Final report

October 30, 2019

Regional Training Workshop on Indicators ITU information and communications technology (ICT) for Latin America
28 to 29 October 2019
Mexico City, Mexico

Final report

The workshop was held from 28 to 29 October 2019 in Mexico City, Mexico. The workshop was organized by the International Telecommunication Union (ITU), the Government of Mexico being the host through the Mexican Agency for International Development Cooperation (AMEXCID) and the Federal Institute of Technology (IFT).

The workshop program is attached hereto as Annex 1.

The workshop was attended by over 50 participants representing ministries, regulators and national statistical offices (NSOs) from 11 countries. 3 countries were represented both by regulatory / ministry agencies and national statistics office. Our host, Mexico, offered the possibility to follow the workshop remotely. On the first day there were more than 2,500 people connected remotely to the workshop and the second day more than 2,000 people connected.

The list of participants and their affiliations face is attached hereto as Appendix 2.

Workshop objectives

The main objectives of the workshop were:

- Identify ways to improve the availability of statistics on Information Technology and Communications (ICT) in the countries of the region through the adoption of a basic list of globally accepted indicators complemented with the needs of national data; and through improving national coordination among stakeholders.

- It identify ways to improve the quality of the data collected by adherence to the definitions, standards and methodologies as described in the ITU Handbook for administrative data; and in the manual of ICT indicators in homes.

- Discuss data collection of the ITU: cycling, questionnaires and scheduling; and the role of national focal points (NFP) in this context.

- Generate active participation in the two ITU experts groups of on indicators and updating of the work of these groups in ICT in 2019.

- Inform participants of the status of work on the ICT Development Index and update on the ITU initiative on big data.

At first, it was stressed that the design, monitoring and evaluation of public policies based on evidence and collaborative regulation requires the effective use of statistics.

1. National coordination

In session 2 the presentation "Data collection on ICT globally: overview of ITU work on ICT statistics" was made and in session 8 the presentation "How to report survey data ITU" was made.

It was said that data collection and dissemination of ICT involve a number of different stakeholders at national level: national statistical offices (NSOs), market regulators, telecommunications ministries and agencies responsible for ICT policy. The participants stressed that coordination between stakeholders can: avoid duplication in statistical work, reduce the response burden, close data gaps, and can improve the flow and exchange of data at the national level and with the ITU and other International organizations.

In this regard, it was recognized that the data submission to the ITU needs to be analyzed and improved, with greater involvement of National Focal Points. ITU stressed that the dates set for responses are fixed to allow checking of the data received and to produce reports efficiently.

2. Statistical integration of telecommunications acquis IFT

Mr. Pedro Terrazas, General Coordinator of Strategic Planning, IFT, spoke about the "Integration of the statistical IFT telecommunications archive".

He mentioned that since the establishment of the new regulator of telecommunications in Mexico (IFT), with the reform and the new Law of 2013, IFT has created one of the best collection systems and data use in the sector, both originating from operators (supply) and originating in surveys in collaboration agreements with the national statistical office (INEGI).

Mr. Terrazas explained that the draft Guidelines objective is to establish the conceptual and methodological framework to have timely and reliable indicators to monitor the performance of the Telecommunications Sector in Mexico. For that, it defines in particular:

- The methodology and periodicity which operators in the telecommunications sector must comply with the Institute. This includes definitions for each of the wholesale and retail telecommunications services, thresholds to provide

information in accordance with the operators' services market level and information they need to deliver based on these, deadlines and levels of confidentiality of information.

- The eFormats by which operators in the telecommunications sector will comply. They must be submitted in text format separated by commas (English comma-separated values, CSV), they are accompanied by filling instructions and specific details of the collected indicators (definition, unit of measure, etc.). The whole process of filling, collection, validation and publication of data collected from operators is done by digital procedures.

- Catalog Key Information. Establishes the keys to be used by operators in the eFormatos that require, in order to classify and standardize common data elements (geographic, technical, commercial, etc.).

Given that IFT has over 4 years of experience in the collection and use of data for operators, IFT has raised, and is under public consultation, a simplification in the data collection industry. It proposes to define certain thresholds, based on the size of the operator on the market as a whole, to simplify certain reporting requirements and focus on operators with significant weight, which covers over 95% of the activity of the sector in any individual businesses.

On the Internet:
http://www.ift.org.mx/industria/consultas-publicas/consulta-publica-sobre-el-anteproyecto-de-lineamientos-que-establecen-la-metodologia-la-periodicidad
You can read the public consultation of the project.

