

6th Meeting of the ITU Expert Group on ICT Household Indicators (EGH)

Geneva, Switzerland, 18-19 October 2018

SUMMARY

1. The 6th Meeting of the ITU Expert Group on ICT Household Indicators (EGH) took place in Geneva, Switzerland, on 18-19 September 2018, back-to-back with the 9th Meeting of the Expert Group on Telecommunication / ICT Indicators (EGTI), which was held on 16-17 October 2018.
2. There were 124 participants attending the meeting, including experts from national statistical offices, ministries, and regulators from 50 countries, and experts from ITU-D Sector Members, research institutions, international and regional organizations, and the ICT industry, namely: China Mobile, China Telecommunications Corporation, China Unicom, Empresa de Telecomunicaciones de Cuba S.A. (ETECSA), INTEL, Magticom (Georgia), African Civil Society for the Information Society, Consortium d'Appui aux Actions pour la Promotion et le Développement de l'Afrique, European Commission, World Wide Web Foundation, African Telecommunication Union, London School of Economics, DevStat and the OECD. In the absence of the EGH Chair and Vice-chair, the meeting was chaired by the previous EGH Chair, Mr. Alexandre Barbosa, Head of the NIC.br's Regional Center for Studies on the Development of the Information Society (CETIC.br), Brazil.
3. The topics discussed in the 6th EGH meeting were those identified by the 5th EGH meeting and recommended by the 15th WTIS (held in Hammamet, Tunisia, on 14-16 November 2017). The following topics were discussed on the EGH forum during 2018:
 - Improving the measurement of ICT skills;
 - Review of indicator HH8 on location of Internet use;
 - The collection of data on e-commerce through ICT household surveys;
 - The collection of data on the Internet of Things through ICT household surveys;
 - The collection of data on child online protection through ICT household surveys;
 - The collection of data on e-waste through ICT household surveys; and
 - The collection of data on cybersecurity through ICT household surveys.
4. The meeting discussed the contributions received in the EGH online forum between April and September 2018. Background documents on key topics of the agenda, namely ICT skills and the location of Internet use, had been prepared and disseminated to all EGH members in advance of the meeting. The background documents aimed to provide relevant information to be used by EGH members and to support the debate and decisions to be taken during the meeting. The documents were prepared by the two subgroups that were created by the 5th EGH meeting to advance these topics and make proposals to the whole EGH.

5. The discussions focused on the relevance of ICT statistics to the policy-making process. Moreover, the meeting also focused on ways forward in advancing the measurement and data collection on the proposed items. The meeting further discussed the future work of EGH, identifying indicators and topics that required further review and discussion related to demand-side indicators, including measuring ICT access, use and skills by households and individuals.
6. The first two substantive agenda items were concerned with improving the measurement of ICT skills. The 5th EGH meeting had agreed that existing indicators HH15 (Individuals with ICT skills, by type of skills) and HH9 (Individuals using the Internet, by type of activity) could be used to improve the measurement of ICT skills. A subgroup was created to work on ICT skills measurements based on ICT household data. The first of the two agenda items dealt with the review of HH9. The Chair introduced the subject and Statistics Canada presented the relevant part from the document prepared by the subgroup: [Background Document 1 - ICT Skills Measurement](#). A number of proposals were made for categories that can be removed. In addition, indicators have been classified by type of activity, in line with other international documentation, to enhance readability. Annex A summarises the proposals. ITU will produce the revised methodological indicator page for HH9 and present this at WTIS.
7. The second agenda item on ICT skills measurement dealt with the revision of indicator HH15: Individuals with ICT skills, by type of skills. There were two presentations. The first one was a presentation of the EU Digital Competence Framework for Citizens (DigComp) by the European Commission. Statistics Canada then presented the remainder of [Background Document 1 - ICT Skills Measurement](#). The meeting agreed to adopt the European Commission's Digital Competence Framework for Citizens as framework to guide the monitoring of skills development and measurement of skills indicators on the ITU model questionnaire. Furthermore, device-agnostic wording for HH15 was adopted to recognize that the skills being measured are not limited to computer use and that activities associated with the skills can be developed and demonstrated through a continually growing number of devices. Amendments to the response categories of HH15 were agreed to reduce redundancy and fill data gaps in the skills that are currently measured (see Annex B). A redefinition of the target population was proposed to ensure appropriate measurement amongst all Internet users, harmonized with HH9. ITU will produce the revised methodological indicator page for HH15 and present this at WTIS.
8. The subgroup did not address the aggregation of categories into one skills index or score. The subgroup also recommended that additional indicators need to be developed to provide measures of the following:
 - Ability to evaluate the reliability of content that is found online (e.g. fake news).
 - Awareness of the use of devices and/or the Internet as they relate to personal well-being (e.g. cyberbullying, addiction and social exclusion).

