

This PDF is provided by the International Telecommunication Union (ITU) Library & Archives Service from an officially produced electronic file.

Ce PDF a été élaboré par le Service de la bibliothèque et des archives de l'Union internationale des télécommunications (UIT) à partir d'une publication officielle sous forme électronique.

Este documento PDF lo facilita el Servicio de Biblioteca y Archivos de la Unión Internacional de Telecomunicaciones (UIT) a partir de un archivo electrónico producido oficialmente.

هذه النسخة الإلكترونية (PDF) مقدمة من قسم المكتبة والمحفوظات في الاتحاد الدولي للاتصالات (ITU) نقلاً من ملف إلكتروني صادر رسمياً.

本 PDF 版本由国际电信联盟(ITU)图书馆和档案服务室提供。来源为正式出版的电子文件。

Настоящий файл в формате PDF предоставлен библиотечно-архивной службой Международного союза электросвязи (МСЭ) на основе официально созданного электронного файла.



World Telecommunication/ICT Indicators Symposium 2024

Summary Report

September 2024



From metrics to action: Bridging data gaps for universal and meaningful connectivity

The 19th World Telecommunication/ICT Indicators Symposium (WTIS-24) took place in Geneva, Switzerland, from 23 to 24 September 2024.

Under the theme "From metrics to action: Bridging data gaps for universal and meaningful connectivity", the event brought together leading experts, policymakers, and practitioners from around the globe to discuss the future of ICT measurement and its critical role in achieving universal and meaningful connectivity (UMC).

WTIS-24 featured 32 speakers and attracted 276 participants, both on-site and remote, from 85 countries. Forty-three percent of the participants were women.

The symposium addressed a range of topics, from the use of mobile phone big data to innovative financing models for ICT statistics. Speakers explored emerging challenges in data collection and the need for more resources, while showcasing promising tools and methods, such as data visualization, augmented reality, and machine learning, to assist data producers and users.

WTIS-24 underscored the importance of collaboration across sectors and international borders to drive innovation in ICT measurement, particularly for developing countries.

WTIS-24 was immediately followed by the <u>15th</u> <u>Meeting</u> of the Expert Group on Telecommunication/ICT Indicators (EGTI) and <u>12th</u> <u>Meeting</u> of the Expert Group on ICT Household Indicators (EGH). The proximity of the events allowed for significant synergies.

This report presents key highlights of each session. The WTIS-24 webpage contains additional information, including speakers' biographies, webcast of all sessions, and the WTIS-24 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 or write to indicators@itu.int.

Programme

Day 1 - Monday, 23 September 2024	Day 2 - Tuesday, 24 September 2024		
Opening ceremony	Advancing the measurement of ICT Access and Use: Insights from the ITU Expert Group on ICT Household Indicators and other Emerging Measurement Practices		
Keynote "Back to the future: technology, data, communication"	Paying for universal and meaningful connectivity measurement: Financing models for ICT statistics		
Data for universal and meaningful connectivity	Mobile phone big data: from methods to implementation		
Shaping the ICT statistics agenda: Report from the Expert Group on Telecommunication/ICT Indicators	Next-gen statistics: Harnessing Al and machine learning		
Celebrating 20 years of the Partnership on measuring ICT for Development	Closing session		
	WTIS-24 Reception		

WTIS-24 Opening ceremony



Speakers

- <u>Cosmas Luckyson Zavazava</u>, Director,
 Telecommunication Development Bureau,
 International Telecommunication Union
- <u>Miosotis Rivas Peña</u>, Director General National Statistics Office, Dominican Republic; WTIS-24 Chair

Summary

The 19th World Telecommunication/ICT Indicators Symposium (WTIS-24) commenced with key addresses from Cosmas Luckyson Zavazava, Director of the ITU's Telecommunication Development Bureau, and Ms. Miosotis Rivas Peña, Chair of WTIS 2024 and Director General of the Dominican Republic's National Statistics Office.

In his opening remarks, Dr. Zavazava underscored the theme of this year's symposium, "Metrics to Action: Bridging Data Gaps for Universal and Meaningful Connectivity." He emphasized ITU's two strategic goals: achieving universal, meaningful access to connectivity and fostering sustainable digital transformation. Zavazava highlighted that progress cannot be achieved without measuring it, stressing that high-quality data is essential for assessing and accelerating efforts toward these goals. He pointed out that data must not only capture the number of people connected but also the quality of their connectivity, which impacts education, economic growth, and social inclusion.

