World Telecommunication/ICT Indicators Symposium 2023

Summary Report

July 2023

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Advancing the measurement agenda to achieve universal and meaningful connectivity

The 18th World Telecommunication/ICT Indicators Symposium (WTIS-23) took place in Geneva, Switzerland, from 3 to 4 July 2023. The event brought together government ministers, business leaders, regulators, national statisticians, academics, data producers, analysts, and partners to discuss the latest trends in digital development and the related data aspects.

Under the theme "Advancing the measurement agenda to achieve universal and meaningful connectivity", the Symposium highlighted the importance of adequately measuring the enablers of connectivity and showcased promising approaches.

This report presents key highlights of each session. The WTIS-23 webpage contains additional information, including speakers' biographies, webcast of all WTIS-23 sessions, and the WTIS-23 communiqué. The photos of the event are available on Flickr. For more information about ITU's statistics programme, visit the page of the ICT Data and Analytics Division.

Programme

(press the CTRL key while clicking the session title to directly access session highlights)

Day 1 – Monday, 3 July 2023	Day 2 – Monday, 3 July 2023
Opening session	Preparing the ground: mobile phone data for official statistics
Universal and meaningful connectivity: The policy perspective	ITU's new statistical tools and initiatives
Universal and meaningful connectivity: Tackling the measurement imperative	Update on the ICT Development Index (IDI)
Keeping up with the measurement agenda: insights from the Expert Group on Telecommunications/ICT Indicators	Tracking trends in ICT use and ownership: insights from the Expert Group on ICT Household Indicators
Measuring connectivity using open and private sector big data	The promises and perils of AI for statistics
Social event: WTIS-23 reception	Closing session

Opening session

Speakers

- Mr Tomas Lamanauskas
  Deputy Secretary-General
  International Telecommunication Union.
- Dr Cosmas Luckyson Zavazava
  Director
  Telecommunication Development Bureau
  International Telecommunication Union.
- Mr Bernard Banda
  Director for Economic Regulation and Consumer Protection
  Zambia Information and Communication Technology Authority
  WTIS-23 Chair
  Chair of the Expert Group on Telecommunication/ICT Indicators

Highlights

- In his opening remarks, **Mr Tomas Lamanauskas** emphasized the importance of measurement, data, and evidence-based decision-making in achieving universal connectivity and strategic goals. However, he pointed out that good, reliable, and actionable data remains scarce, leading to a widening data divide. The lack of data is undermining development efforts, notably in the context of the Sustainable Development Agenda. To fill the gaps, better data ecosystems and talent cultivation are needed, along with harnessing the latest technologies for improved quality coverage and measurement. He reminded that UN Secretary-General Antonio Guterres called for greater investment in data and digital infrastructure and launched a UN data strategy in 2022. The Global Digital Compact, scheduled for September 2024, aims to promote good data governance on a global scale. He also emphasized the importance of establishing a data culture and of developing an ITU-wide data strategy to support the organization's mandate. Participants were encouraged to work together to ensure sufficient data is available for the benefit of all and to achieve meaningful connectivity and sustainable development.
- Building on Mr Lamanauskas' remarks, **Dr Cosmas Luckyson Zavazava** explained that data drives development, with relevant, actionable, and accurate data being crucial for achieving universal and meaningful connectivity. He pointed to some of the key topics that were to be discussed during the Symposium, including data collection, innovation in measurement, and the potential of mobile phone data, open data, and artificial intelligence to revolutionize ICT statistics. He insisted on the role of partnerships for better data and announced a new collaboration between ITU and the World Bank to leverage mobile phone data. He also talked about the 3-year, €3 million [project](#) launched in April and funded by the European Commission to promote and measure universal connectivity. During his intervention, he also launched the [Dashboard for Universal and Meaningful Connectivity](#), which tracks

progress towards the targets for universal and meaningful connectivity. He reminded participants that ITU-BDT is committed to supporting stakeholders with statistical tools, technical assistance, and capacity development for better data. Finally, he nominated Mr. Bernard Banda from Zambia's Information and Communications Technology Authority, as the chair of the 18th edition of the Symposium. His appointment was confirmed by acclamation. He also endorsed Linah Ngumba, from the Kenya National Bureau of Statistics, as chair of ITU's Expert Group on Telecommunication/ICT Household Indicators for the next full term 2024-2027.

- In his opening remarks, **Mr Bernard Banda** expressed his gratitude for chairing this edition of WTIS. The focus, he said, was on universal and meaningful connectivity, which is essential for digital transformation and achieving the Sustainable Development Goals. He insisted on the need to improve data availability and accuracy and that WTIS and ITU's work contributed to this objective. He explained that data gaps are larger when assessing the broader concept of meaningful connectivity. He highlighted the diversity and richness of the agenda, encouraged active participation from all participants, and officially opened the symposium.
- Watch the video on universal and meaningful connectivity that was played during the opening session.