- Ability to recognize skills gaps and an individual's need for upskilling in the digital domain.

The meeting agreed that the subgroup will continue to work on these two topics and report back at the next EGH Meeting.

9. The agenda item on the review of indicator HH8 on location of Internet use was introduced by the Chair. The 5th meeting of the EGH had agreed to create a subgroup within EGH to review indicator HH8: Proportion of individuals using the Internet, by location. The subgroup was in particular asked to look at categories community Internet access facility, commercial Internet access facility and in mobility. The subgroup had prepared [Background Document 2 - Location of Internet use](#), which was presented by Brazil. The meeting agreed to the proposals made by the subgroup to revise the categories community Internet access facility, commercial Internet access facility and in mobility. ITU will produce the revised methodological indicator page for HH8, clarifying some of the questions raised during the meeting and present this at WTIS.
10. The next agenda item discussed e-commerce statistics. The 5th meeting of the EGH had decided to include additional e-commerce indicator breakdowns in the ITU list of ICT household indicators. That meeting also agreed to open a discussion item in the EGH forum on additional indicators on e-commerce, i.e. frequency of e-commerce. China then presented an overview of e-commerce statistics in their country. The meeting concluded that at this point there is no need to add additional e-commerce data to the ITU questionnaire, but due to the high policy relevance, the topic will remain open on the EGH Forum.
11. Item 6 of the EGH meeting was concerned with the collection of data on the Internet of Things and child online protection through ICT household surveys. These items were discussed as a result of the 5th meeting of the EGH, which had decided to open a discussion item in the EGH forum on these issues. The OECD presented their perspective on Measuring the Internet of Things, and Brazil presented how they collect household statistics on child online protection.
12. With regards to the Internet of Things, the meeting concluded that it will become more and more important over time. Measurement should take into account supply side and demand side statistics. Household surveys can only provide a limited view and therefore should have a limited scope. No data collection is proposed, but the topic will remain open on the online forum in conjunction with the same topic on the EGTI Forum.
13. The meeting also concluded that child online protection is a highly important topic for policymakers, industry and society in general, but its implementation within household surveys is complex. There are references that should be considered as methodological frameworks, such as Global Kids online and ITU COP Guidelines and countries are encouraged to share their data collection experiences on the EGH Forum.

14. The collection of data on e-waste and cybersecurity through ICT household surveys was the 7th item on the agenda. On behalf of the Global E-waste Statistics Partnership, the ITU gave an overview of various types of e-waste statistics as developed by the Partnership. This was followed by a country example from Canada. The meeting acknowledged the guidelines developed by the Global E-waste Statistics Partnership and agreed that the topic would remain open on the EGH Forum.
15. Uganda then presented their experience with the collection of data on cybersecurity through an ICT household survey. The meeting concluded that cybersecurity is an important topic and it would be relevant to collect data on the topic. However, it involves questions that are either technical or sensitive in nature, which makes them hard to respond to in household ICT surveys. The topic will remain open on the EGH Forum.
16. The EGH agreed on the following topics for future work in 2019:
 - Continue the work of how to improve the measurement of ICT skills (the subgroup will continue to work);
 - Better measuring Internet users;
 - Community connectivity indicators;
 - Developing questionnaire modules for new areas of measurement (e.g. cybersecurity, IoT, e-waste, mobile money/financial inclusion);
 - Keep discussion items in the EGH forum open on:
 - a. how to collect data on cybersecurity through ICT household surveys;
 - b. how to collect data relating to E-waste through ICT household surveys;
 - c. data relating to child online protection; and
 - d. how to collect data relating to Internet of Things (IoT);
 - Continue experience sharing in the EGH forum on:
 - a. Methodological issues, including experience sharing on how to ensure that Internet use data are collected properly using the definition and methodology included in the ITU Manual for Measuring ICT Access and Use by Households and Individuals;
 - b. implementing household surveys and disseminating results using data visualization;
 - c. National coordination; and
 - d. Big data issues.
17. The conclusions of the 6th EGTI meeting will be presented at the 16th World Telecommunication/ICT Indicators Symposium (WTIS), which will take place in Geneva, Switzerland, from 10 to 12 December 2018.
18. The next meeting of the EGH will take place in the week of 16-20 September 2019 in Geneva.

