

ITU Expert Group on Telecommunication/ICT Indicators (EGTI)



16th Meeting, 24-25 September 2025, Geneva Switzerland

SUMMARY

Overview

1. The [16th meeting of the Expert Group on Telecommunication/ICT Indicators \(EGTI\)](#) took place in Geneva, Switzerland, with the option of remote participation, from 24 to 25 September 2025. The EGTI meeting was held in conjunction with the As part of the ICT data week, it followed the WTIS 2025 and was held in conjunction with the [13th Meeting of the ITU Expert Group on ICT Household Indicators \(EGH\)](#) held on 24 September 2025, and was followed by the practitioners workshop on 26 September 2025.
2. A total of 260 participants attended the EGH and EGTI meetings, which included experts representing 76 Member States, participants from the State of Palestine¹, 26 participants from ITU-D Sector Members, 3 from UN and its Specialized Agencies and 42 from other organizations, from all world regions. Women made up 48 per cent of participants and 68 per cent of participants attended physically. Experts from the ITU-R and ITU-D sector, including ITU Regional Offices also attended the meeting.
3. The affiliation of participants included international and regional organizations (Caribbean Telecommunications Union, Interstate Statistical Committee of the Commonwealth of Independent States, Eastern Caribbean Telecommunications Authority (ECTA), European Commission, OECD, UNCTAD, The World Bank) as well as Operating Agencies and Scientific and Industrial organizations (African Civil Society for the Information Society (ACSIS), China Telecommunications Corporation, Empresa de Telecomunicaciones de Cuba (ETECSA), Global Satellite Operators' Association (GSOA), and Huawei Technologies Co., Ltd.). Members of Academia was affiliated with the Colegio Oficial de Ingenieros de Telecomunicación (COIT), Spain, the Complutense University of Madrid UCM, Universidad de San Andres, Argentina, University of the Philippines, and York University, Canada, and the Geneva Graduate Institute, Switzerland.
4. Mr. Bernard Banda, Director for Economic Regulation and Consumer Protection at Zambia Information & Communications Technology Authority (ZICTA), and Chair of EGTI, chaired the meeting. ITU staff from the ICT Data and Analytics Division acted as the secretariat.
5. The purpose of the 16th 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 EGTI Work Programme for 2025, which included discussing the report of the subgroup on the development of the ICT Development Indicator (IDI) (jointly with EGH)

¹ Resolution 99 (Rev. Dubai, 2018).

Commented [EM1]: Is this from last year?

Commented [DV2R1]: No, actually based on this year's participants list.
Complutense is not Inigo, but another virtual participant

Commented [EM3R1]: But it was already mentioned in the beginning of the sentence, so it should be OK.

Commented [DV4R1]: Ok, thanks, cleaned!

and the report of the subgroup on National Greenhouse Gas Emission Monitoring Indicators for the ICT Sector. The meeting also offered an opportunity to discuss the measurement of quality of service, satellite-based broadband connectivity, the use of sub-national data, the measurement OTT services and ICT prices.

Topics discussed

6. On Day 1, the **joint session of EGH and EGTI** discussed the [Report of the joint EGH-EGTI subgroup on the ICT Development Index \(IDI\)](#). The subgroup leads, Teddy Woodhouse of Ofcom (UK) and Winston Oyadomari of Cetic.br (Brazil), presented a summary of the [joint report](#), highlighting its consideration of candidate indicators for the IDI and its review of methodological aspects. They also advised EGTI/EGH to revise the IDI methodology in 2026 given the upcoming expiration of the validity of the current methodology.
7. The subgroup recommended to:
 - Incorporate on a preliminary basis a new indicator on 5G mobile network coverage into the existing mobile network coverage indicator and including fixed-broadband penetration when data on the number of total households is available;
 - Review goalposts and thresholds, making efforts to minimize time lags between reference years and publication, and improving the quality of reported country data;
 - Extend the mandate of the subgroup.
8. EGH and EGTI members noted the importance of this work in guiding future updates of the IDI. **EGTI and EGH agreed** to extend the mandate of the subgroup and further agreed to proceed with a formal revision of the IDI methodology - in accordance with the process established in PP Resolution 131 (Bucharest, 2022) - ahead of the expiration at the end of 2026 of the current four-year validity period.
9. At the close of the session, the Russian Federation informed EGH and EGTI of the [activities](#) of the Joint Expert Group of the Regional Commonwealth in the Field of Communication (RCC) and the Interstate Statistical Committee of the Commonwealth of Independent States on ICT Statistics.
10. On Day 2, the Mr. Bernard Banda, the EGTI Chair, presented the established working methods of EGTI along with the agenda, which was approved by the participants.
11. The first item on the agenda was **leveraging granular, sub-national administrative data to illuminate coverage gaps**; Min Lee, one of the EGTI Vice Chairs, served as session moderator. Ms. Abeer Nasser Al-Naamani and Ms. Malak Dhahi Al-Quaraini, from TRA Oman, gave a presentation on [the role of GIS in Telecom Infrastructure Analysis and tools for data validation](#). Mr. Jorge Roques, from Indotel, Dominican Republic, presented [country experience in sub-national data analysis](#). Both presentations highlighted how geoinformatics tools, granular data, and a framework for analyzing sub-national statistics can help evidence-based policies for bridging connectivity divides. In a poll, countries from all continents and of different sizes indicated that regulators collect and disseminate sub-national data; typically at regional and municipality levels. The presentation was followed by discussion on data collection techniques and sources, such as the use of crowd-sourced data on speeds as an alternative to drive tests to measure quality of service, or the practical use of validation;

