009 - **Approving and Adopting the Concepts and Definitions for Statistical Purposes for the ICT Sector** – Batch 2, defining the following: Student-to-computer ratio, Proportion of ICT-qualified teachers in primary and secondary schools, Mobile cellular telephone subscribers, Proportion of population covered by mobile cellular network, Proportion of municipalities/cities covered by mobile cellular network, Mobile commerce (m-Commerce), E-government, and Open source software
- NSCB Resolution No. 06 series of 2011 - **Approving and Adopting the Scope and Coverage of the Philippine Information Economy**

- NSCB Resolution No. 16 series of 2011 - **Approving and Adopting the General Policy on the Dissemination of Statistics on the Internet**

### **3. Interagency Committee on ICT Statistics (IAC on ICTS) created in November 2006**

As mandated, the NSCB provides a forum for coordination, through inter-agency committees, technical committees and technical working groups or task forces, to develop new statistical activities, draft policies and resolve policy and technical issues on subject matter areas. Membership of these committees, include both users and producers of statistics, with private sector representation or NGOs. The IAC on ICTS was created primarily with the following functions:

- To serve as a forum for the discussion and resolution of issues relating to ICT statistics;
  - To review the concepts, techniques, and methodologies used in the collection, processing and reporting of ICT statistics to ensure conformity with prescribed statistical standards;
  - To provide inputs to the NSCB Technical Committee on Statistical Standards and Classification (TCSSC) in the development of standard concepts and definitions on ICT statistics and ICT classification systems;
  - To provide assistance and guidance in the regular generation of the estimates of the value of e-Commerce transactions, ICT satellite account and other ICT statistics;
  - To recommend policies geared towards improved generation, dissemination and utilization of ICT statistics including the data gaps identified by the Task Force on the Measurement of e-Commerce;
  - To provide direction and support in the development of an estimation methodology in the valuation of e-Commerce and the compilation of satellite accounts on ICT as well as recommend mechanisms for their institutionalization;
  - To monitor the over-all development of ICT statistics in the country; and
  - To present the results of and recommendations on the initial estimates of the contribution of e-Commerce, the generation of the ICT as a satellite accounts of the Philippine System of National Accounts (PSNA) to the NSCB Executive Board
- The IAC on ICTS is chaired by the Commissioner of the Information and Communications Technology Office and composed of Senior Officials from the following agencies:

Vice Chairpersons: Department of Trade and Industry; and  
National Statistical Coordination Board

Members: National Economic and Development Authority;  
Department of Budget and Management;  
Department of Science and Technology;  
Bangko Sentral ng Pilipinas;  
National Statistics Office;  
National Telecommunications Commission;  
National Computer Center;  
Trade Union Congress of the Philippines;  
Business Processing Association of the Philippines,  
IT Foundation of the Philippines

- The major accomplishments of the IAC-ICTS (2007 to present) include the following:
  - Reviewed the scope and coverage of the Information Economy;
  - Provided inputs in the formulation of the Information Society chapter in the PSDP 2011-2017;
  - Discussed/Identified 16 ICT concepts and definitions;
  - Recommended the following indicators for inclusion in the questionnaire of the 2010 Census of Population and Housing:
    1. Number of household members with mobile phones by type of subscription (pre-paid, post-paid) by sex, age ;
    2. Number of households with PCs: urban-rural;
    3. Number of household members who used a PC in the last 12 months: by sex, age;
    4. Household member frequency of use of PC by sex, age;
    5. Number of household members using/accessing the Internet by type of access: dial-up, DSL, cable;
    6. Household member frequency of access to the internet by sex, age;
    7. Proportion of household members using the internet by type of activity (e-mail, research, e-banking, purchase/order, ads/promo, and the like): by sex, age.

#### **4. System of Designated Statistics (SDS)**

The system of designated statistics (SDS) is a mechanism that identifies and generates the most critical and essential statistics required for social and economic planning/analysis based on approved criteria. It establishes priorities for data production and hence provides a means for more rational resource allocation among government statistical activities. It also identifies the sources of official statistics. The system defines the agency responsible, frequency of data production and schedule of data dissemination. It also indicates the major

data items to be collected and the geographic level of disaggregation, among others.

The IAC on ICTS have had initial discussions on the possible inclusion of ICT statistics in the System of Designated Statistics. By the first quarter of 2013, the IAC on ICTS will submit its endorsement for approval of the NSCB Executive Board on the inclusion of ICT statistics in the System. The proposed ICT statistics/statistical activities to be designated are as follows:

<b>Agency Responsible</b>	<b>Title of ICT Statistics/Statistical Activity</b>
National Statistics Office	1. Annual Survey of Information and Communications Technology
National Telecommunication Commission	2. Generation of ICT statistics on infrastructure 2.1. Fixed telephone lines per 100 inhabitants 2.2. Mobile cellular telephone subscribers per 100 inhabitants 2.3. Fixed Internet subscribers per 100 inhabitants 2.4. Fixed broadband Internet subscribers per 100 inhabitants 2.5. Mobile broadband subscribers per 100 inhabitants 2.6. International Internet bandwidth per inhabitant (bits/second/ inhabitant) 2.7. Percentage of population covered by a mobile cellular telephone network

At present, the following designated statistical activities generate ICT statistics:

<b>Agency Responsible</b>	<b>Statistical Activity</b>	<b>ICT statistics generated</b>
National Statistics Office	Survey on Information and Communication Technology	Most of the data items recommended in the Manual for the Production of Statistics on the Information Economy, 2009
	Census of Population and Housing	Previous censuses: household ownership of ICT devices; ICT-related occupation and educational

Agency Responsible	Statistical Activity	ICT statistics generated
		status of household members  2010 census: household ownership of ICT devices (radio, TV, PC, landline telephone, cellular phones), presence of a landline telephone system or calling station and cellular phone signal in a locality
	Family Income and Expenditures Survey	family expenditures on telephone bills (fixed and mobile), internet subscription; family ownership of radio, TV, fixed and mobile telephone, and microcomputer
	Census/Survey on Philippine Business and Industry	employment, compensation, man-hours, revenue, subsidies, cost, fixed assets, inventories, capacity utilization for ICT industries
	Labor Force Survey	labor and employment data for ICT industries
	Functional Literacy, Education and Mass Media Survey	population with access to the Internet as a means for acquiring knowledge and information, frequency of population in using the Internet
	Administrative/Regulatory-based data	exports, imports of electronic commodities

## 5. Statistical Survey Review and Clearance System (SSRCS)

The SSRCS was formulated to ensure conformity with standard definitions, concepts and classifications, and consequently, the reliability, comparability and accuracy of statistics generated out of said surveys and/or censuses. Its specific objectives are:

- to ensure sound design for data collection;
- to minimize the burden placed upon respondents;
- to effect economy in statistical data collection;
- to eliminate unnecessary duplication of statistical data collection; and
- to achieve better coordination of government statistical activities.