Reflecting on the collaborative nature of ICT development, Mr. Zavazava commended the 20-year partnership on measuring ICT for development, recognizing the joint efforts of various international bodies. He also acknowledged significant contributions from partners such as the European Commission, which co-funded a €3 million project to promote universal connectivity measurement. Mr. Zavazava announced key upcoming sessions on topics like big data and AI for enhancing ICT data collection and analysis, and a discussion on the environmental impact of the digital sector, culminating in the launch of the <u>Greening Digital Companies 2024</u> report.

In her opening remarks, Ms. Miosotis Rivas Peña welcomed participants and emphasized the need to convert data into tangible actions that address global digital inequalities. She noted that digital gaps, often linked to existing structural disparities in countries, prevent millions from accessing meaningful connectivity. Rivas Peña stressed that "meaningful connectivity" goes beyond basic Internet access, highlighting its importance in education, business, and civic participation. Access to high-quality Internet, she noted, empowers people, reduces inequalities, and creates opportunities for social and economic development.

Ms. Rivas Peña pointed out the vital role of metrics in identifying who is connected, who is not, and the quality of their access. She emphasized that statistics must be transformed into actions that drive real-world change, ensuring no one is left behind in the digital age. She expressed hope that the dialogue during WTIS would foster innovative solutions and new methodologies for bridging data gaps.

Both speakers concluded with a call for participants to engage in the upcoming sessions, emphasizing the importance of partnerships, datadriven decisions, and continued collaboration to achieve universal and meaningful connectivity.

Keynote Back to the future: Technology, data, communication



Speaker

<u>Alan Smith</u>, O.B.E., Head of Visual and Data Journalism, Financial Times, United Kingdom

Summary

Alan Smith delivered a keynote on the power of data visualization and storytelling in the digital age, drawing from his experiences in official statistics and journalism. He emphasized the critical need for data to be not only accurate but also engaging and memorable. Reflecting on his time at the UK Office for National Statistics (ONS), Mr. Smith recounted how he pioneered the use of visual storytelling to make complex data more accessible to the public. His work at ONS underscored the importance of balancing technical precision with communication strategies that connect with a broad audience.

A key theme of the keynote was the role of surprise and memorability in data visualization. He highlighted how well-crafted, engaging visuals can significantly enhance public understanding of data. To illustrate, he shared the story of an interactive, census-based quiz that became so popular it caused the ONS website to crash. Mr. Smith attributed this success to the project's use of gamification, which made statistics more engaging and easier to remember. He stressed that memorable data presentations can not only captivate the audience but also lead to better-informed decisions.

Mr. Smith also discussed his transition to the Financial Times, where he revolutionized their approach to data visualization. At the *Financial*

Times, he introduced "Visual Vocabulary," a framework designed to help journalists select the most effective visualization methods for different types of data. This tool has become a cornerstone of the Financial Times' data storytelling, offering journalists a structured way to present complex information. He pointed to a visualization of income distribution during the 2016 U.S. election as a pivotal moment—this piece went viral and sparked widespread public debate, showing how impactful well-designed, clear visuals can be in conveying important economic realities.

In the latter part of his keynote, Mr. Smith addressed the challenges of visualizing more complex systems. He shared insights into an interactive project based on the Phillips Machine, a hydraulic model of the UK economy. By using augmented reality (AR) and extended reality (XR) technologies, Mr. Smith demonstrated how immersive experiences could deepen the public's understanding of intricate economic systems. He emphasized that while these technologies are still in their infancy and can be expensive, they hold immense potential for transforming data engagement and education by moving beyond static charts and mobile screens.

During the Q&A session, Mr. Smith responded to questions about the role of emerging technologies like AR in everyday data use. He acknowledged that while these tools remain niche, their ability to enhance interaction with data could become a game-changer in the future. Addressing concerns about statistical literacy among journalists, Smith stressed the importance of better training to ensure the accurate reporting of data. He also highlighted the need for improved data literacy among policymakers, suggesting that visual storytelling could bridge this gap, especially when making data relevant to real-world decisions. Mr. Smith concluded by advising national statistical offices to maintain neutrality while using contextual comparisons to provide deeper insights, urging them to use time and geographic dimensions to offer richer, yet impartial, narratives.

