

UNITED NATIONS SECRETARIAT
Department of Economic and Social Affairs
Statistics Division

ESA/STAT/AC.104/9
17 August 2005
English only

United Nations Expert Group Meeting on the
2010 World Programme on Population and Housing Censuses
22-26 August 2005
United Nations, New York

**Recommendations for the Revision and Update of the Global United Nations Principles and
Recommendations for Population and Housing Censuses***

By

United Nations Economic and Social Commission for Western Asia
Information and Communications Technology Division

* This document is being reproduced without formal editing.

الإسكوا - ESCWA

تضطلع لجنة الأمم المتحدة الاقتصادية والاجتماعية لغربي آسيا (الإسكوا) بالدور الرئيسي ضمن منظومة الأمم المتحدة لتحقيق التنمية في غربي آسيا. وتعمل اللجنة على تشجيع التعاون الإقليمي بين أعضاءها كوسيلة لتحفيز التنمية الاقتصادية والاجتماعية والتقنية في المنطقة. وتتشكل الإسكوا من ثلاث عشرة دولة، وهم: البحرين، مصر، العراق، الأردن، الكويت، لبنان، عمان، فلسطين، قطر، المملكة العربية السعودية، الجمهورية العربية السورية، الإمارات العربية المتحدة، واليمن.

The United Nations Economic and Social Commission for Western Asia [ESCWA] serves as the main development agency within the United Nations system for Western Asia. The objective of ESCWA is to accelerate the pace of economic, social, and technological development in the region through the promotion of regional cooperation among its thirteen [13] member countries: Bahrain, Egypt, Iraq, Jordan, Kuwait, Lebanon, Oman, Palestine, Qatar, Saudi Arabia, Syrian Arab Republic, United Arab Emirates, and Yemen.

Prelude

1. Statistics underpin policies. Reliable statistical data and indicators regarding societal e-readiness and use and impact of information and communication technologies [ICTs] help policy makers formulate strategies for ICT-driven economic growth and social development. To this end, the heads of state and governments have approved a *Plan of Action* during the first phase of the World Summit on the Information Society [WSIS], held in Geneva in December 2003. The WSIS *Plan of Action* (Paragraph 28) specified that:

“A realistic international performance evaluation and benchmarking (both qualitative and quantitative), through comparable statistical indicators and research results, should be developed to follow up the implementation of the objectives, goals, and targets in the Plan of Action ...”

It went further to require:

“All countries and regions should develop tools so as to provide statistical information on the information society, with basic indicators and analysis of its key dimensions. Priority should be given to setting up coherent and internationally comparable indicator systems, taking into account different levels of development.”

2. In recognition of the need for improved data and indicators on the information society, a global initiative for building “Partnership on Measuring ICT for Development,” was launched in UNCTAD XI in Sao Paulo, in June 2004. The objective of the Partnership, in which ESCWA and the other United Nations regional commissions play a key role,¹ is to bring interested stakeholders in the statistical measurement of ICT to work together to close the data gap at the international level, in particular in developing countries. Specifically, the Partnership project document² has specified three basic objectives, namely:
 - Develop core sets of common ICT indicators and indices relevant to various stakeholders. These core indicators will be harmonized and agreed upon internationally and will constitute the basis for a database on ICT statistics;
 - Enhance the capacities of national statistics offices [NSOs] in developing countries and build competence to develop statistical compilation programs on the information society; and
 - Develop a global database on ICT indicators and to make it available on the Internet.
3. The work of the Partnership has until recently focused on fulfilling its first objective: namely, the harmonization of the lists of core ICT indicators that are developed regionally, and by specialized international organizations in their respective fields of expertise, and in accord with their mandates.

Acting within the mandate of the Partnership, the United Nations Economic Commission for Latin America and the Caribbean [ECLAC], in cooperation with the other United Nations regional commissions, prepared a questionnaire that provided a list of questions that aimed to discover the status of ICT statistics in NSOs in each region. Specifically, the stated purposes of the questionnaire were:

¹ The main entities forming the Partnership are: ITU, OECD, UNCTAD, UIS, ECA, ECLAC, ESCWA, ESCAP, World Bank, UN ICT Task Force, and NSOs. EUROSTAT joined the Partnership in the February 2005 WSIS Thematic Meeting on “Measuring the Information Society” in Geneva.

² *Partnership on Measuring ICT for Development*. Project document, 11 June 2004.