others shared further examples. **EGTI concluded** to continue sharing and exchanging best practices for sub-national data collection and dissemination.

12. The next session focused on **Refining meaningful connectivity indicators** and encompassed 2 main parts. The first segment focussed on **measuring satellite-based broadband connectivity services**. The session was moderated by Ms. Rumila Dautova, one of the EGTI Vice Chairs. In the first presentation, Mr. Emmanuel Felix Neizer (NCA, Ghana) addressed [Satellite-based Internet connectivity statistics highlighting Ghana's experience](#). The presentation showed the take-off of the service following the licensing of low-earth orbit (LEO) satellites and the entry of Starlink in particular, and the supply and demand-side data needs beyond the existing subscription numbers (including number of licensed operators, type of services provided, spectrum and bandwidth allocation, registration of terminals, subscriptions by region and plans) that can be collected from operators and regulatory administrative records. It also highlighted how such data can contribute to improved market monitoring, including affordability, sectoral policies and crisis resilience. The presentation triggered a rich discussion on regulatory approaches to satellite-based connectivity and implications for competition. A poll confirmed that it is a wide-spread practice among regulators and ministries to collect satellite-based connectivity indicators, apart from subscriptions, speed, coverage and traffic indicators, although less frequently. At the same time, the poll also showed that a number of participants have yet to start collecting statistics on satellite-based Internet connectivity.
13. Noting the global interest in satellite-based broadband connectivity, **EGTI agreed** to add it on the agenda for future work, with a view to developing a methodology for international data collection on satellite indicators and identifying indicators that are feasible to be collected by regulators.
14. The second segment of the **Refining meaningful connectivity indicators** session was dedicated to **Measuring Quality of Service (QoS)**, in particular, upload and download speeds. The moderator noted that QoS and QoE measurement was also in the focus of a [discussion topic](#) on the EGTI forum, and that ITU organized a webinar on the subject in June 2025. Mr. Frederic Bourassa (OECD) gave a presentation on [Measuring connectivity divides: The OECD experience with third-party sources](#), based on recent report *Closing Broadband Connectivity Divides for All From Evidence to Practice (July 2025)*. Evidence from third-party sources, such as consumer-initiated Ookla speedtest and Opensignal's passive tests showed the persistence of urban-rural connectivity divides in both fixed and mobile broadband networks, considering speed as well as latency. The presentation highlighted that while samples are uneven, third-party data offers granular, comparable data across countries and regions to support policy makers. Next, Ms. Viviana Umpierrez (ITU) presented [Unlocking Internet Performance: Measuring QoS with Meaningful Indicators. Experience from 2025 WTI data collection](#), and showed that while 142 submissions to the 2025 ITU WTI questionnaire, the data availability for QoS indicators was around 50 to 60 countries for the upload, download and latency indicators. Due to the use of inconsistent measurement methods and the high variability of results, the international comparability of QoS statistics is limited. This highlighted that current data collection efforts do not yield the actionable results, calling for further refinement of methodologies and/or further exploring the use of third-party tools relying on standardized metrics. While participants in the ensuing discussion were favourable to these conclusions, reservations were raised in the final, concluding session. Finally, **EGTI agreed** that members shall continue exploring best practices and the strengths and weaknesses of third-party data sources for measuring QoS.

