1st Meeting of the ITU Expert Group on ICT Household Indicators (EGH)

São Paulo, Brazil, 4-6 June 2013

Final Report

1. The 1st Meeting of the ITU Expert Group on ICT Household Indicators (EGH) took place in São Paulo, Brazil, on 4-6 June 2013. The meeting was organized by ITU and hosted by the Brazilian Network Information Center (NIC.br).

2. The meeting was attended by 38 participants representing national statistical offices, ministries, regulators and other organizations officially in charge of monitoring the information society from 18 countries, as well as UNECLAC. The meeting was chaired by Mr Alexandre Barbosa, head of the NIC.br's Center of Studies on Information and Communication Technologies (CETIC.br), Brazil, who is also the chair of the EGH. ITU was represented by Susan Teltscher and Doris Olaya of the ITU/BDT ICT Data and Statistics Division. Mr José Luis Cervera, consultant to ITU, also attended the meeting to present the revisions of the ITU *Manual for Measuring ICT Access and Use by Households and Individuals*, to which he contributed.

3. The main objective of the meeting was to examine the contributions received from members of the EGH online discussion forum over the past year, with a view to finalizing the revision of the core list of indicators on ICT household access and individual ICT use developed by the Partnership on Measuring ICT for Development and collected by ITU at the international level, as well as the related revision of the ITU *Manual for Measuring ICT Access and Use by Households and Individuals*.

4. The basis for discussion during the meeting was a document prepared by ITU summarizing the inputs that were received on the EGH online forum between May 2012 and May 2013.[1] The document included proposals for revisions of the existing core indicators, proposals for new core indicators and revisions of cross-cutting issues. More specifically, the agenda covered the following: core ICT household access indicators (radio, TV, telephone, computer and type of access to the Internet), core ICT use indicators (location of Internet use, Internet activities), new core indicators (multichannel TV, Internet security, barriers to Internet access, ICT skills, ICT expenditure, and children and youth online protection), and cross-cutting issues (age scope, reference period and the concept of household access to ICTs).

5. The meeting agreed on the revision of seven core ICT household indicators, the concept of household access, age scope and reference period. Revisions of two existing core indicators

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[1] "Revisions and additions to the core ICT indicators on ICT access and use by households and individuals. Proposal for discussion in the EGH online forum and at the face to face meeting in São Paulo, Brazil" (ITU, 2013).

were left open for comments in the EGH online forum for two months (Internet activities and type of access to the Internet). The meeting agreed on four new core indicators covering: multichannel TV, barriers to household Internet access, ICT skills of individuals and household ICT expenditure.

6. Concerning the **revision of the core indicators**, the EGH meeting agreed on the following (see Annex for details on agreed definitions, clarifications, questions and response categories):

   a. **Households with a radio**: the definition of radio was updated in order to include other devices where radios can be integrated. Clarifications on the meaning of household access and working condition were added.

   b. **Households with a TV**: the definition of TV was updated in order to include other devices where TV can be integrated. Clarifications on the meaning of household access and working condition were added.

   c. **Households with telephone**: clarification on the meaning of working condition was added. Clarifications on the meaning of household access and on the availability of the signal were added for the sub-indicator on mobile telephone.

   d. **Households with a computer**: the definition of computer was updated in order to include tablets and similar handheld computers. Clarifications on the meaning of household access and working condition were added.

   e. **Location of individual use of the Internet**: the last two response categories referring to access via mobile devices were removed, with a view of asking them in a separate question and developing a new indicator. They were replaced by a category that reflects the use of Internet "in mobility" (for example while using public transportation). The two response categories on community and commercial access were revised to emphasize that they refer to access "typically free of charge" and "typically paid", respectively. See Annex for the complete set of response categories.

   f. **Households with Internet access**: in line with the revision of the clarifications of the other access indicators that were under discussion, clarifications on the meaning of household access and working condition were added.

   g. **Individuals using a computer**: in line with the revision of the indicator "households with computer", the definition of computer was updated in order to include tablets and similar handheld computers.