- *Collection of metadata on ICT statistics:*
Taking inventory in participating NSOs about existing and planned indicators, questionnaires, and methods of collecting statistics about ICT and the information society.
 - *Standardization of core indicators:*
Moving toward standardized definitions and a set of commonly accepted ICT core indicators.
 - *Preparing technical assistance and knowledge exchange:*
Identifying NSOs with best practices and others that may require technical assistance to strengthen their capacity to advance toward the incorporation of information society statistics.
4. Each regional commission was required to submit the questionnaire to the NSOs of its member countries. The responses to the questionnaires were compiled, analysed, and discussed during a series of regional meetings that were recommended in preparation for the WSIS in Tunis.³ A Partnership document detailing the status of collection of ICT indicators worldwide based on the stocktaking carried out is currently under preparation and will be released at WSIS Tunis.
 5. As a result of the stocktaking in Western Asia, the NSOs of ESCWA member countries adopted a list of core ICT indicators during the Roundtable on “Information Society Indicators and Profiles for Western Asia,” held in Beirut, in October 2004. The Economic Commission for Africa [ECA] adopted a list of core ICT indicators of its own, while the Economic Commission for Latin America and the Caribbean [ECLAC] proposed a set of core questions for household and business surveys. The lists of core ICT indicators of various organizations involved in ICT indicator building in all regions of the world were considered for harmonization in a WSIS Thematic Meeting on “Measuring the Information Society,” held in Geneva, in February 2005. The outcome of the meeting was a list of forty-two [42] core ICT indicators under four [4] categories: infrastructure and access, access and usage for households and individuals, access and usage for businesses, and the ICT sector, that all countries might consider collecting. (The Partnership list of core ICT indicators is given in **Appendix A.**) The agreed-upon list was recognized at the 36th session of the United Nations Statistical Commission, held in New York, in March 2005. Another Partnership document containing definitions, explanatory notes, and model questions related to the core indicators is currently under preparation and will be released at WSIS Tunis.

Capacity-building activities of the Partnership

6. The second objective of the Partnership is to enhance the capacities of NSOs in developing countries with the aim to build competence to develop statistical compilation programs on the information society, based on internationally agreed upon indicators. The Partnership project document specifically cited a set of deliverables as immediate goals to accomplish in the first phase of its operation that ends with the WSIS Tunis in November 2005:

“Deliverables:

³ The final report of the Joint UNECE/UNCTAD/UIS/ITU/OECD/EUROSTAT Statistical Workshop on Monitoring the Information Society in December 2003 holds: “The five United Nations Regional Commissions should, in cooperation with competent regional organizations, commit themselves to organize in 2004, within each region, one ICT-related meeting on the monitoring of information society issues. Both users and producers of official statistics, should work together in organizing these meetings, which are intended to provide input for a global summary meeting in early 2005 in order to prepare an action plan for the next WSIS Summit in Tunis.”

- *At the end of 2005, a number of selected beneficiary developing countries will have the capability to implement programmes for the collection of ICT statistics and indicators, the results of which will be comparable at the international and regional level.*
- *Regional statistical working groups will promote discussions about the development and collection of ICT statistics, in order to allow countries to better identify and promote their interests in international forums dealing with information society indicators. This will also pave the way for identifying needs for capacity building and further cooperation. Close relations with national statistical offices and other interested partners, through continuous regional networking, will assure that the specific needs and challenges of developing countries are adequately considered.*
- *A training course for information society statistics will have been developed and validated in selected countries.*
- *A guiding manual on information society indicators will have been prepared, for dissemination among practitioners in developing countries and to be presented at WSIS Tunis.”*