15. Prof. Iñigo Herguera [introduced the update](#) of the [Handbook for the collection of administrative data on telecommunications/ICT](#), which has served as the key methodological reference on supply-side ICT statistics since 2011. The update will incorporate the indicators adopted by EGTI since the last edition in 2020 (e.g., including 5G/IMT-2020, roaming, QoS indicators, updates on certain breakdowns), will include clarification and updated methodological details and up-to-date examples to support data collection. The aim is to provide the new edition of the Handbook in an accessible format, and is foreseen to be available in June 2026.

Commented [EM5]: Removing this, I think the previous text is sufficient.

16. The next agenda item was **Developing new indicators: measuring the environmental footprint of key players in the ICT sector**. The session was moderated by Mr. Panayiotis Kyriakides, one of the EGTI Vice Chairs. Ms. Loïs Ponce (Arcep, France), the subgroup rapporteur, [presented the report summarizing of the work of the subgroup](#) and its recommendations. The report includes the suggested a priority list of stakeholder companies and indicators that could be collected for the ICT sector, in a progressive and adaptable framework. In short, regarding the stakeholders, top priority was recommended for telecom operators and data center operators in all countries, while network equipment manufacturers and end-user device manufacturers, that are not present everywhere, are prioritized where **plants** are located. Regarding the indicators, a priority matrix was proposed based on environmental relevance and feasibility of data collection, with the highest priority given to greenhouse gas emissions, energy consumption indicators (see Table below). The subgroup recommendation was to extend the mandate and test the feasibility of data collection through a pilot survey in the coming year. The subgroup rapporteur also called for engagement of EGTI members to reach beyond institutional silos as necessary.

Commented [EM6]: Companies?

Commented [DV7R6]: I think it is fine, as this is in line with the discussion that a company may have multiple sites

Table: Indicator priority matrix

Player concerned	Category	Indicator	Environmental relevance priority	Feasibility of data collection priority
All	Carbon	Scope 1 GHG emissions (tCO ₂ e)	1	1
All	Carbon	Scope 2 GHG emissions (location-based) (tCO ₂ e)	1	1
All	Carbon	Scope 2 GHG emissions (market-based) (tCO ₂ e)	2	1
All	Carbon	Scope 3 GHG emissions (tCO ₂ e)	2	3
All	Energy	Total renewable/low-carbon energy consumption (MWh)	1	1
All	Energy	Breakdown of total renewable energy consumption by source (PPAs, guarantees of origin, on-site) (MWh)	2	2
Telecom operators	Energy	Total energy consumption of telecom networks (MWh)	1	1
Telecom operators	Energy	Total electricity consumption of the set-top boxes and internet boxes used by operators' customers (MWh)	1	3
Network equipment manufacturers / End-user device manufacturers	Energy	Total energy consumption of all manufacturing plants and breakdown by plant (MWh)	1	2
Network equipment manufacturers / End-user device manufacturers	Others	Total water consumption of all manufacturing plants and breakdown by plant (MWh)	1	3
Network equipment manufacturers / End-user device manufacturers	Others	Volume of precious metals and rare earth elements used in network equipment / end-user devices (kg)	1	3
Data center operators	Energy	Total energy consumption of all the data centers in operation and breakdown by site (MWh)	1	1
Data center operators	Energy	Total electricity consumption of IT equipment in all data centers in operation and breakdown by site (MWh)	1	2
Data center operators	Others	Total water consumption of data centers in operation (m ³)	1	2
Network equipment manufacturers / End-user device manufacturers / Data center operators	Others	Location of plants / data centers	1	1

Notes: 1 refers to highest, 3 refers to lowest priority. See [Subgroup Report](#) for further details.

17. The session also included the presentation from Ms. Ana Beatriz Souza (Anatel, Brazil) on [Anatel's ESG Climate Seal](#) project. The project was developed in collaboration with the InterAmerican Development Bank (IDB) and assesses telecom and ICT companies' climate maturity through standardized indicators, revealing strong practices among large firms but low engagement from smaller providers, with the aim of fostering transparency, climate-aligned action, and informing future regulation.
18. Finally, ITU's work on [Advancing the monitoring of ICT Sector Climate Impact at National and Industry levels](#), presented by Ms. Rosie McDonald, highlighted the urgent need for reliable ICT sector climate data, showing rising emissions and energy use (driven partly by AI), as well as ITU initiatives—such as the Greening Digital Companies report, dashboard, and national capacity-building—to harmonize indicators, improve reporting (especially Scope 3), and support countries in developing digital net-zero transition plans.