Annex A: Proposed revision of indicator HH9: Individuals using the Internet, by type of activity

The subgroup on ICT skills measurement has made the following proposals for the revision of indicator HH9: Individuals using the Internet, by type of activity.

Current HH9 response category	Proposed potential for exclusion or modification
Access to Information	
1. Getting information about goods or services	There is little difference in the application of skills between this task and 9.1, 9.2, 9.15, and 9.20.
2. Seeking health information (on injury, disease, nutrition, etc.)	(See comment in 9.1) <i>Seeking health-related information (on injury, disease, nutrition etc.)</i>
4. Getting information from general government organizations	(See comment in 9.1)
9. Accessing chat sites, blogs, newsgroups or online discussions	<i>Accessing or posting opinions via any device on chat sites, blogs, newsgroups or online discussions (e.g. on civic or political issues, general interest topics) that may be created by any individual or organization</i> Amended to include activity elements from 9.26, which would be eliminated.
12. Using services related to travel or travel-related accommodation	Overlap with skills needed for 9.3. Furthermore, unsure of overall relevance globally; this may be too restrictive to be a skill indicator. There may still be interest to keep the indicator as an activity worth measuring.
19. Downloading software or applications (includes patches and upgrades, either paid or free of charge)	This indicator could be deleted based on its overlap with HH15.6
20. Reading or downloading online newspapers or magazines, electronic books (includes accessing news websites, either paid or free of charge)	<i>Reading or downloading newspapers, magazines or electronic books in a digital format</i> This should be clear that it includes access through websites and/or apps regardless of device.
Communication and collaboration	
3. Making an appointment with a health practitioner via a website	<i>Making an appointment with a health practitioner via the Internet (i.e. website, app, software)</i> Overlap with skills required to undertake 9.3 and 9.12 in terms of using online calendars and assessing availability, and with 9.5 due to health practitioners, at least in many cases and for many countries, being government organizations, and with 9.21 in other ways.

5. Interacting with general government organizations (downloading/requesting forms, completing/lodging forms online, making online payments and purchasing from government organizations etc.)	(See comment in 9.3)
6. Sending or receiving e-mail	Candidate for deletion: overlaps with skills needed to perform 9.6 and 9.7; overlaps with 15.3; and, requires a lower level of skill than 15.3
7. Telephoning over the Internet/VoIP (using Skype, iTalk, etc.; includes video calls via webcam)	Overlap with skills needed to perform 9.6, 9.7, and 15.3, falling into the DigComp framework's section 2.2 (interacting through digital technologies). While overlap exists, however, skills for this activity would seemingly different, or need to be higher, perhaps, justifying this answer option's continued inclusion.
8. Participating in social networks (creating user profile, posting messages or other contributions to Facebook, Twitter etc.)	Overlap with skills needed to perform 9.8, 9.22, 9.24, and 9.26. A slight modification, perhaps, combining attributes of all, may result in one overarching indicator; for example, " <i>participating in social, professional, or academic networks via websites or apps (creating profiles, posting messages, sharing content, and providing opinions)</i> ".
26. Posting opinions on civic or political issues via websites (blogs, social networks, etc.) that may be created by any individual or organization	Overlap with skills needed to perform 9.8, 9.22 and 9.24. Furthermore, activity closely linked with that of HH9.9. HH9.9 amended to reflect these activities.
27. Taking part in online consultations or voting to define civic or political issues	<i>Taking part in consultations or voting via internet to define civic or political issues (urban planning, signing a petition, etc.)</i>
Electronic commerce, trade, and transactions	
10. Purchasing or ordering goods or services	No change
11. Selling goods or services (via eBay, Mercado libre, Facebook, etc.)	There may be a need to update the platforms used as examples (i.e. Instagram)
13. Internet banking	<i>Electronic financial transactions (e.g. online banking, money transfers, exchange of crypto-currencies)</i> Proposed to expand the scope of this question to ensure financial transactions without traditional bank involvement. Identified as particularly important for developing countries.
Learning	
14. Doing a formal online course (in any subject)	Proposal to drop the word 'formal' from the response category
15. Consulting wikis (Wikipedia etc.), online encyclopedias or other websites for formal learning purposes	(See comment in 9.1). Also, proposal to drop the word 'formal' from the response category.