7. Capacity-building for measuring the information society has been a major focus of ESCWA and the Partnership:

- The NSOs of ESCWA member countries formed a Regional Technical Working Group [RTWG] on ICT Indicators. The working group played an important role in presenting the views of ESCWA member countries with regards to list of core ICT indicators submitted for adoption during the February 2005 WSIS Thematic Meeting in Geneva, and continues to communicate online on matters regarding indicator development and regional activities.
- ESCWA carried out capacity-building missions to help implement programmes for the collection of ICT statistics and indicators. In response to an invitation by the Central Agency for Public Mobilization and Statistics [CAPMAS], Egypt, the ICT Division in ESCWA participated in the “Regional Workshop on the General Census of Population, Housing, and Establishment – 2006,” held in Cairo, in April, 2005, and presented a discussion paper that included an analysis of the Census forms with regards to the inclusion of ICT indicators. The discussion paper suggested minimal modifications to the Census forms that will lead to the collection of data that allows the computation of 19 indicators, in addition to 5 indicators that are typically obtained from the Ministry of Communications and Information Technology, regulatory agencies, and telecommunications operators, out of the 42 indicators in the Partnership list of core ICT indicators.
- ESCWA has undertaken the initiative to build a regional database of ICT indicators and indices relevant to Arab countries and consistent with international trends. ESCWA promotes the global database as an integral component of capacity-building, and, hence, advocates that it should be built and administered to operate as such. Specifically, ESCWA views the global database on ICT indicators as distributed or multiple database system comprised of regional components including its own. Each regional component would be accessible by NSOs in each region through secured web connections to allow for online data update and sharing. An ESCWA report titled “Foundations of ICT Indicators Database” presented its perspective on building the regional database, including the basic specifications of the database.
- ESCWA held a regional workshop on capacity-building for the statistical measurement of the information society, in Beirut, during 7-10 June 2005. The workshop was organized by ESCWA, ITU Arab Regional Office, and the Arab Institute for Training and Research in Statistics. The workshop was the first to be held on building capacity for the statistical measurement of the information society in Western Asia and the Arab region.
- The United Nations regional commissions are planning a series of capacity-building workshops around the Tunis phase of WSIS. ECLAC is holding a capacity-building workshop in September

2005. The United Nations Economic and Social Commission for Asia and the Pacific [ESCAP] has plans (and budget) are for holding two workshops on ICT statistics next year. It is also planning ad-hoc missions to pilot countries that have not yet developed adequate data collections of demand-side indicators. The purpose of the missions is to review the schedule of existing surveys, so that model questions on ICT statistics might be included as supplementary questions, or, even, entire ICT modules attached to the scheduled surveys.

- Several methodological guides and manuals are currently under preparation by members of the Partnership. These include the methodological annexes to the “Guide to Information Society Measurement” by the “Working Party on Indicators for the Information Society” [WPIIS], and the methodological manual of the European Statistical Office [EUROSTAT]. An annex on basic access and infrastructure indicators is prepared by the International Telecommunication Union [ITU]. Two other annexes on household and individual ICT access and use indicators, and on ICT sector indicators are prepared by the Organization of Economic Cooperation and development [OECD]. The UNESCO Institute of Statistics [UIS] is currently preparing an analytical paper that scopes existing surveys of ICT usage and impact in education and literacy. The ITU and OECD annexes were presented and discussed in the Beirut workshop, while UNCTAD presented the definitions and methodology related to core ICT indicators in business.
- During the Beirut workshop, ITU announced a technical cooperation programme to the Arab countries participating in the workshop that are interested in carrying out an ICT household survey, but need specific training and/or capacity-building. The initiation of this programme is contingent upon the outcome of negotiation between ITU and prospective donors. Other programmes and projects for capacity-building by the Partners are envisaged in the future.

Recommendations

8. It couldn't be just a coincidence that the United Nations Statistical Commission adopted a resolution launching the 2010 World Population and Housing Census Programme, and established the Expert Group on the 2010 World Programme on Population and Housing Censuses at the same session it recognized the Partnership list of core ICT indicators.⁴ The working groups and technical subgroups formed by the Expert Group will be carrying out its mandate in regard to the revision and update of the global United Nations Principles and Recommendations for Population and Housing Censuses.
9. Submission of the following recommendations is motivated, on the one hand, by the fact that the population and housing census is the primary source of information about the social, demographic, and economic characteristics of any given population. These censuses provide critical statistical information on the population and housing situation at various administrative levels, thus enabling evidence-based decision-making, as well as produce the frames necessary for data update. This makes censuses an essential tool for data collection for measuring the information society. With Egypt [2006], Palestine [2007], and the Arab Gulf countries [2010] in Western Asia scheduling to hold censuses within the next five years, it is important that the new guidelines emphasize the need to include ICT variables related to the Partnership list of core ICT indicators in future censuses. In this regard, the Beirut regional workshop on capacity-building for the statistical measurement of the

⁴ At its 36th session, the United Nations Statistics Commission adopted a resolution launching the 2010 World Population and Housing Census Programme; and requested (1) that the United Nations Statistics Division [UNSD] in its role as the secretariat of the Programme act as the umbrella organization for setting standards, providing technical expertise and training, and setting priorities as need, and (2) that the umbrella strategy evolve around regional arrangements to the fullest possible extent. It also requested that the UNSD proceed with its work on the revision and update of the *Principles and Recommendations for Population and Housing Censuses*.

information society has recognized international guidelines as a critical dimension of capacity-building for measuring the information society.