The following surveys on ICT have been reviewed and granted clearance for conduct through the SSRCS:

<b>Agency Responsible</b>	<b>Statistical Activity</b>	<b>Years Covered</b>	<b>Remarks</b>
National Statistics Office and the Bangko Sentral ng Pilipinas	Survey of IT-BPO Services	2005, 2006, 2007, 2008, 2009, 2010	Provides information on the economic contribution of IT and IT-Enabled services
National Statistics Office	Survey on ICT for Business and Industries	2006, 2008, 2009, 2010	Aims to gather and generate information on the availability, distribution and access/utilization of ICT among industries and businesses in the Philippines, which are integral in developing plans and programs on ICT
National Computer Center	National Government ICT Resources Survey	2004	Aims to provide indicators on the state of computerization of national government agencies

## **6. Standards and Classification Systems**

The NSCB prescribes uniform standards and classification systems in government statistics to ensure harmonization and comparability of official statistics across national and international boundaries.

For the ICT Sector: 1) there are 16 official concepts and definitions for statistical purposes which were defined and approved (NSCB Resolution Nos. 2, s. 2008 and 21, s. 2009); and 2) the Scope and Coverage of the Philippine Information Economy. Likewise, the NSCB developed and prescribed for adoption the following: a) 2009 Philippine Standard Industrial Classification (PSIC) based on ISIC Rev. 4, and b) Philippine Central Product Classification (PCPC).

## **7. Advocacy Programs**

To instill awareness, appreciation and understanding of statistics among the general public, the following advocacy programs are conducted by the NSCB:

- **National Statistics Month (NSM), (every October)**

In October 2012 NSM - Launching of the Philippine ICT Statistics Portal

- **National Convention on Statistics (NCS), (every three years)**

In the 2004 NCS 2004, two papers were presented under ICT Sessions

1. Empowering the People Thru Information: The Philippines' First Provincial Statistics Information Center in Guimaras
2. Web-Enabled Database As Tools for Disseminating Statistics

In the 2007 NCS, three papers were presented under the session on ICT Applications

1. Test Checker and Item Analyzer with Statistics
2. Sub-national Determinants of the Digital Divide: The Case of the Philippines
3. Multi-Scale and Multi-Temporal Poverty Mapping in the Manila Observatory

In the 2010 NCS, three papers were presented under the session on Developments in ICT

1. The Role of Documentation in a Culture of Excellence in Philippine Statistics
2. National Statistics on ICT, Shipping Industry and the Maritime Profession: Its Applications in Business and Industry and Philippine Society
3. Lessons Learned in the Use of DevInfo in the Philippines

- **Dissemination Fora**

Dissemination fora are conducted by the National Statistics Office during the release of the Annual Survey of ICT

- **Seminars, Conferences, Lectures**

In 2010, the Workshop on ICT Stocktaking, in partnership with the ITU was conducted by the then Commission on ICT, now ICTO.

- **Partnership with foreign/international organizations (UNSD, ITU)**

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***Contribution to WTIM-12 session***

**Document C/4-E  
20 September 2012  
English**

**SOURCE:** Presidency of the Council of Ministers, Lebanon

**TITLE:** Briefing about Lebanon's ICT Indicators (Draft Note)

## Briefing about Lebanon's ICT Indicators

### **Executive summary**

Based on the Resolution No. 72/2005 dated 1/10/2005 issued by the President of the Council of Ministers, the Ministerial Committee for Information and Communication Technology was established. In 2010, an ICT unit at the Presidency of the Council of Ministers (PCM) was formed with aim to coordinate the implementation of the national ICT strategy. As part of this broad mandate, the National ICT coordinator took an individual initiative to liaise between the various ministries to collect Lebanon Core ICT Indicators for the year 2011.

The ICT unit developed the framework for ICT indicators with the Central Administration for Statistics (CAS). The framework consists of the minimum set of statistics that Lebanon has to keep in order to measure the digital economy. The framework is based on the recommendations of the "Partnership for Measuring ICT indicators for Development". The goal of the framework is to measure the policy effect of the e-strategy on the ICT sector and the economy at large. Per such few indicators were added to the minimum set recommended by the "Partnership for measuring ICT indicators for Development". The additional ICT indicators address ICT investments throughout the economy, the size of the ICT sector, e-government, and R&D.

Once the framework has been established, and the methodology of the "Partnership on Measuring ICT indicators" was adopted and the ICT unit started working in parallel with the public institutions on the one hand, and a statistics company on the other hand to perform the household and the business surveys. The reason behind commissioning the statistics company to conduct these surveys is due to CAS's inability to deliver the household and business indicators in due time.

The ICT unit collected the ICT indicators from: the Telecommunication Regulatory Authority (TRA), the Office of the Minister of State for Administrative Reform (OMSAR), the National Council for Scientific Research, and the Center for Educational Research and Development.

The ICT unit's ultimate goal is to have a single administration that collects these indicators based on international standards and methodologies, and the most suited administration for doing so periodically is CAS. Given the proper recruitment for additional specialized and budget, CAS would be able to collect these indicators on yearly basis.

### **Introduction and Methodology**

In April 2011, the National ICT Strategy Coordination Unit at the Presidency of the Council of Ministers (PCM) developed, along with the Central Administration for Statistics (CAS), the framework of ICT indicators. The framework was approved by the various Lebanese private and public stakeholders at a workshop held at the PCM on April 14, 2011.