One aspect of particular importance to note is the collaboration that has managed IFT with the National Statistics Institute (INEGI) in Mexico. Since five years ago that IFT co-financing the development costs of the annual survey on "Use of ICT in households and individuals" and helps the INEGI in the definition of items and services to be measured via household surveys. This collaboration has borne clear fruit as Mexico, INEGI and IFT have now shared extensively, samples and coverage of the survey in terms of deployed and adopted services.

3. Indicators from the point of view of supply

Iñigo Herguera, ITU expert, made the presentations "Indicators on Fixed Telephony Network, Mobile Telephony Network and International Bandwidth" and "Indicators on Fixed Broadband and Mobile, and Broadband Traffic "on sessions 4 and 5 respectively.

He highlighted that bundles indicators refers to services that are presented as packaged. Two types of indicators are collected from 2017: (1) the "dual" bundle composed of a subscription to fixed telephony and broadband access, and (2) most common "triple" bundle which refers to subscriptions that include fixed telephony, fixed broadband and pay TV services.

In discussing the problems that emerge when operators offered the same commercial offer, with a single billing, he presented not only the (traditional) basic services that define the scope of the packages, but also offer some nontraditional additional service, as agents offering over-the-top (OTT). Examples include online music services, video- calls online, access and use of social networking and messaging. The business practices of operators and OTT agents are varied, and heterogeneous across countries, and is a reality that practices such as Zero- rating or joint offering traditional services with OTT services is very common in a number of countries.

Today the use or penetration of OTT services are not measured from the supply side. The regulatory authorities obtain information directly from telecom operators, ie companies that offer a service which should be recorded as operator authority. Service providers of over-the-top (OTT), meanwhile, are agents that offer services via applications on the open Internet layer and are not, in principle, considered telecommunications operators, so they have no obligation to register as such, and to assume the obligations that other operators do take (such as the obligation to provide information about its business lines, subscribers, revenue, prices and volumes sold). Although in some cases OTT may be selling a similar service offered by traditional operators, but has in most cases no obligation to report any information to the regulator.

Session 5 highlighted the recently approved indicators by the Expert Group on Indicators of Telecommunications / ICT (EGTI) on the availability of spectrum for commercial use. Both were approved in September 2019 to be collected by ITU, namely indicators on: (1) allocated spectrum, ie, made available for commercial use, and (2) assigned spectrum, effectively transferred through license agreement or grant and through some allocation mechanism (competition, auction or other) specific operators for the launch of the commercial offerings.

The discussion raised the limitations of these two recently approved indicators in measuring practices that can result in a lower usefulness of the two presented indicators. As an example practices such as assigning all spectrum available to a single operator, or the possibility that a spectrum capacity already assigned to one or more operators is not truly being used nationally, but only in certain locations of large population density.

It is clear that these two proposed indicators do not measure aspects of post-competition or the efficient use or not licensed spectrum or possible events in the secondary market. But it

is also a fact that so far there has not been any global indicators of spectrum availability for commercial use similar to these two new indicators.

4. Indicators from the point of view of demand (household survey).

The ITU expert, José Luis Cervera, made presentations on indicators covering "ICT Access and use by households and individuals", including those in the ICT development index and the Sustainable Development Goals (SDGs) "on the sessions 6 and 7 respectively.

The review process of the ITU Handbook[1] for measuring access to and use of ICT by households and individuals was presented, which will end in 2019. This review will include new indicators agreed by the EGH between 2014 and 2019 (HH17 to HH23 indicators), modifications to the indicators already included in the previous edition, and the model questionnaire, updated, offered to countries to collect household data. This questionnaire can be adapted to the needs of national information while maintaining international comparability.

One of the aspects mentioned and discussed by the participants was the coordination between institutions (NSOs, ministries and regulators) for carrying out surveys, drawing on one hand the technical knowledge about technology (ministry, regulator) and experience in design and analysis survey (NSOs).

It was commented the fact that the ICT household survey, it is not in fact, the best place to capture information on spending on ICT goods and services (HH16 indicator), and its most viable uptake of these can be a specialized data-Income household expenditure survey.

It was emphasized that the measurement of Internet users, refers to those who use the open Internet, leaving out users of "walled gardens". "Walled gardens" refer to protected digital areas, where a person uses an application and proves her identity while the open Internet works with complete anonymity and can access different content.

