TECHNICAL NOTES

Background

The 2013 SICT is the fifth in the series conducted by the National Statistics Office (NSO) now, the Philippine Statistics Authority (PSA). It is as a rider to the 2013 Annual Survey of Philippine Business and Industry (ASPBI) conducted in September 2014.

Objective of the Survey

The 2013 SICT aims to collect and generate information on the availability, distribution and access/utilization of ICT among establishments in the country.

Specifically, the survey aims to measure the following:

- component of ICT resources and their utilization by establishments
- diffusion of ICT into establishments from various sources
- e-commerce transactions from data on e-commerce sales/revenue and purchases
- cellular mobile phone business transactions from data on sales/revenue
- estimate of the number of ICT workers in establishments
- methods of disposal of ICT equipment

Uses of the ICT Data

The results of the survey will be used in:

- assessing the use of ICT resources by establishments and the available infrastructure
- determining how establishments use the internet, including the activities for which it is used
- determining web presence in establishments
- determining the revenue generated through e-commerce transactions, and through cellular mobile phones
- determining the methods of disposal of ICT equipment

Frame of Establishments

The frame for the 2013 SICT was extracted from the 2013 List ofEstablishments (LE). This frame was used to draw the sample establishments for the survey.

Unit of Enumeration

The unit of enumeration of the survey is the establishment. Establishment is an economic unit under a single ownership or control, i.e., under a single legal entity, engaged in one or predominantly one kind of activity at a single fixed location.

Scope and Coverage

The 2013 Survey on Information and Communication Technology (SICT) of Philippine Business and Industry is undertaken nationwide and will cover all industries covered in the 2013ASPBI. For the purposes of the survey, these industries will be classified as core ICT industriesand non-core ICT Industries. Core ICT industries are industries comprising the InformationEconomy (IE).

The IE is composed further of the ICT Sector and Content and Media Sector. The industriesunder each sector are as follows:

a. ICT Sector
    - ICT Manufacturing Industries
    - ICT Trade Industries
    - ICT Service Industries
        - Software publishing
        - Telecommunication services
        - Computer programming, consultancy and related services
        - Data processing, hosting and related activities; web portals
        - Repair of computers and communication equipment

b. Content and Media Sector
    - Publishing activities
    - Motion picture, video and television programme production, sound recording and music publishing activities

The economic activities composing the “core” ICT industries in the Philippines are listed in Table 1.

Table 1. List of Core ICT Industries in the Philippines: 2009 PSIC

2009 PSIC	Industry Description
	ICT Manufacturing Industries
C26110	Manufacture of electronic valves and tubes
C26120	Manufacture of semi-conductor devices and other electronic components
C26200	Manufacture of computers and peripheral equipment and accessories
C26300	Manufacture of communication equipment
C26400	Manufacture of consumer electronics
C26800	Manufacture of magnetic and optical media
	ICT Trade Industries
G46510	Wholesale of computers, computer peripheral equipment and software
G46521	Wholesale of electronic valves and tubes
G46522	Wholesale of semi-conductor devices
G46523	Wholesale of micro-chips and integrTEd circuits
G46524	Wholesale of printed circuits
G46526	Wholesale of telephone and communications equipment including parts and

2009 PSIC	Industry Description
G46527	Wholesale of blank audio and video tapes and diskettes, magnetic and optical disks (CDs, DVDs)
	ICT Service Industries
J58200	Software publishing
	Telecommunication Services
	Wired Telecommunications Activities
J61101	Wired (landline) services
J61102	Wired internet access service activities (e.g. dsl, leased line, dial-up)
J61103	Telegraph, facsimile/telefax, and telex services
J61109	Other wired telecommunications activities, including pay telephone
	Wireless Telecommunications Activities
J61201	Wireless landline services
J61202	Mobile telecommunications services
J61203	Wireless internet access services (e.g. internet service provider, broadband)
J61209	Other wireless telecommunication services, n.e.c.
J61300	Sattellite telecommunications activities
	Other Telecommunications Activities
J61901	Telephone access in facilities open to the public service activities
J61902	Internet access in facilities open to the public service activities
J61909	Other telecommunications service activities, n.e.c.
	Computer Programming, Consultancy and Related Activities
J62010	Computer programming activities
J62020	Computer consultancy and computer facilities management activities
J62090	Other information technology and computer service activities
	Data Processing, hosting and related activities; web portals
J63111	Data processing
J63112	Website hosting services
J63113	Application hosting services
J63120	Web portals
	Repair of computers and communications equipment
S95110	Repair of computers and peripheral equipment
S95120	Repair of communications equipment
S95210	Repair of consumer electronics
Content and Media Industries	
	Publishing Activities
J58110	Book publishing
J58120	Publishing of directories and mailing lists
J58130	Publishing of newspapers, journals and periodicals
J58190	Other publishing activities
J63910	News agency activities
J63990	Other information service activities, n.e.c.

2009 PSIC	Industry Description
	Motion picture ,video and television programme production, sound recording
J59110	Motion picture, video and television programme activities
J59120	Motion picture, video and television programme post-production activities
J59130	Motion picture, video and television programme distribution activities
J59140	Motion picture projection activities
J59201	Sound recording activities
J59202	Publishing of music
	Programming and broadcasting activities
J60101	Radio broadcasting and relay station and studios
J60102	Radio program production
J60103	Radio broadcasting activities over the internet (internet radio stations)
J60201	Television broadcasting and relay stations and studios including closed circuit
J60202	Television program production
J60203	Television broadcasting activities over the internet (internet television stations)

Sampling Design

The 2013 SICT utilized the stratified systematic sampling design with five-digit PSIC serving as industry strata (industry domain) and the employment size (Total Employment, TE) as the second stratification variable.