Dr. Huub Meijers, an expert on the digital economy from Maastricht University visited Lebanon and met with the various Lebanese stakeholders to validate the framework and assess the availability of data needed for the indicators. Once the framework was approved, and in order to quickly populate the first set of ICT indicators and draw from it lessons learned, the PCM commissioned a private company to conduct two surveys in order to populate the ICT indicators on household and business use. Concurrently, the Centre for Educational Research and Development was commissioned to conduct a survey on the use of both public and private schools. Finally various Lebanese institutions were asked to provide administrative data. These include the Ministry of Finance, National Accounts, Ministry of Education and Higher Education (Center for Educational Research and Development), Telecommunication Regulatory Authority, Office of the Minister of State for Administrative Reforms, and National Council for Scientific Research.

The framework contains the minimum number of indicators needed to measure the Lebanese digital economy and to measure the policy effect of the strategy on the ICT sector and the economy at large. It is recommended that the ICT indicators be populated once a year, and that the results are disseminated to stakeholders and to International Organizations.

The National ICT Strategy Coordination Unit has commissioned Infopro (Statistics Company) to conduct two surveys in order to populate the ICT indicators for the households and individual use, and the ICT indicators for the business sector. The surveys were launched in July 2011 according to the methodology of the: “Partnership on Measuring ICT for Development”. In particular for the household questionnaire, Infopro used the International Telecommunication Union (ITU) Manual, and for the business survey the United Nations Conference on Trade and Development (UNCTAD) Manual.

The National ICT Strategy Coordination Office has also commissioned the Center for Education and Research Development (CERD) to conduct one survey to populate the ICT indicators for the education sector.

Quality reports are available at: [www.ict.pcm.gov.lb](http://www.ict.pcm.gov.lb)

The final product was released to the public in May 2012.

### **Recommendations**

The result of the experience of the working group during 9 months was a series of recommendations for measuring the Lebanese digital economy going forward.

- 1- Restructure the National Accounts. The current structure of the National Account doesn't give visibility over key promising sectors such as ICT, media, advertising, and other digital economy sectors and industries. The first recommendation is to review the structure of the National Accounts to give visibility on the ICT sector.

- 2- Use the ISIC classification in the National Accounts and in the Ministry of Finance (MoF). This classification should be promoted and used by all concerned stakeholders both in the private and public sectors.
- 3- Appoint the CAS as the organization in charge of coordinating all actions and creating a comprehensive publication on the Digital Economy in Lebanon.
- 4- Measure ICT indicators in both public and private institutions. For example the indicator for the penetration of computers in schools should include both private and public schools. Surveys needed should be designed accordingly.
- 5- Use international standards and methodologies when identifying sets and collecting data in order to compare and contrast Lebanon's results with other countries. Specifically, the recommendation is to use the "Partnership on Measuring ICT for Development" standards and set of indicators. For questionnaires, the methodology, and the quality checking and reporting, the recommendation is to use UNCTAD.
- 6- Insure that all information is disseminated on a yearly basis to all relevant (international) bodies (ITU, World Bank, World Economic Forum, WITSA, UN, Conference Board, GGDC, The Economist Intelligence Unit, ESCWA, etc.).
- 7- Establish a high quality on-line, real-time, National Business Register.

### **Lessons Learned**

From our experience, the lessons learned about the optimal model to gather statistics is the incorporation of the task of measuring the digital economy within the mandate of the National Statistical Office. In some cases, special laws need to be passed to allow the National Statistical Office to have access to data on ICT spending and investing. The National Statistical Office is free to outsource the needed surveys and market studies or perform them internally. In any case a national coordinator is needed because ICT indicators are spread across several ministries, institutions, and regulatory authorities.

The ITU should provide training session for the IT units at ministries and institutions in order to make the staff more familiar with ITU methodologies and show them best practices from all over the world. Technical assistance should be provided on a country per-need basis.

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***Contribution to WTIM-12 session***

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**English**

**SOURCE:** Ministry of Industry, Energy and Tourism / Observatory for Telecommunications and the Information Society, Spain

**TITLE:** The current situation in Spain on gathering information on the Information Society and the ICT sector

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## Debate on the national coordination of ICT statistics

(10th World Telecommunication/ICT Indicators Meeting (WTIM)  
(25-27 September 2012, Bangkok, Thailand)

### The current situation in Spain on gathering information on the Information Society and the ICT sector

There is a whole statistical field relating to the Information Society (IS) and dealing with the development of ICT and the impact of its use on the economy and society. More specifically, statistics on the Information Society include subjects relating to the production, preparation for use and impact of ICT and services providing audiovisual content.

IS statistics are linked to:

- The Knowledge Society, as the Information Society influences and is in turn influenced by innovation, research and development (R&D) and learning.
- The National Accounts, for measuring the overall impact of the Information Society on the economy.
- Statistics on companies, in relation to measuring the impact that ICT use has on business activities.
- Social statistics, with regard to measuring household IT equipment levels and the degree to which ICT is used and harnessed in homes.

In accordance with international recommendations, information on ICT and the IS in Spain is gathered by different organisations, using different methods.

Regarding the use of ICT in households and in enterprises, information is gathered through surveys of a selected sample of homes and businesses. This is the mechanism used by the Spanish National Institute for Statistics (INE), which carries out its surveys according to Spanish and European regulations. They are carried out according to the annual development programme of the National Statistical Plan and the directives of the European Parliament and Council on EU Information Society statistics.

Information on the degree of penetration of telecommunications infrastructure and the status of the ICT market is compiled from administrative records or by requesting information from enterprises operating in the ICT sector.

In the case of telecommunications, companies operating in this sector are obliged to provide data on their finances, the rollout of infrastructure, subscribers and other market-related information to telecommunications regulators. Gathering such information falls within the functions of both the State Secretariat for Telecommunications and the Information Society (SETSI) of the Ministry of Industry, Energy and Tourism and the Telecommunications Market Commission (CMT).

In the case of enterprises in the IT and Content sectors, the SETSI (State Secretariat for Telecommunications and the Information Society) gathers the financial and market information that such companies are obliged to provide by means of the Spanish Observatory for Telecommunications and the Information Society (ONTSI).

The role of the ONTSI, besides preparing its own studies and reports on ICT and the IS, is to gather all the information produced in Spain and make it available to society in a centralised, ordered form, giving an overview of the state of development of the Information Society, the ICT sector and the content sector.

The role of each of these institutions in measuring ICT and IS in Spain is described below.