Countries were invited to participate in the revision of the Manual, accessing electronic forum EGH[2] and providing examples of good practice in their countries.

5. Presentation of the case of Brazil: multi-year program of surveys and studies on access and use of ICT

In Session 10, Ana Laura Martinez, Coordinator of International Cooperation networks Regional Center for the Development of Information Society (Cetic.br/NIC.br) delivered the

[1] Currently available in Spanish, version 2014, https://www.itu.int/pub/D-IND-ITCMEAS-2014.
[2] Accessible under registration https://www.itu.int/net4/ITU-D/forum/expertgrouponhouseholds/forum/yaf_login.aspx?returnurl=%2fnet4%2fITU-D%2fforum%2fexpertgrouponhouseholds%2fforum%2f

"Presentation of the case of Brazil: multi-year program surveys and studies on access and use of ICT ".

The multi-year program of statistical operations carried out to measure access and use of ICT in Households and by Individuals of Cetic.br, were carried out following ITU statistical standards.

She emphasized the importance of inter-agency coordination for the implementation of surveys as part of the ecosystem of statistical data for each country; also multisectoral working experience that in the case of Brazil, is mainly embodied in the Group of Experts that accompanies each edition of the survey was shared. The aims and dimensions covered by the survey, sampling criteria, a selection of relevant data and some of the future challenges identified were presented. Moreover, communication strategies and dissemination of data, highlighting Cetic.br open data policy, in which each year anonymized survey microdata are released were shared.

Finally, the possibilities of technical assistance for capacity building for measuring ICT access and use were offered by Cetic.br to Latin American and the Caribbean countries.

Recommendations:

<u>As for the purpose of having statistics or indicators:</u>

- It was proposed to request the ITU to make a compilation of cases among countries that demonstrate effective use of IDI or its individual indicators for the design, monitoring and evaluation of public policies or regulation or comparability with other countries or internally and make available their findings.
- Increasing registration and active participation of countries in the region in the work of the Expert Group on Indicators of Telecommunications / ICT (EGTI) and the Expert Group on ICT indicators in households (EGH) (whose secretariat is exercised by the Statistics division) and attend meetings and workshops on ICT indicators.
- It was stressed that the availability of indicators at the national level, following the definitions set globally, not only facilitates public policy and regulation based on evidence, but allows international comparisons.

<u>Regarding the coordination among national entities:</u>

Coordination among national stakeholders should be strengthened in order to improve the production and dissemination of ICT data and reduce data gaps. The National Statistics Office (NSO) should play an active role in this regard.

- When there is a collegial body that governs the statistics as an interagency mechanism (National Statistical Council or similar), the responsible Ministry and the regulator ICT / Telecommunications industry should be included.
- The inter-agency mechanism mentioned in the previous paragraph, should regularly bring together all stakeholders involved in ICT statistics to analyze data priorities based on policy needs and manage and harmonize production and dissemination of data.
- Administrations should have a Statistical Focal Point and the Administration Main Focal Point should be aware.
- The statistical focal point of the Administration should periodically confirm the names and contact details of the focal points of relevant entities when a request for information is received.
- The statistical focal point of the Administration should follow up requests for information.
- Relevant entities should designate the person responsible for sending the country's response to ITU, copying to other relevant entities.
- This designated person is responsible for the communication between the ITU and the country for the validation process and contrast data reported.
- It is requested to ITU when receiving a country's response to acknowledge its reception.
- Inform and update ITU of changes to the National Focal Points (NFPs) and their contact details because as they are the ones receiving ITU questionnaires: The PFN (a) regulator / ministry b) NSO).
- ITU will put to the consideration of the ITU experts groups the convenience of listing the entities and the focal points in Statistics in the Statistics webpage in a similar manner as it is made for the Global Directory.

<u>As for data collection from the supply side (telecom indicators):</u>

- Use different levels of confidentiality for publishing data (aggregated for general publications, anonymized microdata for researchers)
- Build a database that allows a unified data collection process with set periods, reviewing the regulatory burden, for example removing repetitive information requirements.
- As a mechanism to encourage response to questionnaires, provide operators with customized reports based on their data and market aggregates.

<u>As for data collected from household surveys (demand side):</u>

- Encourage exchange of experiences between countries on the results of the pilot surveys. ITU can facilitate this exchange.