10. On the other hand, ESCWA, working closely with its member countries, recognizes the growing need for new global guidelines that specifically address information society statistics. The current set of guidelines has set conditions for selecting census content (*Paragraph 2.3*), namely: priority of national needs, importance of international comparability as is evidenced by the work of the Partnership in response to the WSIS mandate, suitability of topics, and the availability of resources through national programmes and international endowments. The conditions stipulated are clearly satisfied with regards to the collection of information society statistics in many of the member countries of ESCWA and other United Nations regional commissions.
11. On behalf of its member countries, and in coordination with the Partnership, ESCWA submits to the Expert Group the following recommendations for the revision and update of the Global United Nations Principles and Recommendations for Population and Housing Censuses, Revision 1 [ST/ESA/STAT/SER.M/67/Rev.1], for discussion and possible adoption:

Recommendations

I. *Paragraphs 2.13 and 2.16:*

Add a new category of topics with the heading “***Access and use of ICT by households and individuals***” as 9th category to the list of population census topics.

II. *Paragraph 2.16:*

Consider the direct and derived variables within the new category on “***Access and use of ICT by households and individuals***” as shown in the table below.

<u><i>Direct topics</i></u>	<u><i>Paragraphs</i></u>	<u><i>Derived topics</i></u>	<u><i>Indicator*</i></u>
A. Radio set	2.278	A1. Radio sets per 100 population	A-11
		A2. Proportion of households with radio sets	HH-1
B. Television set	2.279	B1. Television sets per 100 population	A-12
		B2. Proportion of households with television sets	HH-2
C. Fixed line telephone	2.280	C1. Proportion of households with a fixed line telephone	HH-3
D. Mobile cellular telephone	2.281-2.282	D1. Proportion of households with a mobile cellular telephone	HH-4
		D2. Proportion of individuals using a mobile cellular telephone	HH-11
		D3. Proportion of population covered by mobile cellular telephony	A-7
E. Personal Computer	2.283-2.284	E1. Personal computers per 100 population	A-3
		E2. Proportion of households with a personal computer	HH-5
F. Internet Access	2.285-2.286	F1. Proportion of households with Internet access at home	HH-7
		F2. Proportion of households with broadband Internet access at home	HH-12
		F3. Proportion of individuals that used the Internet (from any location) in the last 12 months	HH-8

* Indicator designation in the Partnership list of core ICT indicators. The A-list is the list of infrastructure and access core indicators; the HH-list is the list of access and use by households and individuals core indicators.

III. *Paragraphs 2.278 - :*

Add new paragraphs that provide the definitions and specifications of topics within the new category on “***Access and use of ICT by households and individuals***.” The definitions and specifications are drawn from the methodological annexes of ITU and OECD.

A. **Radio set:**

Paragraph 2.278:

A radio set is a device capable of receiving broadcast radio signals, using popular frequencies in the FM, AM, LW, and SW ranges. A radio set may be a standalone device, or it may be

integrated into another device, such as a Walkman, a car, or an alarm clock. *Radio sets per 100 population* is obtained by tallying all usable radio sets in the population, dividing the total number of usable radio sets by the population size, and multiplying the quotient by 100. *The proportion of households with a radio set* is obtained as the quotient of the number of households with usable radio sets to the number of households in the population.

B. Television set:

Paragraph 2.279:

A television set is a device capable of receiving broadcast television signals, using popular access means such as over-the-air, cable, and satellite. A television set is typically a standalone device, but it may also be integrated into another device, such as a computer, or a mobile device. *Television sets per 100 population* is obtained by tallying all usable television sets in the population, dividing the total number of television sets by the population size, and multiplying the quotient by 100. *The proportion of households with a television set* is obtained as the quotient of the number of households with usable television sets to the number of households in the population.

C. Fixed line telephone:

Paragraph 2.280:

Fixed line telephones refer to telephone lines that connect a customer's terminal equipment, e.g., telephone set, facsimile machine, to a public switched telephone network [PSTN], and have a dedicated port on a telephone exchange. *The proportion of households with a fixed line telephone set* is obtained as the quotient of the number of households with one or more fixed line telephones to the number of households in the population.