7. The following two core indicators require minor additional modifications and therefore the meeting agreed to leave them for further discussion in the online forum for two months.

a. **Households with access to the Internet by type of access**: A revision of this indicator was proposed in order to adjust the categories to the ITU/OECD definition of broadband and to clearly distinguish between [fixed (wired) and wireless] broadband and [fixed (wired) and mobile] narrowband. There was no consensus in the meeting about the categories proposed and how to group them for reporting and international comparison purposes (see Annex for the list of categories and groupings under discussion). Response categories for the question to be asked in national surveys related to this indicator will be elaborated by each country based on their available services, providers and technologies. Some countries expressed their difficulties in collecting this information from households, and more experiences need to be shared on how to get accurate information, which is very relevant for policy making.

b. **Internet activities undertaken by individuals**: an extensive list of activities was discussed and agreed (see Annex). However, the indicator was left opened for further discussion in the online forum in order to reflect on the terminology to be used for the category "self/user-created content".

8. Concerning the **revision of cross-cutting issues**, the EGH meeting agreed on the following:

a. **Concept of household access**: in order to consider that a household has access to a given ICT, the device/service should be available for use of any member of the household at any time. The device can be owned or not by the household. This clarification should be added to all indicators referring to household ICT access and should be taken into account when collecting and reporting data for international comparison purposes.

b. **Age scope**: countries should report ICT usage information for the three main core indicators on individuals' use of ICTs (computer, mobile phone and Internet) for the entire population of the country, i.e. there is no minimum age scope any more for these indicators.

c. **Reference period**: information on ICT usage should be collected and reported with a reference period of the last **3** months (instead of 12 months)

9. Concerning proposed **new core indicators**, the EGH meeting agreed to add the following indicators (see Annex for details of the questions and response categories):

a. Households with access to multichannel television
b. Barriers to household Internet access
c. ICT skills of individuals
d. Household ICT expenditure

10. The EGH meeting agreed that the following proposed new core indicators will be left for further discussion in the forum. While agreeing on the importance of the indicators, participants felt that there was not enough discussion and consensus on the categories to be included and on the feasibility of getting good responses when collecting the information (see Annex for details of the questions and response categories under discussion).

    a. Individuals using the Internet by type of portable device and network used to access the Internet
    b. Internet security
    c. Children and youth online protection

11. The meeting proposed a number of other, new indicators to be discussed in the future by the EGH, including on the following topics: green ICTs, mobile phone activities, gender-relevant ICT indicators, revenue and investment for the ICT sector, ICT for people with disabilities.

12. The meeting also proposed that countries share training materials for interviewers on ICT surveys. The importance of good training of interviewers was emphasized in order to get reliable and usable results from the surveys.

13. The meeting agreed that the ITU questionnaire should be revised in order to reflect the revision of the indicators as well as comments made on the relevance of collecting additional survey information, such as coefficient of variation and non-response rates for the main core indicators (e.g. household access to computer and Internet, individual use of computer and Internet). ITU will present a revised proposal for discussion in the EGH online forum.

14. The meeting discussed the **revisions of the ITU *Manual for Measuring ICT Access and Use by Households and Individuals*.** The Manual has been revised and updated to better reflect data collection practices, taking into account lessons learnt during workshops and trainings conducted by ITU across different regions. Revisions were made in the areas of survey methodology, sampling design, data collection standards specific to the core indicators; as well as updates of classifications and examples. A new chapter on national coordination was also added. For each core indicator, tables were created and complemented with more information. They include: definitions of technical terms; clarifications and methodological issues; model questions; disaggregation and classifications; core indicator calculation; and policy relevance.

15. Participants highlighted the relevance of the Manual as a key document helping countries to produce ICT household statistics. They agreed to the proposed changes on the Manual and recommended improvements, including: the need for a conceptual framework defining the information society and the importance to measure it; emphasis on adequate duration of training for interviewers and supervisors; and recommended methods of indicating data quality when disseminating data. Participants also highlighted the importance of topics such as

adequate testing of new questions, improvement of response rates, data dissemination in an attractive way, and adequate planning and coordination.

16. All comments received from EGH members will be integrated in the final revision of the Manual. The tables containing the core indicators will be updated to include the revisions and new core indicators agreed during the EGH Meeting. The draft version of the Manual discussed in the EGH meeting will remain open in the EGH forum for two more months, after which it will be finalized. The revised version of the Manual will be launched at the WTIS 2013 (4-6 December 2013, Mexico City).

17. The meeting agreed that **the outcomes of the EGH meeting will be presented by the Chair of the EGH to the WTIS 2013** (4-6 December 2013, Mexico City).