Session Universal and meaningful connectivity: The policy perspective

Achieving universal and meaningful digital connectivity —the possibility for everyone to enjoy a safe, satisfying, enriching, productive and affordable online experience— is key for enabling digital transformation and meeting the Sustainable Development Goals. Connecting everyone is no longer enough. Universal connectivity without meaningful engagement could inadvertently exacerbate economic and social disparities both within and across nations.

In this high-level session, prominent practitioners and thought leaders highlighted the role of connectivity and technology for development and how data can help policymaking and increase impact of interventions. They talked about their efforts to foster universal and meaningful connectivity and discussed approaches to accelerate progress in achieving a truly transformative digital experience for all.

Speakers

- H.E. Ms Aurora Díaz-Rato Revuelta
  Ambassador, Permanent Representative
  Permanent Mission of Spain to the United Nations Office
  and other international organizations in Geneva
  Spain
- Dr Claire Melamed
  CEO
  Global Partnership for Sustainable Development Data
  United Kingdom of Great Britain and Northern Ireland

- Mr Didier Kla
Director of Orange Business and Broadband
Orange
Côte d'Ivoire
- Mr Torbjörn Fredriksson
Head of the E-commerce and Digital Economy Branch
UN Conference on Trade and Development (UNCTAD)

Moderator

Dr Cosmas Luckyson Zavazava
Director, Telecommunication Development Bureau
International Telecommunication Union

Highlights

- **H.E. Ms Aurora Díaz-Rato Revuelta** highlighted Spain's commitment to achieving universal and meaningful connectivity in the country and within the EU. She emphasized the importance of broadband internet, with the government working closely with service providers to ensure accessibility and affordability. She illustrated her country's commitment to international connectivity projects with the Giga project, which aims to connect to the Internet all the schools in world. To this end, Spain has invested €17 million in the Barcelona Technological Centre, which will lead research and development efforts to increase connectivity in schools using blockchain and satellite imaging. Highlighting that Spain took over the presidency of the European Union on 1 July, Her Excellency said that the digital agenda was one of Spain's priorities during its presidency, aiming to show leadership amidst global uncertainties. Key points of the Spanish presidency include greater social justice, reviewing physical norms and standards for the EU's green and digital transitions, strengthening cooperation with the ITU, and negotiating AI regulations with the European Parliament.
- **Mr Didier Kla** explained that Orange operates in 18 countries in Africa, focusing on developing networks and aiming for 95% population coverage by 2026. He explained that the company invests in rural areas, fixed high-speed internet, and submarine cables, and promotes digital inclusion through incubation centres, training, and funding for startups. Orange has established partnerships for digital professions training. Cybersecurity is another priority, as is the use of technology to improve lives in health and agriculture. Mr Kla highlighted Orange's commitment to environmental initiatives such as e-waste recycling and reducing their carbon footprint by 2050.
- **Dr Claire Melamed** emphasized that data has always been essential for governments to achieve public policy objectives. Data helps achieve these objectives more efficiently and cost-effectively. In recent years, data has become a potential source of economic growth and social change due to digital transformation. Governments must integrate digital transformation strategies with effective data management and governance. Data is the raw material for AI and other advanced technologies, making it crucial for economic growth strategies. She argued that ensuring equal access to data management and governance can prevent new inequalities within and between countries, making data a vital aspect of public policy.
- **Mr Torbjörn Fredriksson** emphasized the growing digital and data divides and the importance of enterprises adapting to the digital economy. He noted that few developing countries collect data on business ICT usage, which is crucial for formulating policies and monitoring progress. There is a standard pattern where larger companies utilize ICT more than smaller ones, and male-led enterprises dominate the digital sector. Improving this situation requires collaboration and building a conducive environment for businesses to go digital, which includes having access to reliable statistics. The Partnership on measuring ICT for development is an example of effective collaboration. UNCTAD's e-trade readiness assessments aim to improve the business environment for going digital by addressing various aspects like strategy, infrastructure, policies, and legal issues. Addressing these challenges is crucial for digital progress, and good data plays a significant role in achieving this.

Session Universal and meaningful connectivity: Tackling the measurement imperative

In parallel to meeting the policy imperative, we must tackle the challenge that measuring universal and meaningful connectivity represents. Without good data, we are lost. Data tells us where we were, where we are,

and where we ought to be. Data tells us what works and what doesn't. While counting the number of subscriptions is relatively straightforward, measuring the meaningful side of connectivity is much harder. This session showcased efforts to tackle the measurement challenge.