Session Data for universal and meaningful connectivity



Speakers

- Moderator: Cosmas Luckyson Zavazava,
 Director, Telecommunication Development
 Bureau, International Telecommunication
 Union
- <u>Laura Eiro</u>, Director General, Data, Safety and Security Department, Ministry of Transport and Communications, Finland; Chair of the Advisory Board Statistics Finland
- Helani Galpaya, Chief Executive Officer, LIRNEasia
- <u>Ekaterine Imedadze</u>, Commissioner, National Communications Commission, Georgia

In his introduction, Dr. Cosmas Luckyson Zavazava set the stage by emphasizing the crucial role of reliable, actionable data in bridging global connectivity gaps. He highlighted the importance of using data-driven insights to ensure that efforts toward achieving universal and meaningful connectivity are both effective and inclusive.

Helani Galpaya provided an overview of LIRNEasia's experience in using mobile network data to track population movements and connectivity patterns, particularly in regions where traditional data collection methods are not feasible. She explained how mobile data has been crucial in policy interventions, offering a real-time understanding of connectivity issues in South Asia. For instance, during the COVID-19 pandemic, mobile network data helped identify gaps in connectivity, especially in remote and economically disadvantaged areas. Ms. Galpaya stressed that beyond identifying gaps, such data enables targeted policy responses, ensuring resources are allocated efficiently to improve connectivity infrastructure. She also highlighted

the importance of leveraging big data analytics to make the most out of available information.

Ekaterine Imedadze shared Georgia's approach to data-driven decision-making through its comprehensive market analysis. This initiative involved detailed data collection on telecommunications infrastructure, subscriber information, and market dynamics to assess competition and technological access. Ms. Imedadze explained that data has been pivotal in informing regulatory policies that aim to expand digital access, particularly in rural and underserved areas. The challenge lies in gathering precise, timely, and granular data to support effective decision-making. She also emphasized the importance of cooperation between regulators, service providers, and international organizations in ensuring that data collection efforts lead to tangible improvements in connectivity.

Laura Eiro participated remotely and discussed Finland's innovative <u>Data Room initiative</u>. This initiative, which was developed during the COVID-19 pandemic, allows for the real-time analysis of data from various public and private sources to support political and policy decision-making. Ms. Eiro highlighted the importance of trust between citizens and government institutions, noting that Finland's high level of public trust has been crucial for successful data collection and use. She also pointed out that rapid access to up-to-date data is essential in evaluating the impact of policies, allowing Finland to make informed adjustments in real time. Ms. Eiro further emphasized the need for robust data privacy frameworks, especially when dealing with personal data from multiple sources.

The session also addressed broader challenges in data collection, particularly in rural and remote regions. The speakers highlighted the importance of innovative data collection methods, such as big data analytics and mobile data, to provide insights that are actionable and relevant for policymakers. The session concluded with a call for stronger international cooperation and multi-stakeholder partnerships to ensure that data-driven solutions are at the forefront of global efforts to achieve universal, meaningful, and affordable connectivity.

Session Shaping the ICT statistics agenda: Report from the Expert Group on Telecommunication/ICT Indicators (EGTI)



Speakers

- Moderator: <u>Shazna Zuhyle</u>, Independent consultant, Sri Lanka
- <u>Bernard Banda</u>, Director, Economic Regulation, ZICTA, Zambia; EGTI Chair
- Anne-Laure Durand, Head, Market Observatories, ARCEP, France
- <u>Liang Guo</u>, Chief Engineer, Cloud Computing and Big Data Research Institute, China Academy of Information and Communications Technology, China

Summary

Shazna Zuhyle opened the session by stressing the importance of comprehensive, reliable, and timely data for shaping ICT policies and global development agendas.

The chair of EGTI, Bernard Banda, presented the group's activities over the past year, focusing on supply-side indicators and the methodologies used to ensure data harmonization. He highlighted key discussions from EGTI's 14th meeting in September 2023, particularly around mobile money indicators and the need to work closely with the IMF's Financial Access Survey to improve and harmonize data collection. He also discussed the importance of updating ICT price baskets to reflect changes in consumption patterns and the need for new indicators to measure the impact of satellite-based fixed broadband services and overthe-top (OTT) services. He emphasized the collaborative approach EGTI takes through the formation of subgroups, which bring together experts to discuss specific topics. He also noted the need for better measurement of fixed

broadband penetration, on whether the denominator should be the population or the number of households. The meeting in 2023 concluded that using the number of households offers more advantages than population, however, concerns were raised about data availability and ITU's mandate in collecting the total number of household data. He outlined ongoing work, including collaboration with the UN Population Division to ensure data comparability on the total number of households.

