

ITU Expert Group on Telecommunication/ICT Indicators (EGTI)



13th Meeting (online), 12-14 September 2022

SUMMARY

Overview

1. The 13th Meeting of the ITU Expert Group on Telecommunication / ICT Indicators (EGTI) took place in a fully virtual setting from 12 to 14 September 2022, back-to-back with the 10th Meeting of the Expert Group on ICT Household Indicators (EGH), which was held on 14-15 September 2022. Joint sessions with EGH were held on 14 September 2022.
2. The meeting was attended by a total of 242 participants, including 213 delegates representing 90 Member States countries, 5 participants from Palestine¹, 18 participants from ITU-D Sector Members, from all world regions. Participants from other UN agencies and regional organizations (The World Bank, World Trade Organization, OECD, African Civil Society for the Information Society (ACSIS), Common Market for Eastern and Southern Africa (COMESA), Eastern Caribbean Telecommunications Authority, Economic Community for West African States (ECOWAS), the European Union, the WWW Foundation, RIPE NCC) as well as Scientific or Industrial Organizations and recognized operating agencies (including Huawei Technologies, Intel Corp., Algérie Télécom, Bangladesh Communication Satellite Company Limited (BCSCL), China Telecommunications Corporation, and Telefónica S. A.), as well as Academia (including the Colegio Oficial de Ingenieros de Telecomunicación) attended the meeting. Out of the total number of participants, 45% were women. Experts from the ITU-D sector, including ITU Regional Offices also attended the meeting. ITU staff from the ICT Data and Analytics Division acted as the secretariat of EGTI. Mr. Bernard Banda, Manager for Policy and Research with the Zambia Information & Communications Technology Authority (ZICTA) chaired the meeting, who was appointed EGTI Chair for the 2022-2025 period. EGTI Members are invited to express interest in the position of the Vice Chair.
3. The purpose of the 13th EGTI meeting was to report on the outcomes of the work of the EGTI subgroups and examine the contributions received from members of the EGTI online discussion forum over the current working period, with a view to finalizing the items under discussion. The topics that were discussed during the EGTI meeting were those identified by the Expert Group on Telecommunication/ICT Indicators, which took place online on 13-15 September 2021. These included the outcome of the investigation of the implications of 5G/IMT-2020 deployment on machine-to-machine (m2m) subscriptions and the measurement of internet of things (IoT), the review of indicators collected in the ITU WTI Long

¹ Resolution 99 (Rev. Dubai, 2018)

Questionnaire and re-visiting the indicators on households covered fixed network technology, and the development of indicators measuring OTT services (jointly with EGH). The meeting also offered an opportunity to address questions around the measurement of middle-mile connectivity and share information on the latest ITU statistical products.

Topics discussed

4. At its 12th Meeting in 2021, EGTI agreed to extend the mandate of the subgroup on 5G indicators (initially established at the 10th Meeting of EGTI in 2019) with the aim to consider if there was any need to extend the existing **machine-to-machine (m2m) indicator** definition considering the new applications, uses and connectivity possibilities offered by 5G/IMT-2020 technology.
5. At the 13th Meeting of EGTI in 2022, Prof. Iñigo Herguera, the sub-group coordinator, summarized the outcome of discussions and proposals provided in their report. The report emphasized the growing importance of m2m and IoT connections in general, as well as the challenges of measuring the number of connections using unlicensed spectrum or local networks. The subgroup proposed that EGTI should keep collecting statistics on m2m subscriptions using the current definition, with a small modification on the scope and methodology.
6. In the ensuing discussion, members confirmed the limited ability of regulators to monitor all m2m connections as well as the importance of continued data collection considering their economic impact, while the consideration of the use of non-conventional data sources was also suggested.
7. After the discussion on the sub-group proposal, EGTI agreed to keep the current definition of the m2m indicator *2.10 Machine-to-Machine mobile network subscriptions-m2m (i271m2m)*, available in page 63-64 of the [ITU Handbook](#) and clarify the scope as follows:
 - in order to facilitate the collection of the indicator and adapt it to recent developments the subgroup recommends including eSIM in the scope of the m2m indicator².
 - use the same activity criterion as the one used in cellular subscriptions (active at least in the past 90 days);

² eSIM are embedded in the final user device and allow for the controlling and switching of service provider remotely, without the need to extract and substitute a physical SIM card. Many devices come already manufactured with eSIMs. Since eSIM may be activated or deactivated by the user any time, an activity criterion is needed for statistical purposes. Note that for post-paid m2m modality all subscriptions are “active” since the final user pays a recurrent fee for the service. For the pre-paid m2m modality, it is recommended to use the same activity criterion as the one used in cellular subscriptions: having made a communication in the last 90 days.