Speakers

- Mr Daniel Ker
  Economic Affairs Officer
  Division on E-commerce and Digital Economy
  UN Conference on Trade and Development (UNCTAD)
  [Presentation](#)
- Mr Fabio Senne
  ICT Survey Project Coordinator
  Regional Center for Studies
  on the Development of the Information Society (Cetic.br)
  Brazil (Federative Republic of)
  [Presentation](#)

Moderator

Ms Linah Ngumba
Statistician
Kenya National Bureau of Statistics
Kenya (Republic of)

Highlights

- **Mr Daniel Ker** in his presentation gave an overview of UNCTAD's efforts in measuring business ICT usage. Data collected and compiled by UNCTAD show that most businesses have Internet access. Complementary indicators can give insights on how widely the Internet is used throughout the business and what it is used for. The "core indicators on ICT for development" provide an internationally adopted suite of relevant indicators for tracking ICT usage in business. Extensive guidance and model surveys are available in the *[UNCTAD Manual for the production of statistics on the digital economy](#)*. It is important to increase the representation of non-EU/OECD countries in international databases of ICT indicators so that they can be better accounted for in international analyses and policy debates.
- **Mr Fabio Senne** presented a series of indicators to show how Brazil is faring regarding universal and meaningful connectivity, with a focus on digital inequalities in the country. He showed that Internet use and connectivity in households in Brazil is increasing, with the urban-rural and socio-economic gap closing. Nevertheless, there is an unequal penetration of fixed broadband in households, while at the same time the deployment of fiber optics among enterprises is increasing fast. There is still an affordability gap between higher-and lower-incomes. Most Internet users are mobile only. These and more results are a strong driver of government policies to increase connectivity and reduce digital inequalities.

Session Keeping up with the measurement agenda: insights from the Expert Group on Telecommunications/ICT Indicators

How can ICT statistics follow the pace of innovations in digital technologies and communication services, and still measure the changes? ITU's Expert Group on Telecommunication/ICT Indicators (EGTI) reviews existing indicators and develops new methodologies for data collection, incorporating experiences from around the world. The session reported on the outcomes of the 12th and 13th meeting of EGTI, held in 2021 and 2022, and shone a light on measuring middle mile connectivity (focusing on Internet exchange points, IXPs) and the affordability of Internet-enabled devices.

Speakers

- Mr Bernard Banda, Director for Economic Regulation and Consumer Protection. Zambia Information and Communication Technology Authority; WTIS-23 Chair; Chair of the Expert Group on Telecommunication/ICT Indicators.
  [Presentation](#)
- Ms Bijal Sanghani,
  Managing Director
  EUR-IX
  [Presentation](#)
- Dr Rami Amin
  Project Lead
  The World Bank
  [Presentation](#)

Moderator

Ms Linda Kambale
Economic Regulation Manager
Malawi Communications Regulatory Authority
Malawi

Highlights

- **Mr Bernard Banda**, in his role as EGTI Chair, provided an overview of the discussions and conclusions of the [12th](#) and [13th](#) meeting of EGTI that took place since the last WTIS. In line with its mission to review existing and develop new telecommunication/ICT supply-side indicators and developing harmonized definitions and data collection methodologies to keep up to date with the fast changing nature of ICT technologies and services, EGTI defined new indicators measuring 5G subscriptions, proposed piloting new

indicators on mobile money services, refined the methodology for machine-to-machine (M2M) subscriptions and reviewed the indicators collected in the ITU World Telecommunication/ICT Indicators Long Questionnaire. Mr Banda explained that EGTI discussions currently focus on the measurement of over-the-top services, fixed broadband penetration, as well as middle-mile connectivity. He concluded by extending an invitation to WTIS participants to join the discussion forum and participate in the work of EGTI.

- **Ms Bijal Sanghani**, in her presentation introduced the activity of Internet Exchange Points (IXPs) and the Membership Association of IXPs and demonstrated how IXPs can provide important statistical insights on middle-mile connectivity across the world. She presented the IXP{DB}, which collects data directly from IXPs through an automated process, integrates data from third-party sources, offering a public data source on the global interconnection landscape. She also introduced the IXP Benchmarking Club, allowing IXPs exchange data about their business; compare their performances and policies. The presentation showcased latest statistics, such as the evolution of peering traffic, the nature of organizations managing IXPs, or port prices and concluded that it is feasible to collect and report statistics from IXPs, with the help of regional IXP associations and the IXP{DB}.

- **Dr Rami Amin** presented the main findings from the upcoming World Bank report 'Affordable Devices for All'. He pointed out that understanding supply-side and demand side factors, and experience from a variety of financing schemes can inform policies to target device affordability, which remains one of the key barriers to connectivity. In-depth analysis addressed the cost structure of smartphones and smart-feature phones, consumer motivations and perceptions collected through user surveys and focus-group discussion, as well as the suitability of alternative financial schemes. Dr Amin also highlighted measurement challenges that need to be addressed for future data collection on device prices. These include the need for a deeper understanding of taxes and fees, the creation of a regularly updated open dataset that covers all countries and finding the right methodology for treating promotions and bundling practices.