- Within the training of interviewers, develop a manual for interviewers to explain the ICT concepts and the correct use of the model questionnaire.
- Adapt the model questionnaire proposed by the ITU to national specificities, respecting international comparability by using the same definitions of indicators and response categories. In this regard, the use of the proposed classifications for households (rural / urban, household composition) and individuals (sex, age, education level, occupation) allow us to disaggregate as needed to study digital divide.
- Obtain from operators the list of their commercial offers to design questions related to connection types available, ICT services, etc.
- Make available to universities and researchers anonymized microdata from household surveys.
- To collect data from people with disabilities would be advisable to use, instead of the Household Survey, the last census and from there, design surveys for a specific target population.
- Place data in absolute values of breakdowns in the ITU data collection form.

<u>As for capacity building:</u>

To request the ITU to develop online content on indicators and make it available taking advantage of the "ITU Academy" platform.

-End of report-

Appendix 1

Regional Training Workshop on Indicators ITU information and communications technology (ICT) for Latin America

Secretary of Foreign Relations, Plaza Juárez 20, Col. Centro

Mexico City, Mexico, 28 with October 29, 2019

Preliminary Agenda

Day 1, October 28, 2019	
8:30 to 9:00	**Registration of participants**
09:00 - 09:30	**Opening ceremony** • Master Mariana Arenzana Anaya, Director for Economic Development and Infrastructure on behalf of the Director General: Icela teacher Alejandra Martínez Rodríguez, Project Integration and Development of Mesoamerica, AMEXCID • Sosthenes Commissioner Diaz, IFT • Miguel Alcaine, ITU
09:30 - 09:45	**Session 1: Introduction and rationale** This session will address the following topics: • Introduction to Workshop objectives • Practical information for participants *Speaker: Miguel Alcaine, ITU*
9:45 to 10:15	**Group Photo and Coffee Break**
10:15 to 11:15	**Session 2: ICT data collection worldwide: overview of ITU work on ICT statistics** This session will address the following topics: 1.1 Collection and validation of global ICT administrative statistics and household 1.2 Development of internationally comparable ICT indicators 1.3 Dissemination of ICT trends and analysis *Speaker: Miguel Alcaine, ITU*
11:15 to 12:30	**Session 3: Integration of statistical IFT telecommunications acquis** The IFT was generating present how the process of collecting and publishing information Institute. While the Bank of Information Technology (BIT) is an important

	part regarding the publication of information, the BIT is within a larger process that we believe can serve as reference to other regulators. *Speaker: Pedro Terrazas, General Coordinator of Strategic Planning, IFT* *Moderator: Iñigo Herguera, ITU Expert*
12:30 to 14:00	lunch
2:00 p.m. to 3:00 p.m.	**Session 4: Indicators Network Fixed Telephony, Mobile Telephony Network and International Broadband** This session will address the following topics: 1.4 Fixed Telephony Indicators 1.5 Mobile Phone indicators 1.6 International Broadband indicators 1.7 Country Experiences *Speakers: Iñigo Herguera, ITU Expert* and experts from countries
15:00 to 15:30	Coffee break
15:30 to 17:00	**Session 5: Indicators Fixed Broadband, Mobile and Broadband Traffic** This session will address the following topics: 1.8 Fixed Broadband indicators 1.9 Mobile Broadband indicators 1.10 Traffic indicators 1.11 Country experiences *Speakers: Iñigo Herguera, ITU Expert* and experts from countries

Day 2, October 29, 2019	
9:00 to 10:15	**Session 6: Access to and use of ICT by households and individuals** This session will address the following topics: 1.12 Overview of household statistics on access and use of ICT 1.13 Collaboration and coordination for household statistics on household ICT 1.14 socio-demographic breakdown: Why and How 1.15 Model questionnaire ITU for ICT household surveys *Speaker: José Luis Cervera, ITU Expert*
10:15 to 10:45	Coffee break
10:45 to 12:30	**Session 7: ICT Indicators and ICT Households included in the IDI and Sustainable Development Goals (SDGs)** This session will address in particular the following indicators: 1.16 HH4: Percentage of households with a computer 1.17 HH6: Percentage of Households with Internet Access 1.18 HH7: Percentage of people using internet 1.19 HH15: People with ICT skills, by type of 1.20 HH18: people owning mobile phone 1.21 Country experiences *Speakers: José Luis Cervera, ITU Expert* and experts from countries
12:30 to 14:00	lunch
2:00 p.m. to 2:30 p.m.	**Session 8: How to report survey data ITU** This session will address the following topics: **1.22** Practical considerations: timing of data collection processes, verification and validation **1.23** Avoid common mistakes in reporting survey data *Speaker: Iñigo Herguera, ITU Expert*
14:30 to 15:30	**Session 9: Update on the Expert Groups of the ITU (EGTI / EGH)** *Speaker: José Luis Cervera, ITU Expert*
15:30 to 16:00	Coffee break
16:00 to 17:00	**Session 10: Presentation of the case of Brazil: multi-year program of surveys and studies on access and use of ICT** - Inter-institutional collaboration and multi-annual programming of statistical operations on ICT - Modern techniques for disseminating ICT statistics - possibilities offered by CETIC.br technical assistance to countries in the Latin American region. *Speaker: Ana Laura Martinez, CETIC.br*
17:00 to 17:30	**Session 11 (final): Conclusions and next steps**

