PARTNERSHIP ON
MEASURING ICT
FOR DEVELOPMENT

ITU data collection:
Partnership core list of indicators on access to and use of ICT by households and individuals

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The need to measure the information society: WSIS

- ## The World Summit on the Information Society recognized that ICT statistics are needed:
  - To support policy making and guide decision-makers
  - To compare countries over time and to each other
  - To set and evaluate targets and objectives

- ## WSIS called for:
  - The development of a common set of core ICT indicators; to increase the availability of internationally <u>comparable ICT statistics</u> as well as to establish a mutually agreed framework for their elaboration…
  - The promotion of <u>capacity building</u> in developing countries for monitoring the information society

Source: WSIS Geneva Plan of Action and Tunis Agenda

Partnership on Measuring ICT for Development

- Multi-stakeholder partnership launched in June 2004 to identify a core set of ICT indicators and help guide countries in collecting and disseminating ICT statistics. Key objectives:
    1. Common set of core ICT indicators
    2. Enhance capacity of NSOs
    3. Global database for ICT indicators

- Includes key stakeholders working on ICT statistics

- A framework for raising additional resources to assist developing countries

Core list of indicators & methodological material

2005

- Based on results of stocktaking exercise, and of regional workshops and emerging consensus on definitions and methodologies in OECD countries:

- Adoption of a core list of ICT indicators

- Includes definitions, model questionnaires, methodological material on the collection of ICT statistics

UNITED NATIONS

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CORE ICT INDICATORS

**Includes:
Definitions
Model questionnaires
Methodologies**

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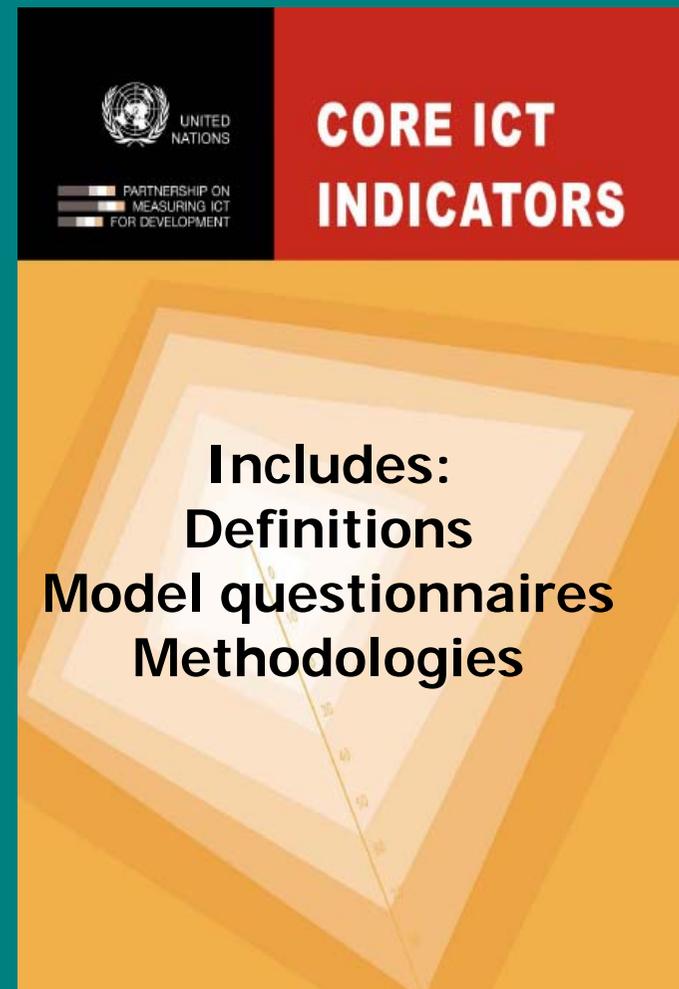
Core list of ICT indicators

Type	Basic core	Extended core	Total
ICT infrastructure and access	**10**	**2**	**12**
ICT access and usage by households and individuals	**10**	**3**	**14**
ICT access and usage by businesses	8	4	12
ICT sector	4	-	4
Total	32	9	42

Source: Partnership on Measuring ICT for Development

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Basic ICT infrastructure & access indicators: already covered by ITU