#### INE

The National Institute of Statistics (<http://www.ine.es/>) is an independent administrative body with legal status and its own assets, which is attached to the Ministry of the Economy and Competitiveness. Under Spanish law, this entity has a leading role in public statistics-gathering, and it is directly responsible for carrying out large-scale statistical operations.

The most notable of these relate to new Information and Communications Technologies, with these surveys forming part of the 2009-2012 Spanish National Statistics Plan. The INE collaborates intensely in the OECD and Eurostat working groups, maintaining a unified and standardised methodology.

As part of this collaboration, the INE publishes, among its other surveys, three fundamental statistical surveys on the ICT and IS sectors:



- Survey on the use of ICT and eCommerce by enterprises
- Survey on the use of ICT by households and individuals
- ICT sector indicators

### **CMT**

The Telecommunications Market Commission (<http://www.cmt.es/>), an independent public entity regulating the Spanish electronic communications and audiovisual services markets, was created by Royal Decree-Law 6/1996, of 7 June, on the deregulation of telecommunications.

The purpose of the CMT is to establish and monitor the specific obligations to be met by operators in the telecommunications markets, encourage compliance with fair competition regulations in the audiovisual services markets, resolve conflicts between operators and, where necessary, act as an arbitrator in any disputes.

More specifically, Article 20 of Law 2/2011, of 4 March, on Sustainable Economy, on Publication of the Actions of Regulating Bodies, establishes the obligation on the part of the CMT to publish an annual report on the markets, which from 2012 will be called the "sector economic report".

Other reports drawn up by the CMT relate to the monitoring of broadband prices in Spain and Europe, and electronic commerce using credit and debit cards in Spain.

### **SETSI**

The responsibilities of the State Secretariat for Telecommunications and the Information Society (SETSI) (<http://www.minetur.gob.es/telecomunicaciones/es-ES/Paginas/index.aspx>) include encouraging, studying, proposing and implementing general policies on telecommunications, audiovisual media and development of the Information Society.

To do this, it gathers additional information on telecommunications operators, broadband and mobile telephony coverage and the telecommunications sector to complement that provided by operators to the CMT.

### **ONTSI**

The ONTSI (<http://www.ontsi.red.es/ontsi/>) is a body attached to the public corporate entity Red.es that reports to the Ministry of Industry, Energy and Tourism (MINETUR). Its mission is to encourage the development of the Information Society in Spain and implement projects in line with the strategic priorities of the State Secretariat for Telecommunications and the Information Society (SETSI). It prepares, gathers, processes and organises indicators and prepares studies and provides information and news updates on the Information Society. It is currently the leading public Observatory of the Information Society in Spain.

It also acts as a meeting place and forum for the ICT sector and the various public authorities for defining and evaluating policies. It is a leading reference centre for all aspects of measuring the IS, and its indicators and studies are used to support policy making, planning and decision making.

It also ensures methodological coordination with other observatories of the Information Society, be they international or regional, public or private.

Over the course of its 10 years in existence, it has drafted a range of studies, reached agreements with the main players in the sector, and has developed large databases of indicators to help assess the evolution of the IS.

The ONTSI has played a decisive role in implementation of the IS, since all the players concerned: public authorities, the corporate sector, professionals, etc. use it as a tool to support them in their decision making and forecasting.

The mission of the ONTSI is defined in RD 164/2002, of 8 February, which establishes its own functions and those that the SETSI may require it to perform.

In this context, the ONTSI performs the following tasks in line with its legally-required indicator functions:

- It gathers, organises and analyses indicators on the IS, publishing this information and making it accessible to the public on the ONTSI website. The ONTSI website has a specific section presenting information on IS and ICT sector indicators, including a selection of the main indicators. The ONTSI website also regularly publishes a series of dossiers containing indicator information.

- It monitors specific key indicators on the various IS development initiatives and plans in Spain (Spanish Digital Agenda) and abroad, especially those introduced by the EU (Digital Agenda for Europe).
- It draws up studies and reports, and generally advises the State Administration on matters relating to telecommunications and the Information Society. As part of this the ONTSI provides support to the State Secretariat for Telecommunications and the Information Society (SETSI), the Ministry of Industry, Energy and Tourism (MINETUR) and the General Directorate of red.es, providing them with the latest data on the IS and the ICT sector.
- It monitors the ICT sector.
- It represents Spain in meetings both at home (INE, SETSI, etc.) and internationally (Eurostat, OECD, European Commission, ITU) that relate to ONTSI's work (IS and ICT indicators, plans to promote the IS, etc.).

The SETSI and the ONTSI play very important roles in monitoring enterprises in the ICT and Content sectors, and draw up an annual report on them.

To obtain an overview that is as accurate as possible, both statically and dynamically, of the enterprises that make up the ICT sector in Spain, the SETSI, through the ONTSI, gathers information on these businesses in the sector in Spain. The ONTSI uses this information to draw up its report on the ICT and Content sectors in Spain. This report complements and adds to the data published by the INE on ICT sector indicators. It also contains data published in the CMT annual report on the telecommunications sector.

The legal basis for this report lies in the Fourth Additional Ruling of Law 56/2007, of 28 December, on Measures to Promote the Information Society, which states that the SETSI may request information from individual manufacturers of products and providers of IT, IS and digital content services.

The main objective of the study is to obtain information about the current situation and recent structural and economic evolution of each of the activities within the ITC sector, such as the number and size of the enterprises comprising each branch of activity, accounting data (revenue, purchases, expenses), employment structure and investment. In addition to the ICT sector, it also analyses the content and audiovisual services sector.

As well as these functions, the ONTSI produces specific studies on aspects relevant to the development of ICTs and the Information Society.

These include its annual report "La Sociedad en Red" (The Networked Society), its report on "cloud computing" and studies on B2C electronic commerce, and the understanding and use of social networks in Spain. Finally, it produces quarterly reports on "Las TIC en los hogares españoles" (ICT in Spanish households), based on a panel of surveyed households.

To conclude, it is important to highlight the significance that the Government of Spain places on its goal of establishing suitable systems for gathering information, thereby enabling statistics to be coordinated in Spain and internationally, especially statistics concerning the ICT sector and the Information Society, given the rapid pace of change and evolution in these areas. The ONTSI also plays an important role in the Information Society in Spain, as a body that concentrates and centralises all ICT statistics.