D. Mobile cellular telephone:

Paragraph 2.281:

Mobile cellular telephones refer to portable telephones using cellular technology that provides access to PSTN. Mobile cellular subscribers refer to users of such telephones with either post-paid subscriptions or pre-paid accounts. *The proportion of households with a mobile cellular telephone* is obtained as the quotient of the number of households with a usable mobile cellular telephone to the number of households in the population. As a household may have more than one operational mobile cellular subscription, the number of households with a usable mobile cellular telephone is always less than or equal to the number of mobile cellular subscribers in the population. *The proportion of individuals using a mobile cellular telephone* is obtained by tallying all individuals in a household that regularly use mobile cellular telephones, regardless whether they are subscribers or not, and dividing the total number by the population size.

Paragraph 2.282:

The proportion of population covered by mobile cellular telephony is a very useful indicator of universal access. It refers to the percentage of a country's population that live within areas served by a mobile cellular signal, irrespective of whether or not they choose to use it. Note that this variable measures the presupposed ability to use mobile cellular services if one has a handset and a subscription, and should not be confused with the proportion of the land area covered by a mobile cellular signal, or the proportion of population that subscribe to mobile cellular service. Where there is a large gap between population coverage and penetration, it suggests that bottlenecks in access are more due to affordability and/or other socioeconomic barriers than to infrastructure shortcomings. Accurate computation of this topic may require matching the geographical overlays for the demographic distribution of the population and the mobile cellular telephony services map in a country using a geographical information system [GIS].

E. Personal computer:

Paragraph 2.283:

Personal computers measure the number of computer units installed in a country. Personal computers include desktop models with central processing units [CPU], screens, and keyboards and other peripherals, laptop and notebook models, *etc.* They exclude terminals connected to mainframe data processing machines and mid-range multi user systems, that are primarily intended for shared use, and devices such as smart-phones that have only some, but not all, of the functionality of a personal computer, as they may lack a standard keyboard, screen, Internet connection, drives, *etc.*

Paragraph 2.284:

ITU estimates an overall country figure for the number of personal computers by adding up the sales figures for last five years. Alternatively, a surrogate for sales is import figures, data that are sometimes available from customs departments of national governments. The sales figures establish a reasonable life span for personal computers. However, either sales or import figures has serious limitations; finding an appropriate combination of the two that eliminates duplication is not easy, if at all possible. On the one hand, sales figures do not fully account for all computers in a country, excluding purchases made abroad and on the Internet. On the other hand, often value rather than volume data is only available in customs data. Customs data would also not include undeclared imports. Additionally, computers assembled from imported parts would not be counted, and some of the imported computers may be later exported. *Personal computers per 100 population* is obtained by dividing the number of computers in use in a country by the population size, and multiplying the quotient by 100.

F. Internet access:

Paragraph 2.285:

Internet access at home refers to the ability of the household to connect to the public Internet using TCP/IP Internet protocols. Internet connections may be classified according to the technology employed, devices used, communication medium, and/or connection bandwidth [speed]. Internet access at home is meant to include both narrowband and broadband connections. Generally speaking, broadband may be defined as transmission capacity with sufficient bandwidth to permit combined provision of voice, data, and video. ITU has set a lower limit of broadband access at 256 kbit/sec, as the sum of the connection uploading and downloading capacities. Effectively, broadband is implemented mainly through [a-]synchronous digital subscriber line [x-DSL], cable, wireless local area network [WLAN] services, or satellite. Narrowband access is typically done through dial-up modems, integrated services digital networks [ISDNs], and most second-generation [2G] cellular mobile telephones.

Paragraph 2.286:

The proportion of households with Internet access is obtained as the quotient of the number of households with usable internet connection to the number of households in the population. This statistic is measured irrespective of the type of access, device used to access the Internet, or the method of payment. *The proportion of households with broadband Internet access* is obtained as the quotient of the number of households with usable broadband internet connection to the number of households in the population. *The proportion of individuals that used the Internet (from any location) in the last 12 months* is obtained by tallying Internet users in all households in the population, and dividing the total number of frequent Internet users by the population size. For sake of comparability, frequency of use may be set to *at least once a month, almost every month for the last 12 months*, to capture the. The 12-month timeframe is favored over shorter reference periods of 3 or 6 months that can be seasonally-biased.

IV. *Addendum on methodology:*

The census recommendations for 2010, like the current ones for 2000, do not specify exactly what questions should be asked. The OECD methodological annex to the “Guide to Information Society Measurement” includes a model questionnaire that gives preliminary wording for core household/individual ICT access and use questions, together with the logic, definitions, and notes when applicable.⁵

The data for the topics listed may also be collected rather concisely using the following schematic on household appliances/users proposed for adoption in the forthcoming [2006] *Egyptian General Population, Housing, and Establishment Census*.