- even if the indicator refers to “subscriptions to m2m” in effect what is being measured is “number of connections” via m2m.
8. EGTI recommends to continue monitoring the evolution of 5G deployment network and IoTs, this latter in collaboration with the data collection efforts from the user side (covering individuals or enterprises).
 9. Subject to comments received by 21 October 2021, the data on M2M will be collected using the refined definition in the ITU World Telecommunication/ICT Indicators Long Questionnaire 2023.
 10. EGTI discussed the relevance of statistics on middle-mile connectivity from multiple aspects building on insights from 3 presentations:
 - Mr. Michael Minges emphasized that Internet Exchange Points (IXPs) and data centers are critical components of the digital economy but are largely invisible in ICT sector statistics, calling for the need to define and collect new statistics – including those on environmental sustainability;
 - Ms. Bijal Sanghani offered insights on the benchmarking work carried out by Euro-IX, the Membership Association of IXPs;
 - Mr. Milton Kashiwakura provided technical details about the background of connectivity in Brazil, covering Autonomous System Networks (ASNs), IXPs and content delivery networks (CDNs) and relevant statistics;
 11. Given the importance of IXPs and data centres in the development of the digital economy, the EGTI proposed to develop internationally harmonized indicators on IXPs and data centers. The EGTI agreed to have a sub-group to discuss the topic subject to the availability of experts who will volunteer to be a member of the sub-group. The following countries indicated their interest in the topic during the meeting and will be contacted: Brazil, Namibia and Pakistan.
 12. The ITU Secretariat presented to EGTI Members two new statistical products developed by the ITU:
 1. Fredrik Eriksson (ITU) presented the latest results from the ITU big data project on using open data sets to estimate the percentage of the population using the Internet;
 2. Thierry Geiger (ITU) provided an overview of the ongoing work to improve the ITU statistical data cycle and presented the [ITU DataHub](#), a dissemination platform for ITU statistics offering a rich source of ICT statistics, indicators and regulatory data.
 13. At its 12th Meeting in 2021, EGTI agreed create a subgroup with the mandate to review indicators collected in the ITU WTI Long Questionnaire, with an aim to find a balance between stakeholder needs for detailed, comprehensive, timely, high-quality data measuring different dimensions of digital development and the response burden on Member States, and to revisit how the number of households covered by a certain technology of fixed broadband is measured.
 14. At the 13th Meeting of EGTI in 2022, the sub-group leader, Ms. Cinthya Arias (SUTEL, Costa Rica) provided an overview of the work of the sub-group, that included reviewing response

rates, regional response patterns and relevance of indicators (based on surveying statistical focal points) to determine which indicator(s) need to be excluded from the data collection of the ITU.

15. Based on its thorough evaluation work, the subgroup presented its proposal to EGTI, which entailed: 1) dropping indicator(s); 2) putting on hold recently introduced indicators (until sufficient evidence emerges from questionnaires); 3) simplifying indicators; 4) flag for methodological refinement; and 5) keep collecting indicators. Participants at the meeting discussed in detail each group of indicators.
16. EGTI agreed to:
 - a. Directly **drop** one indicator from the LQ but still on Handbook (see Annex for specific indicator);
 - b. Keep **“On Hold”** 7 of the 44 analyzed as they were defined by the EGTI recently and are in pilot phase of data collection. There The sub-group suggested analysing the evolution overtime of the response rates and data quality (see Annex for specific indicators list);
 - c. **Simplify** 14 indicators of the 44 analyzed. The methodological details for the simplified indicators need to be defined in the future work. This simplification is expected to help countries to easily collect the data and to increase the response data submission to ITU (see Annex for List of Indicators);
 - d. Continue to collect 3 indicators, but **refine the methodological** information in the Handbook to improve the quality of the data collected (see Annex for List of Indicators);
 - e. EGTI decided to **continue collecting the data** for the rest of the indicators not mentioned above that are included in the WTI Long Questionnaire. EGTI agreed to close the work of the subgroup (see Annex for List of Indicators).
17. At its 12th Meeting in 2021, EGTI agreed to extend the mandate of the subgroup on developing OTT indicators (initially established at the 11th Meeting of EGTI in 2020), in the form of a joint subgroup of the Expert Group on Household Indicators (EGH), with the aim of operationalizing the definition agreed and collecting data. The joint sub-group is led by an EGH representative and an EGTI representative.
18. At the 13th Meeting of EGTI in 2022, the subgroup leads presented a summary of the joint report, highlighting existing legal and technical challenges hampering data collection as well as the need for participants to come forward sharing experience with data collection.
19. The subgroup recommended the extension of the mandate of the joint subgroup, conditional to the availability of additional country experiences and membership participation. During the discussion, EGTI and EGH members pointed to recent country experiences and expressed interest to join the subgroup. The following countries provided links to the recent surveys in their country (Colombia, Portugal, and Trinidad and Tobago) while experts from the following countries indicated interest in joining the OTT subgroup (Afghanistan, Colombia, Egypt, Trinidad and Tobago).

20. EGTI agreed to

- Extend the mandate of the joint subgroup with EGH, considering that further insights can be gained from jointly considering supply- and demand-side measurement.
- Continue the work of the subgroup to share experiences and address practical questions.
- Enquire on non-traditional data collection approaches, and exploration of data triangulation.
- Develop OTT communications data collection guidance, considering evolving Member State practices.