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**Spanish**

**SOURCE:** Ministry of Industry, Energy and Tourism / Observatory for Telecommunications and the Information Society, Spain

**TITLE:** La situación actual en España de recogida de información sobre la Sociedad de la Información y el sector TIC

## **Debate sobre coordinación nacional de Estadísticas TIC**

(10º Reunión de la UIT sobre indicadores de las Telecomunicaciones/TIC mundiales (WTIM)  
(25-27 Septiembre 2012, Bangkok, Tailandia)

### **La situación actual en España de recogida de información sobre la Sociedad de la Información y el sector TIC**

Las estadísticas sobre la Sociedad de la Información (SI) constituyen por sí mismas un campo estadístico que trata sobre el desarrollo y la repercusión del uso de las TIC en la economía y la sociedad. Más concretamente, las estadísticas sobre la Sociedad de la Información abarcan temas relacionados con la producción, la preparación para el uso y el impacto de las TIC, así como los servicios de contenidos audiovisuales.

Las estadísticas sobre la SI mantienen vínculos con:

- La Sociedad del Conocimiento, ya que la Sociedad de la Información influye y, a su vez, se ve influenciada por la innovación, las actividades en investigación y desarrollo (I+D) y el aprendizaje.
- Las Cuentas Nacionales, para la medición del impacto global de la Sociedad de la Información en la economía.
- Las estadísticas de empresas, en lo que se refiere a la medición del impacto del uso de las TIC en la actividad empresarial.
- Las estadísticas sociales, en cuanto a la medición del nivel de equipamiento de los hogares y del grado de utilización y aprovechamiento de las TIC en los mismos.

Conforme las recomendaciones internacionales, en España, la recogida de información sobre las TIC y la SI se lleva a cabo por distintas organizaciones y empleando distintos métodos de recogida de información.

En lo que respecta al uso de las TIC, tanto por hogares como por empresas, la recogida de información se realiza a través de encuestas dirigidas a una muestra seleccionada de hogares y de las empresas. Este mecanismo es el que utiliza el Instituto Nacional de Estadística (INE), que realiza sus encuestas conforme a la normativa nacional y europea. Concretamente, conforme al programa anual de desarrollo del Plan Estadístico Nacional, y al Reglamento del Parlamento Europeo y el Consejo relativo a estadísticas comunitarias de la Sociedad de la Información.

Respecto a la información sobre penetración de las infraestructuras de telecomunicaciones y situación del mercado de las TIC, la recopilación de información se realiza a través de registros administrativos o requerimientos de información a empresas que operan en el sector de las TIC.

En el caso de las telecomunicaciones, las empresas que operan en este sector están obligadas a aportar datos económicos, de despliegue de infraestructuras, abonados y otra información relativa al mercado, a los Organismos Reguladores de las Telecomunicaciones. Tanto la Secretaría de Estado de las Telecomunicaciones y para la Sociedad de la Información (SETSI) del Ministerio de Industria, Energía y Turismo, como la Comisión del Mercado de las Telecomunicaciones (CMT) tienen atribuidas funciones para recabar dicha información.

Respecto a las empresas del sector de las Tecnologías de la Información y el sector de los Contenidos, es la Secretaría de Estado de Telecomunicaciones y para la Sociedad de la Información quien, a través del Observatorio Nacional de las Telecomunicaciones y para la Sociedad de la Información (ONTSI), recopila la información económica y de mercado de dichas empresas, que están obligadas a suministrar.

El papel del ONTSI es la de, además de elaborar sus propios estudios e informes sobre las TIC y la SI, recopilar toda la información que se produce en España para ofrecerla a toda la sociedad de forma centralizada y ordenada, ofreciendo un visión general tanto del desarrollo de la Sociedad de la Información, como del sector TIC y los Contenidos.

A continuación se describe el papel de cada una de estas instituciones en lo que respecta a la medición de las TIC y la SI en España.

#### **INE**

El Instituto Nacional de Estadística (<http://www.ine.es/>) es un organismo autónomo de carácter administrativo, con personalidad jurídica y patrimonio propio, adscrito al Ministerio de Economía y Competitividad. La legislación española otorga a este organismo un papel destacado en la actividad

estadística pública, encomendándole expresamente la realización de las operaciones estadísticas de gran envergadura.

De entre todas destaca las relacionadas con las nuevas tecnologías de la Información y la Comunicación, encuestas que se engloban en el Plan Estadístico Nacional 2009-2012. El Instituto Nacional de Estadística participa y colabora intensamente en los Grupos de trabajo de la OCDE y de EUROSTAT, manteniendo una metodología unificada y homogénea.

Bajo este marco de colaboración el INE publica, entre otras, tres encuestas estadísticas del sector de las TIC y la SI que son fundamentales:

- Encuesta de uso de las TIC y comercio electrónico por las empresas
- Encuesta del uso de las TIC por los hogares e individuos
- Indicadores del sector TIC

### **CMT**

La Comisión del Mercado de las Telecomunicaciones (<http://www.cmt.es/>), Organismo Público regulador independiente de los mercados nacionales de comunicaciones electrónicas y de servicios audiovisuales, fue creada por el Real Decreto-Ley 6/1996, de 7 de junio, de Liberalización de las Telecomunicaciones.

El objeto de la CMT es el establecimiento y la supervisión de las obligaciones específicas que hayan de cumplir los operadores en los mercados de telecomunicaciones y el fomento de la competencia en los mercados de los servicios audiovisuales conforme a lo previsto por su normativa reguladora, la resolución de los conflictos entre los operadores y, en su caso, el ejercicio como órgano arbitral en las controversias entre los mismos.

Más concretamente la Ley 2/2011, de 4 de marzo, de Economía Sostenible, establece en su artículo 20, Publicidad de las actuaciones de los Organismos Reguladores, la obligación de la CMT de publicar anualmente su informe sobre los mercados que a partir de este año 2012 lo renombra como "informe económico sectorial".

Otros informes elaborados por la CMT tienen que ver con el seguimiento de precios de banda ancha en España y Europa, y el comercio electrónico a través de tarjetas de crédito y débito en España.