ANNEX

Revisions of the core ICT household indicators

1. Agreed revisions of existing core indicators

HH1 Households with a radio

Definition of radio

A radio is defined as a device capable of receiving broadcast radio signals, using common frequencies, such as FM, AM, LW and SW. A radio may be a stand-alone device, or it may be integrated with another device, such as an alarm clock, an audio player, a mobile phone or a computer.

Clarifications

- "Household with a radio" means that the radio is available for use of any member of the household at any time. The radio can be owned or not by the household.
- In order for a household to have access to a radio, it should be able to be used, that is, equipment is in working condition.

HH2 Households with a TV

Definition of TV

A TV (television) includes any 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 with another device, such as a computer or a mobile phone.

Clarifications

- "Household with a TV" means that the TV is available for use of any member of the household at any time. The TV can be owned or not by the household.
- In order for a household to have access to a TV, it should be *able to be used*, that is, equipment is in working condition.

HH3 Households with telephone

Clarifications

- "Household with a mobile phone" means that the mobile phone is available for use of any member of the household at any time. The mobile phone can be owned or not by the household.
- A household can be considered as having access to a mobile phone when it is able to receive and make calls from within the house at all times. Countries may adapt this depending on the situation (for example, in remote or rural areas, the garden of the house can be considered part of the house in order to receive the signal).
- In order for a household to have access to a telephone, it should be able to be used, that is, equipment is in working condition.

HH4 Households with a computer and HH5 Individuals using a computer

Definition of computer

A computer refers to a desktop, a laptop computer or a tablet or similar handheld computer. It does not include equipment with some embedded computing abilities, such as smart TV sets, and devices with telephony as a main function, such as mobile or smart phones.

Clarifications

- "Household with a computer" means that the computer is available for use of any member of the household at any time. The computer can be owned or not by the household.
- In order for a household to have access to a computer, it should be able to be used, that is, equipment is in working condition.

HH6 Households with Internet access

Clarifications

- "Household with Internet access" means that the Internet is available for use of any member of the household at any time. The connection and devices can be owned or not by the household.
- In order for a household to have access to Internet, it should be able to be used, that is, equipment and service is in working condition.

HH8 Location of individual use of the Internet

Where did you use the Internet in the last 3 months?

- Home
- Work
- Place of education
- Another person's home
- Community Internet access facility (typically free of charge)
- Commercial Internet access facility (typically paid)
- In mobility (i.e. during a journey in metro, bus, train etc.)

Hh11 Households with access to the Internet by type of access

- Fixed (wired)-broadband
  - *Cable modem*
  - *DSL*
  - *Fibre-to-the-home/building*
  - *Other fixed (wired)-broadband*
- Wireless broadband
  - *Satellite*
  - *Terrestrial fixed wireless (e.g. WiMAX, WiFi (hotspots), microwave)*
  - *mobile phone network (at least 3G, e.g. UMTS) via a handset*
  - *mobile phone network (at least 3G, e.g. UMTS) via a card or USB key (e.g. integrated SIM card)*
- Fixed (wired)-narrowband (Dial-up, ISDN, DSL)
- Mobile narrowband (less than 3G, e.g. CDMA 1x, GPRS, EDGE)

HH9 Internet activities undertaken by individuals

For which of the following activities did you use the Internet in the last 3 months?

- Getting information about goods or services
- Seeking health information (on injury, disease, nutrition etc.)
- Making an appointment with a health practitioner via a website
- Getting information from general government organizations
- Interacting with general government organizations
- Sending or receiving e-mail
- Telephoning over the Internet/VoIP
- Participating in social networks (creating user profile, posting messages, or other contributions to facebook, twitter etc.)
- Accessing chat sites, blogs, newsgroups or online discussions