Session Measuring connectivity using open and private sector big data

The explosion of data generated from online activities and connected devices has reached unprecedented levels. Most of these data sources are private and subject to safeguards and restrictions, ensuring the protection of individual privacy and the preservation of commercial interests. However, in recent years, there has been closer cooperation between the private and public sectors, highlighting the immense value of utilizing privately-owned big data to gain new insights that support the development of public policies. This has been particularly evident during the COVID-19 pandemic. The session showcased the potential of utilizing big data from the private sector to establish new benchmarks for universal and meaningful connectivity

Speakers

- Mr Andrew Tatem
  Professor of Spatial Demography and Epidemiology
  University of Southampton

Director of WorldPop
United Kingdom
[Presentation](#)
- Mr Barry Graham
Head of Market Impact Team
OpenSignal
[Presentation](#)
- Mr Amit Misra
Principal Data and Applied Scientist
AI For Good Lab
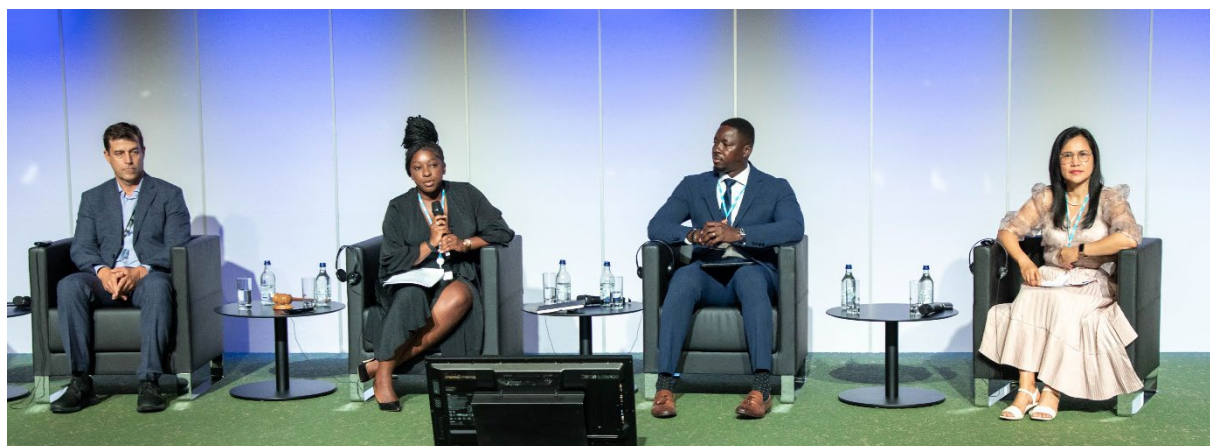Microsoft
[Presentation](#)

Moderator

Mr Steve MacFeely
Director of Data and Analytics
World Health Organization (WHO)

Highlights

- **Mr Andrew Tatem** highlighted in his presentation that the scarcity of mapping resources, lack of reliable validation data, and difficulty in obtaining high-resolution contemporary census statistics pose significant challenges to settlement and population mapping in low-income regions worldwide. To address this issue, WorldPop aims to create detailed and freely available population distribution and composition maps, enabling accurate measurement of the impacts of population growth, monitoring changes, and facilitating planning interventions. WorldPop utilizes a combination of official data, satellite imagery, and data-driven techniques to estimate population grids, providing demographic breakdowns at a resolution as small as 100x100 meters. These maps offer valuable insights into population distribution, which can inform decision-making processes in various sectors. He underlined that small area population estimates can never be flawless, emphasizing the importance of validating outputs, comprehending, and quantifying uncertainties, and effectively communicating them. Additionally, as population figures can be highly sensitive, it is important to ensure local ownership, to have collaborative development with governments, transparent methods, and data, all of which are essential for establishing trust and ensuring the use of this new data source.
- **Mr Barry Graham** provided an overview of the work OpenSignal conducts to accurately measure the true experience of end users with their Internet speeds. Their software, installed on partner apps worldwide, collects billions of measurements daily from over 100 million devices. By simulating consumer activities like browsing, video streaming, and gaming, OpenSignal provides reliable data to compare operators based on metrics. The utilization of OpenSignal data in areas such as quality of service (QoS) and quality of experience (QoE), Network Coverage, Spectrum Utilization, and Energy Consumption offers significant benefits for regulators, policymakers, and the industry. It enables evidence-based decision-making, facilitates infrastructure development, supports efficient spectrum allocation, and promotes sustainability. By leveraging this data, stakeholders can enhance service quality, expand connectivity, optimize spectrum resources, and drive industry growth and innovation.
- **Mr Amit Misra** in his presentation described the Microsoft's Airband Initiative which is focused on bridging the digital divide and providing high-speed internet connectivity to communities worldwide that lack access. He emphasized that rural areas face challenges in accessing reliable internet services, but the true extent of the problem remains uncertain. Accurate mapping plays a crucial role in expanding broadband availability. While the Federal Communications Commission (FCC) reports that over 18 million people in the United States lack broadband access, there is strong evidence suggesting that the actual number is significantly higher. Microsoft's analysis, based on its own data, reveals that approximately 157.3 million individuals in the U.S. do not have access to broadband-speed internet. By highlighting these disparities, Microsoft's Airband Initiative aims to drive awareness and catalyze efforts to provide equitable and widespread broadband connectivity. In terms of future work, Microsoft aims to release a worldwide dataset to the public, which will provide valuable insights into global internet connectivity. Additionally, Microsoft is partnering with the ITU to measure household internet connectivity, further contributing to understanding and addressing the digital divide. To move beyond Internet access, Microsoft plans to leverage their data to assess meaningful connectivity, incorporating factors such as download speeds, and exploring the use of other datasets to enhance coverage and address connectivity gaps.