Household Appliances / Users					
Personal Computer	2	Television Set	1	<input type="checkbox"/>	<input type="checkbox"/>
Fixed Line Telephone	1	Radio Set	4	<input type="checkbox"/>	<input type="checkbox"/>
Narrowband Internet Access	<input type="checkbox"/>	Broadband Internet Access	<input type="checkbox"/>	Non ICT	
Internet User	2		<input type="checkbox"/>		
Mobile Cellular User	1			<input type="checkbox"/>	<input type="checkbox"/>

The schematic shown can be used, as is, to collect the information needed to compute all the topics in the new category, and be processed using any optical character recognition software should one be planned for. The numbers entered in the upper four boxes account for the number of personal computers, fixed lines [not telephone sets], and television and radio sets in the household. In these and the two Internet access boxes, a zero, or a blank box, will indicate nonexistence of the item in the household; a nonzero number, or a darkened box for a default of *one*, will indicate its existence. In the bottom two boxes, numbers entered account for the number of frequent Internet users and mobile cellular telephone users.

Given that including a single additional topic or question in a census normally requires an executive order, or even a parliamentary decree, and is both contentious and expensive, many countries may opt to selecting a minimum set of topics/questions. This set must be sufficient for understanding the place of ICTs in the household, as well as for use for planning purposes by governments and private sectors to enable wider and improved delivery of services, and to assess their impact on the society. This should not be difficult, even if subjective, given the interrelationships between use by individuals and existence of the topic in the household, and among many of the topics.⁶

⁵ The annex aims to convey the methodological points and conceptual issues that are most relevant to the collection of household/individual ICT use information.

⁶ For instance, any dwelling with Internet access must have personal computer, television set, or third generation mobile telephone. Although Internet access may not necessarily indicate the existence of fixed telephone line, or, for that matter, broadband Internet access will not always imply that dial-up access exists, such inferences can still be made in the overwhelming majority of households in many developing countries. Note that no matter how appropriate or accurate these inferences may turn up to be, they are no substitutes for computing the relevant indicators.

Finally, OECD recommends that all questions related to access and use of ICT in the OECD model survey of ICT use by households and individuals asked of a *randomly selected adult* who responds in respect of the household and him/herself. Typical census procedures normally prefer the *head of household*. Regardless, it is important that the census enumerator ensures that the respondent understands of the technology included in the questions.

Appendix A: The Partnership List of core ICT Indicators

Infrastructure and Access		مؤشرات البنية الأساسية والنفوذ	
Basic Core		مؤشرات أساسية	
A-1	Fixed telephone lines per 100 population	عدد خطوط التليفون الثابت لكل مائة (100) شخص	A-1
A-2	Mobile cellular subscribers per 100 population	عدد خطوط المحمول لكل مائة (100) شخص	A-2
A-3	Computers per 100 population	عدد أجهزة الحاسب لكل مائة (100) شخص	A-3
A-4	Internet subscribers per 100 population	عدد المشتركين في خدمة الإنترنت لكل مائة (100) شخص	A-4
A-5	Broadband Internet subscribers per 100 population (fixed and mobile)	عدد المشتركين في خدمة الحزمة العريضة للإنترنت لكل مائة (100) شخص	A-5
A-6	International Internet bandwidth per population	نصيب الفرد من عرض الحزمة الدولية للإنترنت	A-6
A-7	Proportion of population covered by mobile cellular telephony	نسبة السكان في المناطق التي لديها خدمة الاتصال بالتليفون المحمول	A-7
A-8a	Internet access tariffs (20 hours per month), in US\$	تكلفة النفوذ للإنترنت (20 ساعة شهرياً) بالدولار الأمريكي	A-8a
A-8b	Internet access tariffs (20 hours per month) as a percentage of per capita income	تكلفة النفوذ للإنترنت (20 ساعة شهرياً) بالنسبة لمتوسط دخل الفرد	A-8b
A-9a	Mobile cellular tariffs (100 minutes of use per month), in US\$	تكلفة استخدام خدمة التليفون المحمول (100 دقيقة شهرياً) بالدولار الأمريكي	A-9a
A-9b	Mobile cellular tariffs (100 minutes of use per month) as a percentage of per capita income	تكلفة استخدام خدمة التليفون المحمول (100 دقيقة شهرياً) بالنسبة لمتوسط دخل الفرد	A-9b
A-10	Proportion of localities with public Internet access centres (PIACs) by number of population (rural/urban)	نسبة المراكز العامة للنفوذ إلى الإنترنت لعدد السكان بالحضر/الريف/البادية	A-10
Extended Core		مؤشرات إضافية	
A-11	Radio sets per 100 population	عدد أجهزة الراديو لكل مائة (100) شخص	A-11
A-12	Television sets per 100 population	عدد أجهزة التليفزيون لكل مائة (100) شخص	A-12