Basic core

A-1	Fixed telephone lines per 100 inhabitants
A-2	Mobile cellular subscribers per 100 inhabitants
A-3	Computers per 100 inhabitants
A-4	Internet subscribers per 100 inhabitants
A-5	Broadband Internet subscribers per 100 inhabitants
A-6	International Internet bandwidth per inhabitant
A-7	Percentage of population covered by mobile cellular telephony
A-8	Internet access tariffs (20 hours per month)
A-9	Mobile cellular tariffs (100 minutes of use per month)
A-10	Percentage of localities with public Internet access centres

Extended core

A-11	Radio sets per 100 inhabitants
A-12	Television sets per 100 inhabitants

Core indicators on access to, and use of, ICT by households and individuals

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Basic core

- HH-1   Proportion of households with a radio
- HH-2   Proportion of households with a TV
- HH-3   Proportion of households with a fixed line telephone
- HH-4   Proportion of households with a mobile cellular telephone
- HH-5   Proportion of households with a computer
- HH-6   Proportion of individuals that used a computer
- HH-7   Proportion of households with Internet access at home
- HH-8   Proportion of individuals that used the Internet
- HH-9   Location of individual use of the Internet
- HH-10   Internet activities undertaken by individuals

Extended core

- HH-11   Proportion of individuals with use of a mobile telephone
- HH-12   Proportion of households with access to the Internet by type of access from home
- HH-13   Frequency of individual access to the Internet in the last 12 months

HH-1: Proportion of households with a radio

Definition

- A radio is a device capable of receiving broadcast radio signals, using popular frequencies, such as FM, AM, LW and SW. Radios also include: those combined with other equipment such as cassette players/recorders, portable radios such as transistor radios, and radios in motor vehicles. The proportion of households with a radio is calculated by dividing the number of in-scope households with a radio by the total number of in-scope households. Sub-indicators may be constructed using the household classificatory variables, household composition and household size. For example: the proportion of households with a radio where there are one or more children under 16 in the household.

Model question

- **Does any member of this household/do you have access to a radio at home?**

  a. The term 'do you' is included to cover single person households. It does not refer to individual activities.

HH-2: Proportion of households with a TV

Definition

- A TV (television) is a device capable of receiving broadcast television signals, using popular access means such as over-the-air, cable and satellite. A television set may be a standalone device, or it may be integrated into another device, such as a computer or a mobile phone. The proportion of households with a TV is calculated by dividing the number of in-scope households with a TV by the total number of in-scope households. Sub-indicators may be constructed using the household classificatory variables, household composition and household size, for example, the proportion of households with a TV where there are no children under 16.

Model question

- **Does any member of this household/do you have access to a television at home?**

  a. The term 'do you' is included to cover single person households. It does not refer to individual activities.

HH-3 Proportion of HH with a fixed line telephone

Definition

- Fixed telephone lines refer to telephone lines connecting a customer's terminal equipment (e.g. telephone set, facsimile machine) to the public switched telephone network (PSTN) and which have a dedicated port on a telephone exchange. The proportion of households with a fixed line telephone is calculated by dividing the number of in-scope households with a fixed line telephone by the total number of in-scope households. Sub-indicators may be constructed using the household classificatory variables, household composition and household size.

Model question

- **Does this household have a fixed line telephone at home?**

HH-4 Proportion of HH with a mobile cellular telephone

Definition

- Mobile cellular telephones refer to portable telephones subscribing to an automatic public mobile telephone service using cellular technology, which provides access to the PSTN. Users of both post-paid subscriptions and prepaid accounts are included. The proportion of households with a mobile cellular telephone is calculated by dividing the number of in-scope households with a mobile cellular telephone by the total number of in-scope households. Sub-indicators may be constructed using the household classificatory variables, household composition and household size.

Model question

- **Does any member of this household/do you have access to a mobile telephone at home?**

    a. The term 'do you' is included to cover single person households. It does not refer to individual activities.

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HH-5 Proportion of households with a computer

Definition

- A computer includes: a desktop, portable or handheld computer (e.g. a personal digital assistant). It does not include equipment with some embedded computing abilities such as mobile phones or TV sets. Note that this is a different definition of a computer than the one used for indicator A3, with the main difference being that personal digital assistants (PDA) are included here but excluded from A3. There are practical and historical reasons for this difference but, for the purposes of indicators HH5 and HH6, the functionality of PDAs, which may include Internet connectivity, is of interest. The proportion of households with a computer is calculated by dividing the number of in-scope households with a computer by the total number of in-scope households. Sub-indicators may be constructed using the household classificatory variables, household composition and household size.

Model question

- **Does any member of this household/do you have access to a computer at home?**
  a. The term 'do you' is included to cover single person households. It does not refer to individual activities.