Next, Liang Guo provided insights into China's development of data centres and the country's approach to monitoring computing power and efficiency. He shared how China has improved the measurement of design and efficiency of data centres over the past decade, integrating environmental indicators such as Power Usage Effectiveness (PUE) and Water Usage Effectiveness (WUE). Mr. Guo emphasized the need for international collaboration to develop universal indicators for data centre performance, suggesting that countries begin with simple indicators to allow for global comparison.

The final speaker, Anne-Laure Durand discussed France's efforts to measure the environmental impact of the digital sector. She highlighted the lack of reliable data on the carbon footprint of digital technologies and explained ARCEP's approach to collecting environmental indicators from telecom operators and manufacturers. Ms. Durand stressed the importance of starting with a few key indicators and gradually expanding the scope of data collection to cover more aspects of the digital ecosystem.

The session concluded with a lively Q&A, where panellists addressed questions on data collection methodologies and the role of international cooperation in developing globally harmonized ICT indicators.

During the session, a participant presented a proposal from the Regional Commonwealth in the field of Communications regarding the terms of reference of EGTI and of the Expert Group on ICT Household Indicators.

Session 20th anniversary of the Partnership on measuring ICT for Development



Speakers

- Moderator: <u>Alexandre Barbosa</u>, Head, CETIC.br, Brazil
- <u>Scarlett Fondeur-Gil</u>, Economic Affairs Officer, UN Trade and Development
- <u>Michael Frosch</u>, Senior Statistician, International Labour Organization
- <u>Esperanza Magpantay</u>, Senior Statistician, ITU
- <u>Deniz Susar</u>, Governance and Public Administration Officer, United Nations Department of Economic and Social Affairs (UNDESA)
- Yusif Yusifov, Deputy Chairman, State Statistical Committee, Azerbaijan

Summary

In his introduction, Alexandre Barbosa highlighted the history of the Partnership, launched in 2004 in São Paulo, Brazil, and the impressive progress made over two decades in producing high-quality and comparable ICT statistics globally. He listed the key objectives of the Partnership on improving the quality and comparability of data, and capacity-building.

Esperanza Magpantay provided an <u>overview of the Partnership's history and achievements</u>, including the development of core ICT indicators across sectors such as households, businesses, government and education, and on e-waste. She stressed that despite progress in data collection efforts of countries, challenges remain in data availability in low-income countries, with funding as a major barrier. She highlighted the importance of continued capacity building and the use of new data sources to address data gaps.

Scarlett Fondeur Gil discussed the Partnership's role in supporting evidence-based policymaking at national and international levels, especially for

developing countries. She provided an overview of availability of <u>data on ICT usage in business</u>, the <u>ICT sector</u>, and <u>digital trade</u>. Ms. Fondeur pointed out the slow pace of improvement in developing countries, with only 53 percent of respondents collecting data on Internet usage by businesses. She emphasized the need for financing surveys, noting that while demand for ICT data has grown, availability lags.

Deniz Susar highlighted the evolution of the Partnership's ICT and e-government indicators over the past 20 years. He highlighted the recently adopted Global Digital Compact (GDC) and those items related to the work of the Partnership such as improving connectivity indicators by 2030, conducting national digital inclusion surveys with disaggregated data and introducing digital competency indicators for public officials. He also shared their work on ICT and government indicators and noted progress in areas such as e-participation, digital identity, and open government data, and stressed the need for new indicators to measure digital skills in the public sector.

Michael Frosch addressed the need for improved measurement of ICT use in employment, particularly digital platform work. He highlighted two key areas of work: on improving the measurement of ICT use, especially in the informal economy, through labour force surveys focusing on digital access, barriers, and gender gaps, which are critical for policy discussions on formalizing the informal economy; and on setting statistical standards for digital platform work and employment, aiming to address data gaps, especially in low- and middle-income countries.

Yusif Yusifov shared Azerbaijan's journey in developing ICT statistics over the past two decades. He discussed how the Partnership's methodological materials have shaped national statistical practices, and how Azerbaijan has continuously improved its data collection methods and digital development indicators.