Access and Use by Households and Individuals		مؤشرات النفوذ والاستخدام للأسر والأفراد	
Basic Core		مؤشرات أساسية	
HH-1	Proportion of households with a radio set	نسبة المنازل التي بها أجهزة راديو	HH-1
HH-2	Proportion of households with a TV set	نسبة المنازل التي بها أجهزة تليفزيون	HH-2
HH-3	Proportion of households with a fixed line telephone	نسبة المنازل التي بها خط تليفون ثابت	HH-3
HH-4	Proportion of households with a mobile cellular telephone	نسبة المنازل التي بها خط تليفون محمول	HH-4
HH-5	Proportion of households with a computer	نسبة المنازل التي بها أجهزة حاسب	HH-5
HH-6	Proportion of individuals that used a computer (from any location) in the last 12 months	نسبة الأفراد الذين استخدموا الحاسب من أي مكان خلال الـ 12 شهراً الأخيرة	HH-6
HH-7	Proportion of households with Internet access at home	نسبة المنازل التي تتصل بالإنترنت	HH-7
HH-8	Proportion of individuals that used the Internet (from any location) in the last 12 months	نسبة الأفراد الذين استخدموا الإنترنت من أي مكان خلال الـ 12 شهراً الأخيرة	HH-8
HH-9	Location of individual use of the Internet from all locations in the last 12 months: <ul style="list-style-type: none"> At home At work Place of education At another person's home Free Public Internet Access Centre (specific denomination depends on national practices) Charged Public Internet Access Centre Others 	نسبة الأفراد الذين استخدموا الإنترنت خلال الـ 12 شهراً الأخيرة طبقاً لمكان النفوذ <ul style="list-style-type: none"> المنزل العمل مكان التعليم (المدرسة/الجامعة/..) منزل شخص آخر مركز عام للنفوذ للإنترنت مجاني مركز عام للنفوذ للإنترنت برسوم مكان آخر 	HH-9
HH-10	Internet activities undertaken by individuals in the last 12 months: <ul style="list-style-type: none"> For communicating 	نسبة الأفراد الذين استخدموا الإنترنت خلال الـ 12 شهراً الأخيرة طبقاً لغرض الاستخدام <ul style="list-style-type: none"> الاتصال (البريد الإلكتروني/..) 	HH-10

	<ul style="list-style-type: none"> For getting information Purchasing or ordering goods or services Internet banking or other financial services For education and learning For dealing with government organisations/public authorities For leisure activities 	<ul style="list-style-type: none"> الحصول على معلومات طلب أو شراء بضائع تحصيل خدمات بنكية ومالية التعليم التعامل مع المؤسسات الحكومية أو العامة الترويح والتسلية 	
Extended Core		مؤشرات إضافية	
HH-11	Proportion of individuals using a mobile cellular telephone	نسبة الأفراد الذين يستخدمون التليفون المحمول	HH-11
HH-12	Proportion of households with access to the Internet by type of access from home. Response categories should allow an aggregation to narrowband and broadband, where broadband will exclude slower speed technologies, such as dial-up modem, ISDN and most 2G mobile phone access, and which will usually result in a speed of at least 256 kbit/s.	نسبة المنازل التي تتصل بالإنترنت طبقاً لسرعة/عرض حزمة الاتصال تُختار وسائط الاتصال بحيث تسمح بتقسيم الإجابة إلى وسائط الحزمة الضيقة (مثل مودم DIAL-UP، ISDN، ومعظم التليفونات المحمولة بتكنولوجيا 2G) ووسائط الحزمة العريضة (سرعة اتصال لا تقل عن 256 كيلو بت بالثانية)	HH-12
HH-13	Frequency of individual access to the Internet in the last 12 months (from any location) <ul style="list-style-type: none"> at least once a day at least once a week but not every day at least once a month but not every week less than once a month 	نسبة الأفراد الذين استخدموا الإنترنت خلال الـ 12 شهراً الأخيرة طبقاً لتكرار الاستخدام <ul style="list-style-type: none"> مرة واحدة يومياً على الأقل مرة واحدة أسبوعياً على الأقل، ولكن ليس يومياً مرة واحدة شهرياً على الأقل، ولكن ليس أسبوعياً أقل من مرة واحدة شهرياً على مدار العام 	HH-13
Reference Indicator		مؤشر مرجعي	
HH-R1	Proportion of households with electricity	نسبة المنازل المتصلة بشبكة الكهرباء	HH-R1