HH-6 Proportion of individuals that used a computer

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Definition

- A computer includes: a desktop, portable or handheld computer (e.g. a personal digital assistant). It does not include equipment with some embedded computing abilities: such as mobile phones or TV sets. The proportion of individuals who used a computer etc is calculated by dividing the total number of in-scope individuals who used a computer from any location in the last 12 months by the total number of in-scope individuals. Sub-indicators may be constructed using the individual classificatory variables, age, gender, highest education level, employment status and occupation

Model question

- **Have you used a computer in the last 12 months?**

HH-7 Proportion of households with Internet access at home

Definition

- The Internet is a world-wide public computer network. It provides access to a number of communication services including the World Wide Web and carries email, news, entertainment and data files. Access is not assumed to be only via a computer - it may also be by mobile phone, digital TV etc. The proportion of households with Internet access at home is calculated by dividing the number of in-scope households with Internet access by the total number of in-scope households. Sub-indicators may be constructed using the household classificatory variables, household composition and household size.

Model question

- **Does any member of this household/do you have access to the Internet at home regardless of whether it is used?**

  a. The term 'do you' is included to cover single person households. It does not refer to individual activities.

HH-8 Proportion of individuals that used the Internet

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Definition

- The Internet is a world-wide public computer network. It provides access to a number of communication services including the World Wide Web and carries email, news, entertainment and data files. Individuals may have accessed the Internet by any means including a computer, mobile phone, games machine, digital TV etc. The proportion of individuals who used the Internet etc is calculated by dividing the total number of in-scope individuals who used the Internet (from any location) in the last 12 months by the total number of in-scope individuals. Sub-indicators may be constructed using the individual classificatory variables, age, gender, highest education level, employment status and occupation. An example of such a sub-indicator is the proportion of individuals aged 16-24 who used the Internet.

Model question

- **Have you used the Internet in the last 12 months?**

HH-9 Location of individual use of the Internet (1)

Definition

- Location of use includes home, work, place of education, another person's home, community Internet access facility, commercial Internet access facility and other places. Individuals can respond in respect of more than one location. For international comparability, output is most simply presented as the proportion of in-scope individuals using the Internet at each location, for instance, the proportion of individuals using the Internet at home, at work etc. Sub-indicators may be constructed using the individual classificatory variables, age, gender, highest education level, employment status and occupation. An example of such a sub-indicator is the proportion of employed persons who used the Internet at work.

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Model question

Where did you use the Internet in the last 12 months?

- Home
- Work
- Place of education
- At another person's home
- Community Internet access facility: Includes access at community facilities such as public libraries, publicly provided Internet kiosks, other government agencies; access is typically free or low cost. (It is expected that each country would tailor categories according to the facilities available).
- Commercial Internet access facility: Includes access at Internet or cyber cafés, hotels, airports; even though the venue is commercial, the cost is not necessarily at full market price. (It is expected that each country would tailor categories according to the facilities available.)
- Other places

Note:

a. The question is asked of all in-scope individuals who used the Internet in the last 12 months.

b. Possible country variations to the response categories are to add or split locations according to country data requirements.

HH-10 Internet activities undertaken by individuals (1)

Definition

- Internet activities are: use of the Internet for getting information (several response categories per the model question), for communicating, for purchasing or ordering goods or services, for Internet banking, for education or learning activities, for dealing with government organisations and for leisure activities (several response categories per the model question). Note that these activities are restricted to private purposes and therefore exclude activities such as purchasing over the Internet undertaken as part of a person's job or undertaking online courses as part of a job. Individuals can respond in respect of more than one activity and activities are not mutually exclusive.

- For international comparability, output is most simply presented as the proportion of in-scope individuals undertaking each activity, for instance, the proportion of individuals using the Internet to get information about goods or services. An alternative presentation is the proportion of **Internet users** undertaking each activity. Sub-indicators may be constructed using the individual classificatory variables, age, gender, highest education level, employment status and occupation.

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Model question

For which of the following activities did you use the Internet for private purposes in the last 12 months?

- **For getting information**
- **For communicating**
- **For purchasing or ordering goods or services**
- **For Internet banking**
- **For education or learning activities**
- **For dealing (interacting) with government organisations/public authorities**
- **For leisure activities**

Note:

a. The question is asked of all in-scope individuals who used the Internet in the last 12 months.

b. The activities are not necessarily mutually exclusive, for instance, some activities (such as dealing with government and leisure activities) may also involve purchasing online. In such cases, the individual responds in respect of more than one response category.

c. There are alternative ways of asking activities questions. For instance, each could be rated according to its frequency or intensity of use. This question uses a simplified method of presentation which asks respondents for all activities. Possible country variations to the response categories are to add or split categories according to country data requirements. In particular, countries may wish to add an 'Other' category to this question.