Establishments engaged in the core ICT industries will be completely enumerated (100%), regardless of employment size. The establishments classified in the non-core ICT industries and with total employment of 20 and over shall be covered on a 10 percent sampling basis. For each of the non-core ICT industry, the sample size for establishments with TE of 20 and over was determined by applying the specified sampling rates for each of the industry domain at the national level. The minimum sample size is set to 3 establishments and maximum of 100 establishments per cell (industry domain). However, when the total number of establishments (N) in the cell is less than the set minimum sample size, all establishments in that cell are taken as samples.

A total of 10,986 samples were selected for the survey.

Indicators

Some indicators to be generated from the survey are as follows:

- proportion of establishments using computer
- proportion of employees using computers
- proportion of establishments with internet connection
- proportion of employees using the internet at work
- proportion of establishments with Web presence
- proportion of establishments with Intranet
- proportion of establishments placing and receiving orders over the internet
- proportion of establishments using the Internet by type of access and activity

- proportion of establishments with LAN and Extranet

Reference Period

All information collected in the 2013 SICT refers to calendar year 2013 except for employment which is as of 15 November 2013.

Response Rate

The overall response rate for the 2013 SICT is 87.04 percent (9,562 of the 10,986 sample establishments).This included receipts of "good" questionnaires, partially accomplished questionnaires, reports of closed, moved out or out of scope establishments. Sample establishments under core ICT industries reported 89.96 percent response rate (5,421 out of 6,026 establishments) while non-core ICT industries response rate is 83.48 percent (3,633 out of 4,352 sample establishments). On the other hand, industries classified in Business Process Management (BPM) have a response rate of 83.55 percent (508 out of 608 establishments).

CONCEPTS AND DEFINITIONS

Information Economy (IE) is a term used to describe the economic and social value created through the ability to rapidly exchange information at anytime, anywhere to anyone. It is characterized by the intensive use by businesses of ICT for the collection, storage, processing and transmission of information. The use of ICT is supported by supply of ICT products from an ICT-producing sector and through trade.

IE is comprised of the Information and Communication Technology (ICT) Sector and theContent and Media Sector.

Industries under ICT Sector are industries which fulfill and/or enable, by electronic means, the processing, communication, transmission and display of information. It excludes the industries which create the information.

Industries under Content and Media Sector are those which produce goods and services primarily intended to inform, educate and/or entertain humans through mass communication media. These industries are engaged in the production, publishing and/or distribution of content (information, cultural and entertainment products), where content corresponds to an organized message intended for human beings.

Information and Communication Technology (ICT) as defined by the Commission on Information and Communication Technology (CICT) is "the totality of electronic means to collect, store, process and present information to end-users in support of their activities". It consists, among others, of computer systems, office systems and consumer electronics, as well as network information infrastructure, the components of which include the telephone system, the Internet, fax machines and computers.

ICT Resources are equipment, knowledge and human resources used to support electronic business/manufacturing processes and the conduct of electronic commerce transactions. It includes computer and peripheral equipment, systems and application software, network channels, telecommunication equipment, routers, satellite and other ICT hardware used in electronic business and commerce transactions, ICT support services and ICT workers.

Network channel is a collection of computers connected to each other that allows them to communicate with each other, and share resources and information. All networks are made up of basic hardware building blocks to interconnect network nodes, such as Network Interface Cards (NICs), Bridges, Hubs, Switches, and Routers.

Internet is a global system of interconnected computer networks that interchange data by packet switching using the standardized Internet Protocol Suite (TCP/IP). It is a "network of networks" that consists of millions of private and public, academic, business, and government networks of local to global scope that are linked by copper wires, fiber-optic cables, wireless connections, and other technologies. The internet carries various information resources and services, such as electronic mail, online chat, file transfer and file sharing, online gaming, and the inter-linked hypertext documents and other resources of the World Wide Web (WWW).

Intranet is a set of networks, using the Internet Protocol and IP-based tools such as web browsers and file transfer applications, that is, under the control of a single administrative entity. That administrative entity closes the intranet to all but specific, authorized users. Most commonly, an intranet is the internal network of an organization.

Extranet is a network or internetwork that is limited in scope to a single organization or entity but which also has limited connections to the networks of one or more other usually, but not necessarily, trusted organizations or entities (e.g. a company's customers may be given access to some part of its intranet creating in this way an extranet, while at the same time the customers may not be considered 'trusted' from a security standpoint).

Wide Area Network (WAN) is a computer network that covers a broad area (i.e., any network whose communications links cross metropolitan, regional, or national boundaries. Less formally, a WAN is a network that uses routers and public communications links. The largest and most well-known example of a WAN is the internet. A WAN is a data communications network that covers a relatively broad geographic area (i.e. one city to another and one country to another country) and that often uses transmission facilities provided by common carriers, such as telephone companies.

Local Area Network (LAN) is a computer network covering a small physical area, like a home, office, or small group of buildings, such as a school, or an airport. Current LANs are most likely to be based on Ethernet technology. Each workgroup can get to its local printer. Note that the printers are not accessible from outside their workgroup.

E-commerce or electronic commerce refers to the sale of goods and services where an order is placed by the buyer, price and terms of sale are negotiated over the Internet Protocol-based networks, an extranet, Electronic Data Interchange (EDI) network, or other on-line system.

Web site is a collection of Web pages, images, videos or other digital assets that is hosted on one or more web servers, usually accessible via the internet. All publicly accessible websites are seen collectively as constituting the "World Wide Web". The pages of a website can usually be accessed from a common root URL called the homepage, and usually reside on the same physical server.