In closing, the session underscored the Partnership's critical role in advancing ICT measurement globally and the importance of collaboration, funding, and innovation in data collection to meet future measurement challenges.

Session Advancing the measurement of ICT Access and Use: Insights from the ITU Expert Group on ICT Household Indicators and other Emerging Measurement Practices



Speakers

- Moderator: <u>Riina Vuorikari</u>, independent consultant
- <u>Linah Ngumba</u>, Head, ICT Statistics Section,
 Kenya National Bureau of Statistics; EGH Chair
- Molly Lesher, Acting Head of the Digital Connectivity, Economics and Society Division, OECD
- <u>Justin Thomas</u>, Senior Research
 Specialist, Digital Wellbeing Programme,
 Sync, Ithra, Saudi Arabia
- <u>Enrico Nano</u>, Head of Research, Horizon Group

Riina Vuorikari set the stage by introducing the presenters and emphasizing the critical need for accurate, comprehensive data on ICT access and use to shape policies aimed at reducing the digital divide.

Linah Ngumba opened the presentations by discussing the work of the ITU Expert Group on Household Indicators (EGH). She provided an overview of the primary mission of EGH - to review and update ICT indicators to ensure they reflect technological advancements and enable crosscountry comparisons. She next recounted the key topics discussed in the 2023 EGH meeting included harmonizing ICT e-waste surveys, measuring OTT (over-the-top) services, and ICT skills indicators. Work in 2024 focused on continuing to improve ICT skills measurement - an SDG indicator - and discussion on improving the ICT Development Index (IDI). To close, Ms Ngumba emphasized the importance of international collaboration and encouraged more

countries to join EGH and share their experiences through its online forum.

Molly Lesher next provided an overview of the <u>Truth Quest Survey</u>, conducted by the OECD to measure people's ability to identify false and misleading content online. The <u>survey</u>, conducted across 21 countries, used fact-checked claims and a gamified format to assess how well respondents were able to correctly assess the truthfulness of content. Ms Lesher presented the results of the survey showing that, on average across these countries, people correctly identified false content 60% of the time. She highlighted several interesting findings including that Al-generated false or misleading content was recognized more frequently than human-generated content. The survey also underscored the influence of media consumption patterns and trust in AI, revealing that positive perceptions of AI were associated with an increase in participants' ability to identify accurate information.

Justin Thomas and Enrico Nano concluded the session with a joint presentation on measuring <u>digital well-being</u> through the <u>Global Digital</u> Wellbeing Index (DWI). Mr Nano outlined the development of the DWI - a collaboration between the Horizon Group and Sync - which uses 12 pillars to evaluate opportunities, such as enhancing education, social connectedness, and income, alongside risks like mental health challenges, cyber safety concerns, and behavioural addictions. Mr Nano and Mr Thomas each provided comparisons of countries on these different aspects. They also emphasized the aim of DWI to inform policymakers and foster a balanced approach to digital advancement. Mr Thomas closed by noting that the DWI will expand to cover 50 countries by 2026 and will aim to address emerging technologies and behaviours.

The session concluded with a consensus on the need for more detailed, forward-looking indicators that not only measure ICT access but also the broader, more nuanced impacts of technology on individuals and societies.

Session Paying for UMC measurement: Financing models for ICT statistic



Speakers

- Moderator: <u>Henri Numbi Ilunga</u>, Chef de Service de l'Observatoire des Marchés, ARPTC, Democratic Republic of the Congo
- Andrea Barone, Senior Economist, World Bank
- Vasco Molini, Program Manager of the 50 x 2030, a joint initiative of the World Bank, FAO and IFAD
- <u>Miosotis Rivas Peña</u>, Director General,
 National Statistics Office, Dominican Republic
- Yusif Yusifov, Deputy Chairman, State Statistical Committee, Azerbaijan

Summary

Henri Numbi Ilunga opened the discussion by highlighting the importance of sustainable financing models to support the measurement of ICT statistics. He emphasized that without consistent funding, countries would struggle to collect the necessary data to monitor and improve universal and meaningful connectivity.

Yusif Yusifov provided insights from Azerbaijan, which has developed innovative financing mechanisms for ICT statistics over the past two decades. He emphasized the importance of building strong partnerships, notably with international organizations, such as the ITU, to secure long-term, sustainable funding. Mr. Yusifov highlighted that integrating ICT statistics into broader national development programs has been crucial in ensuring sustained financial support from both the public and private sectors.