The discussion following the presentations emphasized the importance of having a clear conceptual framework for the data collection, as well as the challenges of ensuring wider participation in the data collection.

19. **EGTI agreed** to extend the mandate of the subgroup to continue discussions on the recommendations outlined in the report.
20. The next session focused on **revisiting indicators** on over-the-top (OTT) services and ICT prices, moderated by Mr. Bernard Banda, EGTI Chair. He recalled that the topic of OTT services was earlier on the EGTI agenda, however, country-level measurement practices were not sufficiently mature to propose international data collection. He noted that a forum discussion topic was dedicated to the matter in the previous year, indicating some ongoing data collection. Mr. Robert Kiraly (RTR, Austria) gave an online presentation on [Data collection on number-independent communications services \(NI-ICS\) by RTR Austria](#). He explained the legal basis and the methodology based on which the regulator is collecting and publishing indicators (number of users and traffic) from 13 representative providers in the country on messengers, voice calls, video calls and conferencing services and email, allowing comparability with traditional indicators. Subsequent discussion highlighted the challenge of data collection (such as access to information and incomplete coverage of operators, or, where applicable, challenges with deep packet inspection). Responding to a poll during the session, participants from 20 countries indicated that their organization collects or plans to collect data on OTT (NI-ICS) communications services, mostly on the number of active users and data traffic.
21. **EGTI agreed** to continue experience sharing in the discussion forum on OTT data collection methodologies.
22. In the next part of the session, Mr. Daniel Vertesy (ITU) gave an [overview of the experience with collecting ICT Price Basket data in 2025](#), the first one based to the revised methodology adopted by at the previous meeting of EGTI in 2024. He reported on ITU's work in implementing the revision, that included a drafting of a new ICT Price Basket Manual, the revision of the questionnaire, as well as capacity building activities. Overall, the data collection process successfully reached the end of the validation phase, with more countries submitting the questionnaire in 2025 than in the previous year. Participants in the follow-up discussion shared information about latest market dynamics, including the marginalization of SMS use in certain countries.
23. **EGTI agreed** to share country experience on recent dynamics in retail prices in a dedicated forum.
24. In the session on **future work** for 2026, EGTI Members discussed a range of possible topics to address. Based on the guidelines presented by the EGTI Chair, for a subgroup to be launched, at least ten committed participants should sign up by 24 October 2025 during the meeting or in the [online forum](#) (otherwise a discussion topic will be opened on the EGTI forum instead), encouraging regional diversity, and establishing a priority so that no more than three subgroups (including joint ones with EGH) would be launched in a year. As is customary for EGTI, the scope of work will be established by the Chair in consultation with the Secretariat. The subgroup lead will be appointed by ITU in agreement with the Chair.
25. **EGTI agreed** that the following topics would feature on its future work agenda:

- Review of the ICT Development Index (IDI): extend the mandate of the joint EGTI-EGH subgroup;
- ICT sector greenhouse gas emission monitoring indicators: extend mandate of the subgroup;
- ICT Price baskets (experience sharing in the online forum);
- Satellite-based broadband connectivity;
- Measurement of device affordability;
- Review the list of indicators collected in the WTI questionnaire;
- Experience sharing on sub-national data collection, use of GIS-based techniques;
- As well as topics from previous years, including the measurement of middle-mile connectivity and OTT use.

26. The meeting resolved to subject all the decisions regarding the agenda to comments until 24 October 2025, after which they would become final.

27. Appointment **of the EGTI Chair 2026-2029**: At the closing ceremony, Dr. Cosmas Luckyson Zavazava, Director of the Telecommunication Development Bureau (BDT), ITU, recalled that the current EGTI Chair, Mr. Bernard Banda, is completing his term in 2025, and a Call for expressions of interest had been issued in July ([Circular Letter BDT/DKS/IDA/079](#)). Following careful consideration and consultations, Mr. Panayiotis (Panos) Kyriakides, Economist at the Office of the Commissioner for Electronic Communications and Postal Regulation (OCECPR) of Cyprus and one of the current EGTI Vice-Chairs, was appointed EGTI Chair for the 2026-2029 term. Dr. Cosmas Luckyson Zavazava thanked Mr. Bernard Banda for his excellent chairing of the EGTI during his tenure.