### **SETSI**

La Secretaría de Estado de Telecomunicaciones y para la Sociedad de la Información (SETSI) (<http://www.minetur.gob.es/telecomunicaciones/es-ES/Paginas/index.aspx>) tiene encomendadas entre otras competencias, las relativas al impulso, estudio, propuesta y ejecución de la política general sobre telecomunicaciones, medios audiovisuales y desarrollo de la sociedad de la información.

Por ello recopila, entre otras, información de los operadores de telecomunicaciones sobre cobertura de banda ancha y cobertura de la telefonía móvil, e información del sector de las Telecomunicaciones complementaria a la proporcionada por los operadores a la CMT.

### **ONTSI**

El ONTSI (<http://www.ontsi.red.es/ontsi/>) es un órgano adscrito a la entidad pública empresarial Red.es, adscrita al Ministerio de Industria, Energía y Turismo (Minetur) encargada de impulsar el desarrollo de la Sociedad de la Información en España y ejecutar proyectos de acuerdo a las prioridades estratégicas de la Secretaría de Estado de Telecomunicaciones y para la Sociedad de la Información (SETSI). Se encarga de elaborar, recoger, sintetizar y sistematizar indicadores, elaborar estudios, y ofrecer servicios informativos y de actualidad sobre Sociedad de la Información, siendo actualmente el Observatorio público sobre la Sociedad de la Información líder en España.

Es, además, punto de encuentro y de diálogo entre el sector de las TIC y las distintas Administraciones Públicas, para la definición de políticas y su posterior evaluación. Es centro de referencia para la métrica de la SI en todos sus aspectos, y sus indicadores y estudios sirven para la fijación de políticas, la planificación y la toma de decisiones.

Igualmente, asegura la coordinación metodológica con el resto de observatorios de Sociedad de la Información tanto de nivel internacional como autonómico, tanto de carácter público como privado.

A lo largo de sus diez años de recorrido ha consolidado una serie de estudios, ha realizado convenios con los principales agentes del sector y posee extensas bases de datos de indicadores de la SI que permiten valorar la evolución histórica.

La contribución del ONTSI a la implantación de la SI es decisiva ya que todos los agentes concernidos: Administraciones Públicas, sector empresarial, profesionales, etc. encuentran en él una herramienta en la que poder apoyarse en su toma de decisiones y previsiones de futuro.

La misión del ONTSI viene definida en el RD 164/2002, de 8 de febrero, que fija dichas funciones como propias, así como el desarrollo de aquellas que la SETSI le encargue en cualquier momento.

El ONTSI en este contexto y conforme la función de indicadores legalmente encomendada realiza las siguientes tareas:

- Recopila, sintetiza y analiza indicadores sobre la SI, permitiendo que esa información sea pública y esté al alcance de la sociedad a través de la página web del ONTSI. La página web del ONTSI dispone de un apartado específico dedicado a presentar información sobre indicadores de la SI y el sector TIC, incluyendo una selección con los principales indicadores. Además de manera regular se publican en la web del ONTSI una serie de dosieres recopilatorios con información sobre indicadores.
- Realiza el seguimiento de indicadores específicos y claves de las diferentes iniciativas y planes de desarrollo de la SI, tanto nacionales (Agenda Digital Española) como internacionales, en especial aquellos impulsados por la Unión Europea (Agenda Digital para Europa)
- Elabora estudios e informes y, en general, asesora a la Administración General del Estado en todo lo relativo a las telecomunicaciones y a la Sociedad de la Información. En este sentido el ONTSI realiza tareas específicas de apoyo a la Secretaría de Estado de Telecomunicaciones y para la Sociedad de la Información (SETSI), al Ministerio de Industria, Energía y Turismo (MINETUR) y a la Dirección General de red.es, poniendo a su disposición los datos más actualizados sobre la SI y el sector TIC.
- Realiza el seguimiento del sector TIC.
- Participa en reuniones nacionales (INE, SETSI, etc.) e internacionales (Eurostat, OCDE, Comisión Europea, ITU) relacionados con la actividad del ONTSI (indicadores de la SI y las TIC, planes de fomento de SI, etc.) como parte de la representación de nuestro país.

La SETSI y el ONTSI tienen un papel muy importante en lo que respecta al seguimiento de las empresas del Sector TIC y los Contenidos, elaborando un informe anual al respecto.

Con el fin de obtener una visión lo más exacta posible, tanto desde un punto de vista estático como dinámico, de las empresas que conforman el sector TIC en España, la SETSI, a través del ONTSI, recaba información de las empresas del sector en España. Con dicha información el ONTSI elabora el informe sobre el sector de las Tecnologías de la Información y la Comunicación, y los Contenidos en España. Este informe complementa y avanza los datos que el INE publica sobre indicadores del Sector TIC. También recoge los que la CMT publica sobre el sector de las telecomunicaciones en su informe anual.

Este informe se sustenta legalmente por la Disposición Adicional Cuarta de la Ley 56/2007, de 28 de diciembre, de Medidas de Impulso de la Sociedad de la Información, establece que la SETSI podrá realizar requerimientos particularizados a los fabricantes de productos y proveedores de servicios referentes a las TI, a la SI, a los contenidos digitales.

El objetivo principal del estudio es conocer la situación y la evolución reciente de las características estructurales y económicas específicas de cada una de las actividades que componen el sector de las TIC, tales como el número y el tamaño de las empresas que componen cada rama de actividad, datos contables (ingresos, compras, gastos) así como la estructura del empleo y la inversión. Además del sector TIC se analiza el sector de los Contenidos y Servicios Audiovisuales.

Además de estas funciones, el ONTSI realiza estudios específicos sobre aspectos relevantes del desarrollo de las TIC y la Sociedad de la Información.

Destaca el informe anual "La Sociedad en Red", el informe de "cloud computing" o los estudios sobre comercio electrónico B2C, y el conocimiento y uso de las Redes Sociales en España. Por último destacar los informes trimestrales sobre "Las TIC en los hogares españoles", informes elaborados a partir de un panel de hogares.

Como conclusión, remarcar la importancia y el objetivo del Gobierno de España de establecer sistemas adecuados de recogida de información, que permitan coordinar tanto nacional como internacionalmente las estadísticas en general y en particular sobre el sector de las TIC y la Sociedad de la información, dado su carácter cambiante y su rápida evolución. Además destacar el papel clave del ONTSI en el mundo de la Sociedad de la Información en España, como órgano de concentración y centralización de todas las estadísticas de las TIC.