Session Preparing the ground: mobile phone data for official statistics

As mobile phone usage continues to grow rapidly around the world, the wealth of data generated by these devices presents numerous opportunities for improving our understanding of the information society. The session highlighted some applications of mobile phone data such as in tourism, migration, and for measuring the information society statistics, among others, as well as some of the challenges and limitations in the use of this new data source. The session showcased approaches to help improve access to data, build statistical capacities of, and funding for, national statistics offices.

Speakers

- Ms Esperanza Magpantay
  Senior Statistician, ICT Data and Analytics Division
  International Telecommunication Union
  Presentation
- Ms Ruaa Alshehhi
  Data Analyst
  Federal Competitiveness and Statistics Centre
  United Arab Emirates
  Presentation
- Mr Laurent Sarr
  Chief Technology Officer
  Global Voice Group
  Presentation

- Mr Trevor Monroe
  Senior Program Manager
  Development Economics Data Group
  The World Bank
  Presentation

Moderator

Ms Julie Ssali
Manager of Mobile Forecasting and Modelling
GSMA Intelligence

Highlights:

- **Ms Esperanza Magpantay** in her presentation emphasized the importance of national coordination among the different stakeholders (ministry, regulator, national statistical office, and operators) to facilitate access to mobile phone data. Further, she highlighted that international collaboration is key in ensuring comparability of data derived from mobile phone big data. The leading role of ITU in the UN Committee of Experts on Big Data and Data Science for Official Statistics (UN-CEBD) was highlighted, along with the different applications of mobile phone data in areas such as tourism, migration, disaster context, population

dynamics, information society and transport statistics. She also presented the five UN methodological guides for each of the areas, giving detailed explanation of what is included in the Guide on Information Society SDG indicators. She encouraged countries to use the Guides to ensure comparability of the data.

- **Ms Ruaa Alshehhi** provided an overview of the UN Regional Hub in Dubai, one of the four regional hubs of the UN-CEBD. The Hub aims to provide the largest data collaborative in the MENA region. The Hub aims to illustrate experiences related to data access, access to technology services as well as data science and AI practices. She emphasized the trainings planned in 2023 and engagements with the private sector, communities, and the other government entities. She further encouraged countries to take advantage of the available resources and knowledge in the Hub.

- **Mr Laurent Sarr** presented the work that of the Global Voice Group in several countries in Africa to help regulators collect mobile phone data directly from mobile operators using a tool installed in operator's premises. The data transferred to regulators is cleaned and anonymized data. The presentation further highlighted how data access issues can be mitigated, including through collaborative efforts between policymakers and industry stakeholders to develop transparent and ethical mechanisms to share and access mobile phone big data. He highlighted that appropriate regulations should be in place that will safeguard operators' business and protect individuals' privacy.

- **Mr Trevor Monroe** stressed the importance of programmatic funding for the use of mobile phone big data in national statistics office. This will allow countries to integrate this new data source in their regular statistical processes. He encouraged donors to allocate funding to support research and development in mobile phone big data analytics. This programmatic funding will facilitate the delivery of trainings in different areas, including the processing of raw mobile phone data, and deriving insights in areas where the UN Guides are available. He further announced the ITU and World Bank collaboration that will ensure the implementation of the project that is to be funded by the World Bank Global Data Facility (GDF). The GDF is an innovative global funding instrument designed to enable long-term support and transform data ecosystems and data capital in low- and middle-income countries. Hosted by the World Bank as an umbrella trust fund, the GDF aims to boost programmatic funding and support to integrate the use of MPD for official statistics and policy planning into 30 national data systems by 2030. The countries will be selected based on criteria that will enable them to integrate mobile phone data as one of the data sources.