Professional life	
21. Looking for a job or sending/submitting a job application (includes searching specific web sites for a job; sending/submitting an application online)	No change
22. Participating in professional networks	Overlap with skills needed to perform 9.8, 9.24, and 9.26. There may need to provide examples (e.g. LinkedIn)
Digital content consumption	
16. Listening to web radio (either paid or free of charge)	Overlap with skills needed to perform 9.17 and 9.18; does not map well to the skills framework and should only be maintained if determined to be a policy-relevant activity.
17. Watching web television (either paid or free of charge)	Overlap with skills needed to perform 9.16 and 9.18; does not map well to the skills framework and should only be maintained if determined to be a policy-relevant activity.
18. Streaming or downloading images, movies, videos or music; playing or downloading games (either paid or free of charge)	Overlap with skills needed to perform 9.16 and 9.17; does not map well to the skills framework and should only be maintained if determined to be a policy-relevant activity.
Digital content creation	
23. Managing personal/own homepage	This question has mostly become obsolete as fewer individuals maintain a blog or personal homepage making it a candidate for deletion. A more interesting question from a skills perspective may be one related to managing one's personal identity online
24. Uploading self/user-created content to a website to be shared (text, images, photos, videos, music, software, etc.)	Overlap with skills needed to perform 9.8, 9.22 and 9.26
25. Blogging: maintaining or adding contents to a blog	The activity and skills covered in HH9.24 have overtaken blogging as an activity and this could be dropped
Cloud Computing	
28. Using storage space on the Internet to save documents, pictures, music, video or other files (e.g. Google Drive, Dropbox, Windows Skydrive, iCloud, Amazon Cloud Drive)	No change
29. Using software run over the Internet for editing text documents, spreadsheets or presentations	Overlap with the skills needed to perform HH15.7, which many make it a candidate for deletion. The activity as it relates to Internet, however, may still be relevant for measurement and may be linked to security and trusting online service providers.

Annex B: Proposed revision of indicator HH15: Individuals with ICT skills, by type of skills

The subgroup on ICT skills measurement has made the following proposals for the revision of indicator HH15: Individuals with ICT skills, by type of skills.

HH15 answer-set formulation: computer-related activities	Proposed HH15 answer-set formulation: device-agnostic activities
1. Copying or moving a file or folder	The skill measured by this indicator overlaps with 15.2 below and this can be dropped
2. Using copy and paste tools to duplicate or move information within a document	<i>Using copy and paste tools to duplicate or move data, information and content in digital environments (e.g. within a document, between devices, on the cloud)</i>
3. Sending e-mails with attached files (e.g. document, picture, video)	<i>Sending messages (e.g. e-mail, messaging service) with attached files (e.g. document, picture, video)</i> It may be worth providing a non-Internet related example that is clearer than 'messaging service' to ensure offline messaging via digital devices is considered by respondents.
4. Using basic arithmetic formulae in a spreadsheet	No change
5. Connecting and installing new devices (e.g. a modem, camera, printer)	Connecting and installing new devices (e.g. a modem, camera, printer) through wired or wireless technologies
6. Finding, downloading, installing and configuring software	<i>Finding, downloading, installing and configuring software and apps</i>
7. Creating electronic presentations with presentation software (including text, images, sound, video or charts)	From a skills perspective, this overlaps with HH9.29. Therefore, HH9.29 is proposed for deletion.
8. Transferring files between a computer and other devices	<i>Transferring files or applications between devices (including via cloud-storage)</i> Redundancy may still remain between 15.8, 15.2 and 15.3.
9. Writing a computer program using a specialized programming language	<i>Programming or coding in digital environments (e.g. computer software, app development)</i> Proposed to add further detail on the definition of a specialized programming language. While this language may suffice for this documentation, countries should provide this detail as they see fit.
New: Modification of security settings	<i>Setting up effective security measures (e.g. strong passwords, log-in attempt notification) to protect devices and online accounts</i>
New: Changing privacy settings to protect personal information	<i>Changing privacy settings on your device, account or app to limit the sharing of personal data and information (e.g. name, contact information, photos)</i>