HH-11 Proportion of individuals with use of a mobile telephone

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Definition

- Mobile telephones refer to portable telephones subscribing to an automatic public mobile telephone service using cellular technology, which provides access to the PSTN. Use of a mobile telephone does not mean that the telephone is owned or paid for by the person but should be reasonably available through work, a friend or family member, etc. It excludes occasional use, for instance, borrowing a mobile phone to make a call. The proportion of individuals with use of a mobile telephone is calculated by dividing the total number of in-scope individuals with use of a mobile telephone by the total number of in-scope individuals. Sub-indicators may be constructed using the individual classificatory variables, age, gender, highest education level, employment status and occupation.

Model question

- **Did you have personal use of a mobile telephone during some or all of the last 12 monthsa?**

  a. Countries may wish to consider elaborating this question to ask whether individuals accessed the Internet using a mobile phone. Such an indicator could be relevant for countries with rapidly growing mobile phone usage but otherwise relatively poor telecommunications infrastructure.

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HH-12 Proportion of households with access to the Internet by type of access from home

Definition

- A major aim of this indicator is to present the proportion of households with broadband access, therefore the response categories chosen allow aggregation to narrowband and broadband. As households can use more than one type of access service, multiple responses are possible. For international comparability, output is most simply presented as the proportion of in-scope households using each type of access service, for instance, the proportion of households accessing the Internet by DSL. Additionally, output should be available for the aggregations, the proportion of households with broadband and narrowband access to the Internet. Alternatively, output could be presented as a proportion of households with Internet access. Sub-indicators may be constructed using the household classificatory variables, household composition and household size.

HH-12 Proportion of households with access to the Internet by type of access from home

Model question

What type/s of Internet access services are used for Internet access at home?

- **Analog modem (dial-up via standard phone line):** An analog modem converts a digital signal into analog for transmission by traditional (copper) telephone lines. It also converts analog transmissions back to digital.
- **ISDN (Integrated Services Digital Network)**: ISDN is a telecommunication service that turns a traditional (copper) telephone line into a higher speed digital link. It is usually regarded as narrowband.
- **DSL (ADSL, SDSL, VDSL etc.):** Digital subscriber line; it is a high-bandwidth, local loop technology carrying data at high speeds over traditional (copper) telephone lines.
- **Cable modem:** A modem which uses cable TV lines for connection to the Internet.
- **Other narrowband:** Including most mobile telephone access and other forms of access with an advertised download speed of less than 256 Kbps (kilobits per second). Countries are expected to add appropriate category/ies based on services available.
- **Other broadband:** Including optic fibre cable, some mobile telephone access (e.g. UMTS), powerline, satellite, fixed wireless, with an advertised download speed of >= 256 Kbps. (Note: countries are expecected to add appropriate category/ies based on services available).
- **Do not know**

Note:

A. The question is asked of all in-scope households with access to the Internet at home.

Possible country variations to the response categories are: remove categories where items are not feasible, add or split categories according to technologies available and country data requirements.

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HH-13 Frequency of individual access to the Internet in the last 12 months

Definition

- Frequency of use can be: at least once a day, at least once a week but not every day, at least once a month but not every week, or less than once a month. For international comparability, output is most simply presented as the proportion of in-scope individuals using the Internet with each frequency, for instance, the proportion of individuals using the Internet at least once a day. An alternative presentation is the proportion of **Internet users** using the Internet with each frequency. Sub-indicators may be constructed using the individual classificatory variables, age, gender, highest education level, employment status and occupation.

Model question

How often did you typically use the Internet during the last 12 months?

- **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**

Methodological notes

- Sample frame: no specific recommendation
- Recall period:12 months recommended
- Denominator: household & individuals
- Survey vehicles (existing surveys) and interview techniques (personal interview techniques preferred to postal or phone interviews)
- Statistical units: randomly selected individual and households
- Frequency
- Survey scope: minimal individual age scope (16-74)
- Survey coverage: complete in-scope resident population/private dwellings; effect of omission of geographic areas (non-electrified)
- Classificatory variables/characteristics: household composition and size; individuals' age, gender, highest education level, employment status and occupation

Thank You

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