Miosotis Rivas Peña <u>focused on the Dominican</u> <u>Republic's approach</u> to financing ICT statistics, underscoring the challenges developing countries face in securing reliable and continuous funding, particularly for long-term data collection initiatives. She advocated for developing public-private partnerships to bridge funding gaps and emphasized the role of international cooperation in providing both financial resources and technical assistance, as well as capacity-building efforts, to ensure that the data collected is not only accurate but also actionable and useful for policy-making.

Andrea Barone <u>presented how the World Bank's</u> <u>supports the financing of ICT statistics</u> across different geographies. The World Bank has been working with governments to integrate ICT measurement into broader economic frameworks and national development strategies. Mr. Barone stressed the importance of leveraging existing data collection infrastructures, such as national statistics offices, to ensure cost-effectiveness and minimize duplication of efforts. He also emphasized the need for countries to adopt innovative financing models, such as performance-based funding or results-based financing, to improve the sustainability and efficiency of their ICT data collection efforts.

Lastly, Vasco Molini <u>presented</u> the "50 x 2030" <u>initiative</u>, a collaboration between the World Bank, FAO, and IFAD, aimed at financing agricultural statistics. Although focused on agriculture, Mr. Molini drew parallels to ICT statistics, emphasizing that similar models of international collaboration, pooled financing, and resource sharing could be effectively applied to ICT measurement. He stressed that innovative financing solutions, such as blended finance, could help developing countries overcome funding challenges and improve their data collection efforts.

In concluding, Mr. Numbi Ilunga emphasized the importance of collaboration and innovation in financing ICT statistics. Participants asked how developing countries could apply the discussed models. Yusif Yusifov highlighted the role of international partnerships and integrating ICT statistics into national development plans. Ms. Rivas Peña underscored the need for flexibility in partnerships, while Mr. Barone pointed out the importance of resilient data collection systems to handle fluctuating funding. Mr. Molini advocated for resource pooling across sectors to address funding gaps.

Session Mobile phone big data: From methods to implementation



Speakers

- Moderator: <u>Daniel Power</u>, Managing Director Flowminder
- Mohamad Hairy Halib, Head of Statistics and Data Intelligence Department, Malaysian Communications and Multimedia Commission, Malaysia
- <u>Fredrik Eriksson</u>, Senior Data Scientist, ITU
- <u>Trevor Monroe</u>, Senior Program Manager, World Bank
- <u>Esperanza Magpantay</u>, Senior Statistician, ITU

Summary

The session focused on the methods and practical implementation of mobile phone big data for improving ICT statistics.

Mr. Power began by highlighting the immense potential of mobile phone data to transform how we understand user behavior, infrastructure usage, and digital connectivity. He emphasized that this data is especially valuable in regions where traditional data collection methods may be limited or outdated. By using mobile phone data, policymakers and stakeholders can obtain realtime, actionable insights into digital inclusion, Internet access, and overall connectivity, which are crucial for informed decision-making.

Esperanza Magpantay provided a comprehensive overview of ITU's initiatives to incorporate mobile phone big data (MPD) into global ICT measurements. She stressed that MPD offers an unparalleled opportunity to fill gaps. She presented an update of the partnership between ITU and the World Bank on using MPD to work for policy, which is now in the implementation phase, and the efforts to apply MPD in various countries to measure information society indicators. She

highlighted the 18 countries selected to be funded under the Global Data Facility (GDF-MPD) that will receive technical support for developing their MPD capabilities and guidance to strengthen their statistical systems to use MPD. She emphasized the importance of collaboration across countries and organizations to achieve sustainable use of MPD globally by 2030.

Fredrik Eriksson began by highlighting ITU's long-standing work in helping countries use mobile phone data to measure the information society. He then presented ITU's latest development: a set of technical notebooks, including both code and documentation, designed to streamline the cleaning, processing, and analysis of mobile phone data. Mr. Eriksson also stressed the importance of ensuring high data quality and validating results against survey data. He emphasized the great potential of mobile phone data in measuring the information society and encouraged countries to collaborate with ITU and other partners to integrate mobile phone data as a key source in national statistical frameworks.