**10<sup>th</sup> World Telecommunication/ICT  
Indicators Meeting (WTIM-12)**  
Bangkok, Thailand, 25-27 September 2012



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***Contribution to WTIM-12 session***

**Document C/6-E  
20 September 2012  
English**

**SOURCE:** International Telecommunication Union

**TITLE:** Concept Note on National Coordination of ICT statistics

**10<sup>TH</sup> WORLD TELECOMMUNICATION/ICT INDICATORS MEETING (WTIM)**  
**25-27 September 2012**  
**Bangkok, Thailand**

**High-level panel on national coordination of ICT statistics**  
**Tuesday, 25 September 2012, 10:30-12:30 hours**

**Concept note**

A key element in any successful national ICT strategy is an efficient and effective monitoring system and the collection of pertinent indicators to assess progress and review policies. Given the cross-cutting nature of ICTs, permeating all sectors of the society, statistical data collection and dissemination is often fragmented. At the occasion of the 10<sup>th</sup> WTIM, for the first time, an international high-level panel, comprised of representatives of ICT Ministries, telecommunications regulatory authorities, National Statistical Offices, and international and regional organizations, will discuss the topic of “National Coordination of ICT Statistics”. Coordination among statistical agencies within countries is one of the ten Fundamental Principles of Official Statistics<sup>1</sup>, adopted by the UN Statistical Commission in 1994. The objective of the panel is to address ways and means of establishing a national coordination mechanism to ensure the efficient and timely production of ICT indicators. The outcome of the debate is expected to result in a set of recommendations on future action to enhance national coordination in the field of ICT statistics, to be adopted at the end of the WTIM.

**1. Stakeholders in the production of ICT statistics**

In most countries, ICT statistics are produced from a variety of sources, involving different national institutions and private organizations (see Figure 1):

*National statistical offices*

National statistical offices (NSOs) usually collect, process and publish ICT household data (such as households with computers and people using the Internet) and ICT business data (such as businesses delivering online services and ICT sector value added) and associated metadata. ICT data are collected through stand-alone ICT surveys or incorporated in existing household and establishment surveys (or censuses). NSOs have the capacity to carry out nation-wide, representative surveys given the fact that they have a set of generic technical statistical infrastructure and skills such as sample frames, sample design methods, data collection and estimation procedures, which are fundamental steps of the statistical process. Most NSOs are also supported by legislation designed to protect data and, in many cases, to mandate provision of data, thereby enhancing response rates. NSOs have the necessary technical experience in data collection and generally provide credibility of the official statistics they produce. Their structures and capacities (including human, technological, legal and financial resources) vary but most NSOs aim to follow international methodologies and standards for collecting data.

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<sup>1</sup> <http://unstats.un.org/unsd/methods/statorg/FP-English.htm>



### *National regulatory authorities*

In most countries, the national telecommunication regulatory authority (NRA) is responsible for collecting, compiling and disseminating administrative ICT data (such as operating licenses, telephone and Internet subscriptions) covering the telecommunication services sector. This typically arises out of the authority's mandate to regulate, analyse and monitor the sector. NRAs maintain a register of licenses that can be used to identify sources of telecommunication/ICT indicators (e.g. service providers).

### *Sector ministries*

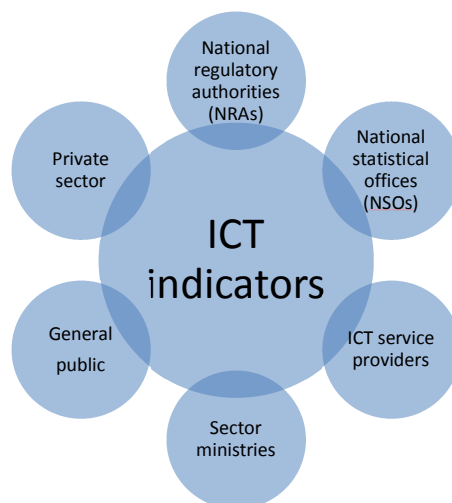
In some countries, ministries responsible for Telecommunications, Science and Technology and related matters collect administrative ICT data from provider companies. Occasionally, where the demand for ICT indicators has been high, they have carried out ad-hoc surveys on the use of ICT by businesses and households, not always in coordination with the NSO. The reason for this is that the ministry has information needs for ICT policy-making which are not satisfied and at the same time, better access to funds (including funds from international donors), skilled human resources in the domain of ICT or even the legal mandate to establish an ICT observatory.

Other line ministries also have an interest in collecting ICT-related indicators, such as the Ministry of Education (statistics on ICT in education and ICT skills), Ministry of Labour (statistics on ICT sector production and employment), Ministry of Health (statistics on ICT in health) etc. So far, data collection in those areas is limited, in particular in developing countries, while at the same time demand for more data is growing.

### *Other stakeholders*

In addition to the official stakeholders mentioned above, private companies, Universities and other research institutions also engage in ICT data collection and often are very successful in publishing their results and receiving media attention. Furthermore, ICT service providers (e.g. telecommunication companies) collect data from their customers and publish them in annual reports, available to anyone interested in using them.

**Figure 1. ICT indicators stakeholders**



## 2. The need for national coordination in the production of ICT statistics

In view of the variety of existing ICT data sources, coordination and cooperation among data producers are fundamental to the production of high-quality official statistics. Otherwise, there is a risk that published data are inaccurate or inconsistent, leading to wrong policy decisions. Other benefits of coordination include reduction of the overall response burden for data providers, avoidance of duplication of effort and optimization of the efficient use of resources. It also helps to identify existing data gaps, to harmonize objectives and priorities between the different stakeholders, and to improve monitoring and evaluation of the ICT statistical production process.

In particular, there should be close collaboration between the sector ministries, the NRA and the NSO, for several reasons. First, the ministries and the NRA are likely to be aware which ICT indicators are important and should be collected. Second, even if the ministries and the NRA collect some data, the NSO's statistical expertise will be very valuable. Third, the NSO may collect ICT household and business data through surveys that can be complemented by – and often combined with – the ICT data from administrative sources.