Session ITU's new statistical tools and initiatives

The ITU assists stakeholders throughout the data lifecycle with many different and innovative products and activities. In this session the ITU DataHub was presented, and the Dashboard for Universal and Meaningful Connectivity was launched. The session also demonstrated the new platform that ITU is now using to collect data from Member States. Lastly, an overview of two training courses on the ITU Academy, one on ICT access and use by households and individuals and one on Telecommunication/ICT indicators was also provided.
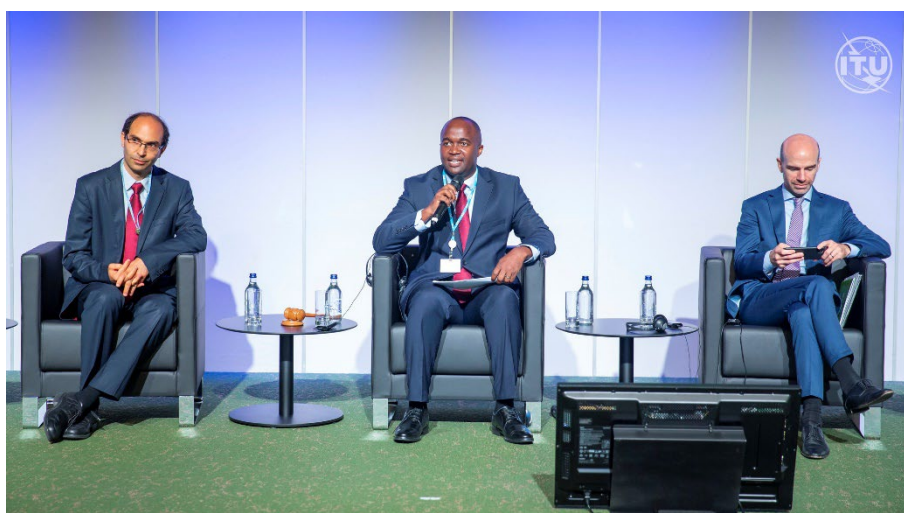
Speakers

- **Mr Thierry Geiger**
  Senior Economist and Head of the ICT Data and Analytics Division
  International Telecommunication Union
  [Presentation](#)
- **Mr Fredrik Eriksson**
  Data Scientist
  ICT Data and Analytics Division
  International Telecommunication Union
- **Mr Nathan Menton**
  Statistician
  ICT Data and Analytics Division
  International Telecommunication Union

Highlights

- **Mr Thierry Geiger** demonstrated the latest release of the [ITU DataHub](#) and the first iteration of the [Universal and Meaningful Connectivity Dashboard](#), released on 3 July 2023. As both tools are work in progress, he invited participants to send comments and feedback to ITU (indicators@itu.int).
- **Mr Fredrik Eriksson** demonstrated the new cloud-based platform introduced in March and used by countries to submit the ICT data questionnaires to ITU. He highlighted the platform's intuitive, multilingual interface, and the new live validation rules to avoid entry mistakes and improve the quality of submissions.
- **Mr Nathan Menton** presented the two new courses offered through the ITU Academy on measuring digital development – one on [ICT access](#) and [use by households and individuals](#) and the other on telecommunication/ICT indicators. These self-paced courses are free-of-charge – links were provided for attendees to register.

Information session Update on the ICT Development Index (IDI)

This session provided an update on the process for developing a new ICT Development Index (IDI) and report on the progress.

Speakers

- Mr Thierry Geiger
  Senior Economist and Head of the ICT Data and Analytics Division
  International Telecommunication Union
  [Presentation](#)

- Mr Daniel Vertesy
  Economist
  ICT Data and Analytics Division
  International Telecommunication Union
  [Biography](#)