21. Regarding future work for the 2022/2023 period, EGTI agreed to address the following topics; whether this shall be carried out in the form of a subgroup is subject to the expression of interest by 10 or more members, otherwise a discussion topic will be opened on the EGTI forum.

- Revisit the outcomes of pilot data collection of recently introduced indicators as well as indicators considered as “on hold” (see Annex)
 - Quality of service indicators
 - International roaming indicators
 - Mobile money indicators
 - 5G/IMT-2020 indicators
- Define and refine methodology for new indicators created by simplifying (aggregating) existing indicators;
 - fixed and mobile numbers ported;
 - foreign investments in telecommunication
- Addressing the feasibility of developing internationally comparable indicators to measure middle-mile connectivity (statistics on IXPs, data centers, including their environmental impact);
- Developing indicators on measuring OTTs: extend the work of the subgroup.
- Explore revising the methodology for the calculation of fixed broadband penetration, taking into consideration the number of households instead of total population.

22. All the decisions regarding the indicators will be subjected to comments until 21 October 2022 (taking into consideration the upcoming ITU Plenipotentiary Conference), after which they will become final.

Annex Table

EGTI conclusion on specific indicators collected in the ITU WTI Long Questionnaire

ITU Code	Indicator	Conclusion	Combine into
QUALITY OF SERVICE			
i147t	Service activation time for fixed broadband service (in days)	DROP	
i146mwul	Average Upload Throughput for Mobile Broadband, in bits	ON HOLD	
i147ul	Average upload Throughput for Fixed Broadband, in bits	ON HOLD	
i147f	Fault Resolution Period for Fixed Broadband Service, in hours	ON HOLD	
i147l	Packet Latency for Fixed Broadband, in milliseconds	ON HOLD	
i146mwl	Packet Latency for Mobile Broadband, in milliseconds	ON HOLD	
INTERNATIONAL ROAMING			
i133crm	Number of countries with which there is a country-level roaming agreement	ON HOLD	
i133rm	Number of countries with which there is an operator-level roaming agreement	ON HOLD	
TRAFFIC			
i131m	Domestic fixed-to-fixed telephone traffic, in minutes	SIMPLIFY	A. Total outgoing voice traffic from fixed (originated in) networks; B. Total incoming voice traffic to fixed networks (fixed network destination)
i1313wm	Fixed-to-mobile telephone traffic, in minutes	SIMPLIFY	A. Total outgoing voice traffic from fixed (originated in) networks; B. Total incoming voice traffic to mobile networks (mobile network destination)
i1335wm	Incoming international traffic to mobile network, in minutes	SIMPLIFY	Total incoming voice traffic to mobile networks (mobile network destination)
i132mi	International incoming fixed-telephone traffic, in minutes	SIMPLIFY	Total incoming voice traffic to fixed networks (fixed network destination)
i132m	International outgoing fixed-telephone traffic, in minutes	SIMPLIFY	A. Total outgoing voice traffic from (originated in) mobile networks; B. Total international outgoing traffic
i1332wmf	Outgoing mobile traffic to fixed networks, in minutes	SIMPLIFY	A. Total outgoing voice traffic from (originated in) mobile networks; B. Total incoming voice traffic to fixed networks (fixed network destination)
i1333wm	Outgoing mobile traffic to international, in minutes	SIMPLIFY	A. Total outgoing voice traffic from (originated in) mobile networks; B. Total international outgoing traffic
INTERNET			
i4213cv	Number of households covered by a fixed wired network	SIMPLIFY	Total number of households covered by fixed networks
i4213cv_cab	Number of households covered by cable TV networks	SIMPLIFY	Number of households passed by the traditional copper-based network
i4213cv_dsl	Number of households covered by digital subscriber lines networks (excluding VDSL/VDSL vectoring)	SIMPLIFY	Number of households passed by the traditional copper-based network
i4213cv_vdsl	Number of households covered by digital subscriber lines networks (VDSL/VDSL vectoring)	SIMPLIFY	Number of households passed by the traditional copper-based network

i4213cv_ftp	Number of households covered by Fiber-to-the-premises networks	SIMPLIFY	Number of households covered by fiber-based or cable modem networks
i4213cv_o	Number of households covered by other fixed-wired networks	SIMPLIFY	[copper-based or fibre-based/cable, as appropriate]
i4213cv_pstn	Number of households covered by the traditional public switched telephone network	SIMPLIFY	Number of households passed by the traditional copper-based network
FIXED TELEPHONE NETWORK			
i112pt	Fixed-telephone numbers ported	REFINE	
MOBILE CELLULAR NETWORK			
i271pt	Mobile-cellular numbers ported	REFINE	
INVESTMENT			
i841f	Annual foreign investment in telecommunications	REFINE	
Rest of the indicators currently in the ITU WTI Long Questionnaire:		Continue data collection	