Among the institutional challenges to produce ICT statistics and indicators, the most relevant is the setting up of coordination mechanisms between relevant institutions. Since survey-based ICT statistics is a rather new field in most developing countries, the initiative to produce ICT data often originates from a demand by policy makers. Traditionally, telecommunication data and statistics have been collected by national telecommunication regulators or ministries, based on administrative sources. Therefore, it is rather new for them to turn to the NSO for the collection of survey data on ICT access and use.

Coordination of statistical activities between NSOs and other agencies in the national statistical system for the production of ICT indicators should include the following:<sup>2</sup>

### Technical coordination

- Establishment and coordinated use of definitions of ICT indicators and relevant classifications. These definitions should be based on international standards, but adapted to country conditions.
- Establishment of population frames for household and business surveys.
- Establishment of procedures for the preparation and dissemination of standardized data and metadata.

### Legal coordination

- Establishment of an adequate institutional framework to represent the institutions that produce information.
- Legal provisions to confer official status of statistics from data collection exercises conducted by institutions that are members of the national statistical system.
- A legal framework to ensure sustainable funding from the national budget (or from donor cooperation, where relevant) for the operation of national statistical systems and for the implementation of programmes of statistical work.

### Coordination in resource allocation

- Development of synergies among the different institutions' financial resources for the implementation of large-scale surveys.

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<sup>2</sup> Based on UNCTAD "Manual for the production of statistics on the information economy", 2009.

- Efficient use of statistical and technical capacities of highly-qualified staff in the national statistical system, and of ICT resources available within different agencies for data collection, processing and dissemination.
- Coordination of financial resources (from external sources and between agencies involved in the project).

### 3. Models of national coordination mechanisms for ICT statistics

National statistical systems have varying degrees of structure and coordination. Most countries have a system structured within a legal framework, which puts in place coordination bodies (for example, inter-ministerial commissions or national statistical councils) where stakeholders are represented. Such inter-institutional structures may also work in thematic groups (for instance, related to particular topics such as ICT). The following highlights a few models that could be applied in the field of ICT statistics, based on existing national coordination mechanisms.

#### *National statistical coordination bodies and NSOs*

In most countries, NSOs take on the role of national statistical coordination. The NSO is the central point of the national statistical system and plays a coordinating role enshrined by law. Some countries have established specific national statistical coordination bodies for this purpose.

The multiplicity of actors involved in national statistical systems, particularly in relation to ICT indicators, necessitates institutional leadership, and, given their area of expertise, NSOs are usually best placed to exercise this. On the other hand, technical expertise on ICT subject matters may be more evident in ICT-related institutions, making close collaboration with sector ministries and NRAs essential.

NSOs sometimes have satellite units in line ministries (agriculture, health, education) responsible for sectoral statistics. In larger countries, regional and/or sub-regional offices may exist to facilitate data collection. However, they do not necessarily accommodate ICT statistics mainly due to the relative novelty of the subject.

A good example of a national statistical coordination body which includes ICT in its work is the National Statistical Coordination Board (NSCB) of the Philippines. Through its Inter Agency Committee on ICT Statistics created in 2006, cooperation among producers, users and other stakeholders of ICT statistics is realized. The inter agency committee serves as a forum for discussion and resolution of issues pertaining to improved generation, dissemination and utilization of ICT statistics in the country.

Another example is the Australian Bureau of Statistics (ABS) which established in early 2004 an ICT reference group involving government, industry, academic and community representatives. The reference group provides members with the opportunity to discuss and consider strategies to address ICT statistical issues. ABS also brings together key stakeholders from across the entire statistical community through the National Statistical Service (NSS) initiative, which aims to provide a unified source of statistical information that can be used to inform debate, policy making and evaluation.

#### *Coordination bodies related to ICT Ministry or presidential office*

Government policymakers responsible for ICT policy are often the most important data users and therefore have a particular interest in receiving timely data on the latest ICT developments in the

country. They would therefore be well placed to take on a coordination role among the various data producers, in particular in countries where other bodies (e.g. the NSO) have not taken on that responsibility. A new coordination body could be established, linked to the ICT Ministry or the presidential office. The latter would have the advantage to also involve other sector ministries (e.g. Education, Economy) that have an interest in producing ICT statistics.

An example of a country that has established a coordination body working closely with the Government is Brazil. Since its inception in 1995, the Brazilian Internet Steering Committee (CGI.br) coordinates projects for the development and operation of the Internet in the country. CGI also promotes the collection, compilation and sharing of information, analyses, indicators and statistics on ICT in Brazil. The CGI membership is composed of the public and private sector and representatives from the scientific and technological community, including the Ministry of Communication, the Ministry of Science and Technology and the National Telecommunication Agency.

In Egypt, the Information Center under the Ministry of ICT takes on the role of coordination of ICT statistical production and dissemination. The ICT indicators project launched in 2005 is a joint effort between the Ministry of Communications and Information Technology (MCIT) and its affiliates such as the Information Technology Industry Development Agency (ITIDA), the National Telecommunication Regulatory Authority (NTRA), and the Central Agency for Public Mobilization and Statistics (CAPMAS).

#### *National information society observatories*

Some countries have established national information society observatories with the objective to centralize all ICT indicators and disseminate them through one national portal. The observatory could be linked to the ICT Ministry or any other Government office. A close cooperation with all data producers mentioned above would be required.

As an example, Spain has established the National Observatory for Telecommunications and the Information Society (ONTSI) in the frame of the Ministry of Industry, Tourism and Trade. It is a body attached to the public corporate entity Red.es, the main objective of which is the monitoring and analysis of the telecommunications sector and the information society.

#### *Inter-agency ICT statistical working groups or committees*

Other (less institutionalized) forms of collaboration among data-producing organizations could take the form of thematic cooperation agreements or inter-institutional working groups with clearly defined responsibilities for establishing technical standards (e.g. for data collection and analysis, fieldwork and the verification and dissemination of findings).

## **4. Issues to be addressed by the high-level panel**

Given the various models for coordination of ICT statistical production, the high-level panel is encouraged to address the following issues:

- What is the role of ICT measurement in national ICT policy making?
- How can ICT statistical production be effectively integrated into national statistical strategies?
- What are some best practice examples of national coordination on statistics in general, and on ICT statistics in particular?

- Recommendations on how to further advance the subject of national coordination on ICT statistics, both at the national and international levels.