Moderator

Mr Bernard Banda
WTIS-23 Chair

Highlights

- **Mr Thierry Geiger** gave an overview of the process to develop a new [ICT Development Index](#) (IDI). He explained that the process for developing the new IDI methodology involves consultations with EGTI/EGH members and Member States, for a potential release in 2023. He explained that the methodology is based on the concept of universal and meaningful connectivity (UMC). UMC has two dimensions: universal connectivity, depending on the uptake by stakeholders, and meaningful connectivity, reliant on enablers like infrastructure, affordability, and devices.
- **Mr Daniel Vertesy** presented the latest version of the IDI methodology. The measurement challenge involves selecting appropriate indicators that fit the Universal and Meaningful Connectivity (UMC) framework, based on six criteria: relevance, ease of interpretation, official data source, data reliability, data variation, and data availability and timeliness. The process considered a long list of indicators from ITU and other UN agencies, with a shorter feasible list further refined through consultations. The IDI currently comprises a Universal Connectivity pillar with three indicators and a Meaningful Connectivity pillar with seven indicators. To calculate the index for over 160 economies, the methodology involves treating outliers, estimating missing data, establishing goalposts and thresholds, and normalizing data. Equal weighting is applied at each level of aggregation to obtain the overall index score. Mr Vertesy emphasized the simplification and uncertainty involved in aggregating indicators into a single index score. Sensitivity and uncertainty analysis can help understand how methodological choices influence scores. Index scores should be seen as entry points, providing a bird's eye view of the current state and trends, but cannot replace the rich set of indicators collected by ITU.

Session Tracking trends in ICT use and ownership: insights from the Expert Group on ICT Household Indicators

The ITU Expert Group on ICT Household Indicators (EGH) reviews global experiences to improve statistical indicators measuring ICT access and use by households and individuals. Their findings contribute to the ITU [Manual for Measuring ICT Access and Use by Households and Individuals](#), which guides countries in conducting ICT household surveys. This session highlighted the outcomes of the most recent EGH meetings and included further presentations on the importance of measuring ICT indicators for children and the experience of Bangladesh in implementing their ICT household survey.

Speakers

- Ms Linah Ngumba
  Statistician
  EGH Chair
  Kenya National Bureau of Statistics
  [Presentation](#)
- Dr Daniel Kardefelt-Winther
  Lead, Research on Children's Digital Engagement and Protection
  UNICEF
  [Presentation](#)
- Ms Syeda Marufa Shaki
  Deputy Director
  Bangladesh Bureau of Statistics
  [Presentation](#)

Moderator

Ms Alana Gorospe Ramos
Chief of the Plans and Policy Monitoring and Evaluation Division (PPMED)
Department of Information and Communications Technology (DICT)
Philippines

Highlights

- **Ms Linah Ngumba**, in her role as EGH Chair, provided an overview of the discussions and conclusions of the [9th](#) and [10th](#) meetings of EGH that took place since the last WTIS. In line with its mission to review existing and develop new indicators on household ICT access and individual ICT use and developing harmonized definitions and data collection methodologies, EGH addressed a wide range of topics in these meetings. Specifically, EGH encouraged countries to start or continue surveying children based on the Global Kids Online guides, continued work to harmonize survey questions on e-waste, and reorganized and expanded the breadth of data collection on ICT skills through dedicated subgroups. In addition, EGH encouraged countries to share experiences on collecting household data on the use of over-the-top (OTT) services through its joint subgroup with EGTI, reviewed the ITU's long questionnaires and shared country experiences on several topics. Ms Ngumba explained that EGTI discussions currently focus on finalizing the respective subgroups' work on the measurement of over-the-top services, e-waste, and ICT skills. She concluded by extending an invitation to WTIS participants to join the [discussion forum](#) and participate in the work of EGH.
- **Dr Daniel Kardefelt-Winther** provided an overview of the need for data on children's use of ICTs and the work already ongoing to collect this information. This work includes internationally comparable surveys conducted by Global Kids Online and through the Disrupting Harm project which focus on children. He also explained the challenges of surveying children such as privacy/safeguarding needs and the difficulty in

conveying concepts related to technology. WTIS attendees took interest in the presentation and Mr Kardefelt-Winther responded to a variety of questions, including those on concerns with surveying children and how questions to children can be integrated into existing ICT household surveys.

- **Ms Syeda Marufa Shaki** presented the main findings from the ICT Access and Use by Households and Individuals Survey conducted by the Bangladesh Bureau of Statistics in 2023. The survey was the second annual survey dedicated to collecting ICT statistics. Ms Shaki shared details on the objectives, sampling design, and data quality monitoring methods of the survey before finishing her presentation by summarizing the results of the survey. In the question-and-answer portion of the session Ms Shaki provided additional information to attendees. She responded to questions from attendees on how budget directors were persuaded to provide resources to the Bureau of Statistics to conduct this survey as well as on any policy outcomes from these new data, among others.

Session The promises and perils of AI for statistics

As artificial intelligence (AI) continues to reshape our world, it holds the potential to revolutionize the ways in which we create, analyze, and present statistical data.