- Purchasing or ordering goods or services
- Selling of goods or services (e.g. eBay, facebook)
- Using services related to travel or travel-related accommodation
- Internet banking
- Doing a formal online course (in any subject)
- Consult wikis (e.g. Wikipedia), online encyclopaedias or other websites for formal learning purposes
- Listening to web radio
- Watching web television
- Playing/streaming or downloading games, images, videos or music
- Downloading software and applications
- Reading or downloading on-line newspapers or magazines, electronic books
- Looking for a job or sending a job application
- Participating in professional networks (creating user profiles, posting messages or other contributions to LinkedIn, Xing etc.)
- Teleworking
- Managing personal/own homepage
- Uploading self/user-created content (text, images, photos, videos, music, software etc.) to any website to be shared
- Blogging (maintaining or adding content to a blog)
- Posting opinions on civic or political issues via websites (e.g. blogs, social networks, etc.)
- Taking part in on-line consultations or voting to define civic or political issues (e.g. urban planning, signing a petition)
- Using storage space on the Internet to save documents, pictures, music, video, other files (e.g. Google Drive, Dropbox, Windows Skydrive, iCloud, Amazon Cloud Drive)
- Using software run over the Internet for editing text documents, spreadsheets or presentations (e.g. Google Docs, Office 365)

2. Agreed new core indicators

The names of the indicators, their definitions and response categories need to be refined and further elaborated.

HH13 Households with multichannel TV

Does this household have access to the following television services at home?

- Cable TV
- Direct-to-home satellite services
- Internet-protocol TV
- Digital terrestrial TV

HH14 Barriers to household Internet access

Why does this household not have Internet access?

- Don't need the Internet (not useful, not interesting, lack of local content)
- Have access to the Internet elsewhere
- Lack of confidence, knowledge or skills to use the Internet
- Cost of equipment too high
- Cost of the service too high
- Privacy or security concerns
- Internet service is not available in our area
- Internet service is available but it does not correspond to our needs (e.g. quality, speed)
- Cultural reasons (e.g. exposure to harmful content)

HH15 ICT skills of individuals

Which of the following computer-related activities have you carried out in the last 3 months?

- Copying or moving a file or folder
- Using copy and paste tools to duplicate or move information within a document
- Sending e-mails with attached files (document, picture, video)
- Using basic arithmetic formulas in a spreadsheet
- Connecting and installing new devices (e.g. a modem, camera, printer)
- Finding, downloading, installing and configurating software
- Creating electronic presentations with presentation software (e.g. slides) including e.g. images, sound, video or charts
- Transferring files between computer and other devices
- Writing a computer programme using a specialized programming language

HH16 Household ICT expenditure

- Annual amount expended in ICT services (including fixed and mobile telephone, Internet, including in cybercafes, paid TV),
- Annual amount expended in ICT equipment (including desktop, laptop, tablet, mobile phones, e-book reader, MP3/4 players etc.).

Clarifications

- Information can be collected from household expenditure surveys or specific ICT surveys and can be collected with a reference period of the previous month or last quarter, to calculate annual values.

- Categories to be considered will be revised according to the Classification of Individual Consumption according to Purpose (COICOP).

3. Proposed new indicators left for further discussion in the EGH forum

1. Individuals using the Internet by type of portable device and network used to access the Internet

Did you use any of the following portable devices to access the Internet in the last 3 months?

a) Mobile phone (or smart phone)

      if yes to a)   a1) via mobile phone network

                          a2) via wireless network (e.g. WiFi)

b) Portable computer (e.g. laptop, tablet)

      if yes to b)   b1) via mobile phone network, using USB key or (SIM) card or mobile phone or smart phone as modem

                          b2) via wireless network (e.g. WiFi)

c) Other portable devices

2. Internet security

Did you experience any of the following security incidents when using the Internet in the last 3 months?

- Catching a virus or other computer infection (e.g. worm or Trojan horse) resulting in loss of information, time or damaging your device
- Abuse of personal information sent on the Internet and/or other privacy violations (e.g. abuse of pictures, videos, personal data uploaded on community websites)
- Financial loss as a result of receiving fraudulent messages (phishing) or getting redirected to fake websites asking for personal information (pharming)
- Financial loss due to fraudulent payment (credit or debit) card use

3. Children and youth online protection

Have any of the children living in this household ever been subject to any of the following victimisation forms?

- Cyberbullying
- Exposure to a medium that might foster harmful behaviour on the part of children
- Exposure to pornography
- Child solicitation or grooming
- Online encounters resulting in offline meetings

- None of the above
- Don't know

Did you take any of the following actions about your child's use of Internet?

- Agreeing house rules about use of Internet and personal devices
- Installing an Internet content filter
- Supervising or monitoring child(ren)'s use of Internet
- Allowing the child(ren) to access Internet only from a public area in the house
- Educating child(ren) about safe and appropriate Internet use
- Other actions (please specify)
- No action taken