	This session will present the findings and the next steps will be identified to follow in the region. *Speaker: ITU* **Closing ceremony** • IFT representative • Miguel Alcaine, ITU Representative
CLOSURE OF THE WORKSHOP	

Appendix 2

Regional Training Workshop on Indicators ITU information and communications technology (ICT) for Latin America

28-29 October 2019

List of participants

No	Nombre	Cargo	Organización	País
1	Sharolyn Deugal		PUC	Belize
2	Marcelo Monteiro		ANATEL	Brasil
3	Ana Laura Marthez		CETIC nic.br	Brasil
4	Allan Ruiz		COMTELCA	Costa Rica
5	Vivián Aguilar Aguilar	Estadístico, Profesional en Telecomunicaciones	MICITT	Costa Rica
6	Carla Victoria Valverde Barahona	Gerente de Análisis Económico y Mercados de Telecomunicaciones	MICITT	Costa Rica
7	Leslie Carrodeguas		MINCOM	Cuba
8	Francisco Saravia		SIGET	El Salvador
9	Miguel Alcaine	Representante de Área, Centroamérica	UIT	El Salvador
10	José Cervera	Experto UIT	DevStat (Experto UIT)	España
11	Iñigo Herguera	Experto UIT	UIT	España
12	Edgar Arturo Rodríguez Barrios	Gerente de Regulación de Telefonía	SIT	Guatemala
13	José Alfredo Romero		CONATEL	Honduras
14	Sebastián Lobo		CONATEL	Honduras
15	Luis Rocha		IFT	México
16	Roberto Enrique Ordoñez		IFT	México
17	Pedro Terrazas		IFT	México
18	Octavio Ríos		INEGI	México
19	Dante Rosey		IFT	México
20	Guadalupe Ortega Ramos		IFT	México
21	Juan Carlos Bonifacio		IFT	México
22	Aldo Acosta Ureña		IFT	México
23	Jorge Eduardo Ponce		IFT	México
24	Gema González García		IFT	México
25	Simón Sánchez Tinoco		INEGI	México
26	Emir Jafet Cortés		IFT	México

No	Nombre	Cargo	Organización	País
27	Krista Monroy		IFT	México
28	Eliud Díaz		IFT	México
29	María Isabel Juarez		IFT	México
30	Daniela Dávila		IFT	México
31	Sonia Sánchez		IFT	México
32	Lesly Gabriela Jaimes		IFT	México
33	Sandra Aracely Martínez		IFT	México
34	Juan Orozco López		SCT	México
35	Eduardo Zavala		IFT	México
36	Erk Huesca		IFT	México
37	Sóstenes Díaz	Comisionado	IFT	México
38	Angeles Anaya		JCT	México
39	Gabriela Gutiérrez		IFT	México
40	Aide Camargo		IFT	México
41	Diana Haidee Gómez		IFT	México
42	Perla López		IFT	México
43	Mariana Anaya Arenzana,	Directora para Desarrollo Económico e Infraestructura	AMEXCID	México
44	Grethel Estrada	Especialista Telecomunicaciones	TELCOR	Nicaragua
45	Marvin Córdoba	Coord CAERITEL	TELCOR	Nicaragua
46	Juan Carlos Gutiérrez		TELCOR	Nicaragua
47	Selim Avellán		CEABAD	Nicaragua
48	Héctor Lizárraga		COMTELCA	Nicaragua
49	Celia Margarita Reyes Ochoa	Directora de Titulación y Atención a Operadores y Usuarios	TELCOR	Nicaragua
50	Emilce Portillo		CONATEL	Paraguay
51	Julissa Cruz		INDOTEL	República Dominicana
52	Angélica Florentino		INDOTEL	República Dominicana