Access and Use by Businesses		مؤشرات النفاذ والاستخدام لقطاع الأعمال	
Basic Core		مؤشرات أساسية	
B-1	Proportion of businesses using computers	نسبة مؤسسات الأعمال التي تستخدم الحاسب	B-1
B-2	Proportion of employees using computers	نسبة الموظفين الذين يستخدمون الحاسب	B-2
B-3	Proportion of businesses using the Internet	نسبة مؤسسات الأعمال التي تتصل بالإنترنت	B-3
B-4	Proportion of employees using the Internet	نسبة الموظفين الذين يستخدمون الإنترنت	B-4
B-5	Proportion of businesses with a website (or web presence where the business has control over the content)	نسبة مؤسسات الأعمال التي تمتلك موقع على الإنترنت	B-5
B-6	Proportion of businesses with an INTRANET	نسبة مؤسسات الأعمال التي لديها شبكة معلومات داخلية INTRANET	B-6
B-7	Proportion of businesses receiving orders over the Internet	نسبة مؤسسات الأعمال التي تستلم طلبات عبر الإنترنت	B-7
B-8	Proportion of businesses placing orders over the Internet	نسبة مؤسسات الأعمال التي ترسل طلبات عبر الإنترنت	B-8
Extended Core		مؤشرات إضافية	
B-9	Proportion of businesses accessing the Internet by modes of access. Response categories should allow an aggregation to narrowband and broadband, where broadband will exclude slower speed technologies, such as dial-up modem, ISDN and most 2G mobile phone access, and which will usually result in a speed of at least 256 kbit/s.	نسبة مؤسسات الأعمال التي تتصل بالإنترنت طبقاً لسرعة/عرض حزمة الاتصال. تُختار وسائط الاتصال بحيث تسمح بتقسيم الإجابة إلى وسائط الحزمة الضيقة (مثل مودم DIAL-UP، ISDN، ومعظم التليفونات المحمولة بتكنولوجيا 2G) ووسائط الحزمة العريضة (سرعة اتصال لا تقل عن 256 كيلو بت بالثانية)	B-9
B-10	Proportion of businesses with a Local Area Network (LAN)	نسبة مؤسسات الأعمال التي لديها شبكة حاسبات محلية LAN	B-10
B-11	Proportion of businesses with an EXTRANET	نسبة مؤسسات الأعمال التي لديها شبكة معلومات خارجية EXTRANET	B-11
B-12	Proportion of businesses using the Internet by type of activity: <ul style="list-style-type: none"> Internet e-mail Getting information 	نسبة مؤسسات الأعمال التي تستخدم الإنترنت طبقاً لنوع النشاط <ul style="list-style-type: none"> استخدام البريد الإلكتروني الحصول على معلومات 	B-12

<ul style="list-style-type: none"> • Performing Internet banking or accessing other financial services • Dealing with government organisations/public authorities • Providing customer services • Delivering products online 	<ul style="list-style-type: none"> – تحصيل/تقديم خدمات بنكية ومالية – التعامل مع المؤسسات الحكومية أو العامة – تقديم خدمات للعملاء – استلام طلبات
--	---

ICT Sector		مؤشرات قطاع تكنولوجيا المعلومات والاتصالات	
Basic Core		مؤشرات أساسية	
ICT-1a	Proportion of male workforce of the total workforce involved in the ICT sector	نسبة الذكور من إجمالي العاملين في قطاع تكنولوجيا المعلومات والاتصالات	ICT-1a
ICT-1b	Proportion of female workforce of the total workforce involved in the ICT sector	نسبة الإناث من إجمالي العاملين في قطاع تكنولوجيا المعلومات والاتصالات	ICT-1b
ICT-2	Value added in the ICT sector (as a percentage of total value added)	نسبة القيمة المضافة في قطاع تكنولوجيا المعلومات والاتصالات من القيمة الشاملة المضافة	ICT-2
ICT-3	ICT goods imports as percentage of total imports	نسبة قيمة تكنولوجيا المعلومات والاتصالات المصدرة من إجمالي التصدير	ICT-3
ICT-4	ICT goods exports as percentage of total exports	نسبة قيمة تكنولوجيا المعلومات والاتصالات المستوردة من إجمالي الاستيراد	ICT-4