Speaker

Dr Emmanuel Letouzé
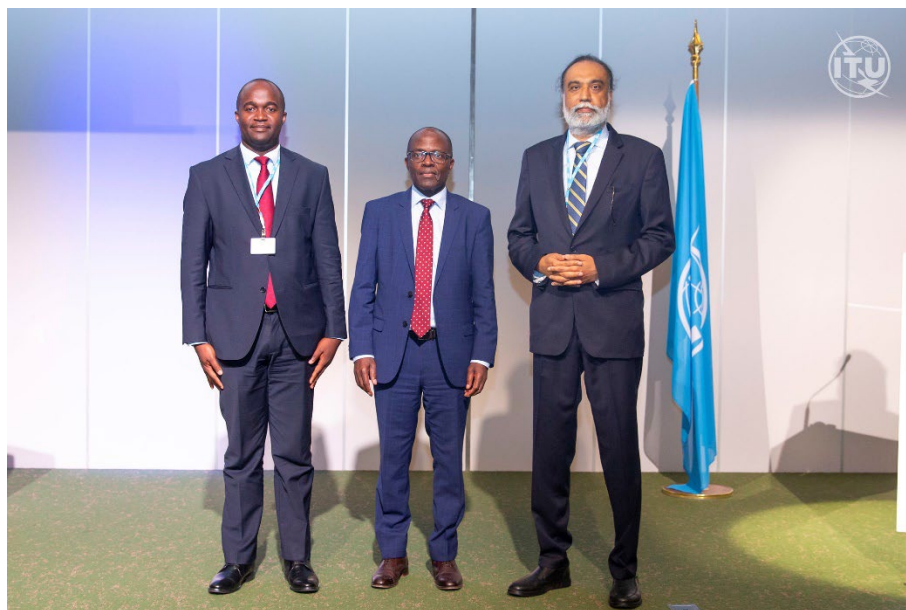Director
Data-Pop Alliance
Presentation

Moderator

Mr Alexandre Barbosa
Head
Regional Center for Studies on the Development of the Information Society (Cetic.br)
Brazil

Highlights

Dr Emmanuel Letouzé in his presentation highlighted how official statistics can leverage AI in statistical processes and on improving data quality. The session focused on the merits, promises, and potential pitfalls of AI in the realm of data and statistics. AI can contribute to improving knowledge and trust among the public by employing AI-driven communication tools (such as ChatGPT), to better engage with the public, facilitate access to information, and combat disinformation and misinformation to safeguard societies. Further, the integration of AI can lead to more efficient and smarter operations within official statistics, such as in optimizing resource allocation during surveys, analyzing system performance, enabling better decision-making and resource management. However, AI implementation in official statistics entails shifting the mindset towards prioritizing innovation over solely focusing on statistical production. This includes developing innovative projects and forging partnerships to attract and retain highly skilled personnel within the field. The session further illustrated through a short demonstration how ChatGPT can be used to disseminate statistics in an efficient manner but at the same time how wrong data or information could also be present, and that it is important to be careful when using it.

Closing session

Speakers

- Mr Amandeep Singh Gill
  UN Secretary-General Special Envoy on Technology
  United Nations
- Dr Cosmas Luckyson Zavazava
  Director
  Telecommunication Development Bureau
  International Telecommunication Union
- Mr Bernard Banda
  WTIS-23 Chair

Highlights

- In his speech, **Mr Amandeep Singh Gill** emphasized the importance of ICT indicators and data in advancing inclusive and sustainable digital transformations. Although the quality of ICT indicators is improving, there is still room for improvement in attracting the right investments. The community must work harder to address missing data, using artificial intelligence and big data to complement traditional statistical approaches. Additionally, the presentation of data to policymakers must improve, focusing on better data visualization and providing qualitative context alongside quantitative indicators. The Office of the Secretary-General's Envoy on Technology has been working with ITU on universal and meaningful connectivity indicators to help policymakers better understand and relate to them. The Global Digital Compact, set to be negotiated next year, will focus on inclusive, safe, and sustainable digital objectives, actions, and principles. Better data, real-time data, and highly targeted data are crucial to the digital development paradigm, and the ITU's work on data is vital in addressing the digital divide. Mr Gill concluded by thanking ITU for bringing together experts on this important topic and highlighted the significance of ongoing discussions on data and AI for addressing the digital divide and advancing the digital transformation agenda.
- In his concluding remarks, **Dr Cosmas Luckyson Zavazava** expressed his gratitude to the attendees for their commitment to meaningful statistics and measurement, noting the event had attracted about 300 participants from 90 countries. He emphasized the importance of data for better decision-making and driving sustainable development.
- In closing the Symposium, **Mr Bernard Banda** summarized the discussions of the two days, focusing on the importance of measuring connectivity enablers and showcasing promising approaches.

Additional information

Results of the Mentimeter poll: **In one word, please define this edition of WTIS.**

Based on 102 responses

Thank you to all the WITS-23 participants!

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*Advancing the measurement
agenda to achieve universal
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