Mohamad Hairy Halib shared Malaysia's experience with the implementation of mobile phone big data for national ICT statistics. He highlighted the importance of securing high-level government support and a mandate to access data from mobile network operators (MNOs). Mr. Halib, explained that Malaysia uses a centralized processing model with five MNOs submitting anonymized data to MCMC, the telecom regulator, for further analysis. Key lessons included the necessity of government mandates, fostering strong relationships between regulators and MNOs, learning from other countries' successes, and collaborating with ITU, whose technical notebooks greatly improved data processing efficiency.

The session concluded with a strong consensus on the value of mobile phone big data in enhancing ICT statistics. The speakers underscored the need for continuous collaboration between governments, MNOs, and international organizations, while also stressing the importance of safeguarding privacy and ensuring data security. This approach, they agreed, would enable successful implementation and utilization of mobile phone data in shaping future ICT policies.

Session Next-gen statistics: Harnessing Al and machine learning



Speakers

- Moderator: <u>Howard Bilodeau</u>, Economist, Statistics Canada
- <u>Irina-Madalina Bejan</u>, Technical lead, OpenMined
- InKyung Choi, Statistician, United Nations Economic Commission for Europe
- <u>Ronald Jansen</u>, Assistant Director, United Nations Statistics Division

Summary

The session focused on next-generation statistics and the emerging trends and challenges in this rapidly evolving field.

Howard Bilodeau emphasized the growing interest in measuring Al adoption rates and its societal and economic impacts. He highlighted that successful use of Al depends on an organization's ability to leverage its strengths while mitigating its weaknesses. At Statistics Canada, Al adoption is approached methodically to align with the core principles of producing robust, trusted, and high-quality statistics.

Ronald Jansen highlighted the global statistical community's efforts to address artificial intelligence (AI) and data science. Countries and organizations within the UN Committee of Experts on Big Data and Data Science (UN-CEBD) are collaborating to advance methodologies, training materials, and capacity development, particularly through task teams and global hubs. Mr. Jansen emphasized the importance of leveraging big data, such as real-time AIS vessel tracking data, to build new skills and data pipelines for statistical offices. He also noted the increasing use of AI and data science in these offices, which has led to a

revision of the Committee's mandate to include emerging technologies and Al governance.

InKyung Choi focused on the role of artificial intelligence (AI) and machine learning (ML) for official statistics. She explained how these technologies can help automate the processing of large datasets, uncover patterns that would be difficult to detect through traditional methods, and predict trends more accurately. Ms. Choi highlighted several examples where AI and ML have been successfully implemented in national statistical offices, enabling faster decision-making and more accurate forecasts. However, she also acknowledged the challenges of ensuring data quality and interpretability when using complex algorithms, stressing the need for transparency and accountability in the use of AI for statistics.

Irina-Madalina Bejan discussed the ethical considerations and privacy concerns associated with next-generation statistics, particularly when using personal or sensitive data. She introduced the concept of privacy-preserving techniques, such as differential privacy, which OpenMined is promoting to ensure that large datasets can be used for statistical purposes without compromising the privacy of individuals. Ms. Bejan elaborated on how these technologies can enable organizations to share data more openly while safeguarding personal information, thus facilitating greater collaboration and more comprehensive data analysis. She underscored that the successful adoption of privacy-preserving technologies is critical to building trust in the data ecosystem, especially as the volume and sensitivity of data continue to grow.

The session concluded with a discussion on the future of next-gen statistics, where all speakers agreed that innovation in data collection, analysis, and privacy protection is essential. They highlighted the need for international cooperation, cross-sector partnerships, and continued investment in capacity building to ensure that statistical systems can keep pace with technological advancements and meet the evolving demands of policymakers and society.

WTIS-24 Closing session



Speakers

- Cosmas Luckyson Zavazava
 Director
 Telecommunication Development Bureau
 International Telecommunication Union.
- Miosotis Rivas Peña Director General National Statistics Office Dominican Republic; WTIS-24 Chair

Summary

At the closing of WTIS 2024, Dr. Cosmas Luckyson Zavazava, BDT Director, and Miosotis Rivas Peña, WTIS-24 Chair, reflected on the symposium's achievements and future directions.

Mr. Zavazava emphasized the importance of filling key positions within the Expert Groups, inviting members to volunteer for vice-chair roles. He also highlighted the preparatory process for the upcoming World Telecommunication Development Conference (WTDC) 2025 in Azerbaijan, stressing the need for early and efficient regional consultations.

Mr. Zavazava reiterated the importance of producing high-quality, accurate data and addressing gaps in data collection. He acknowledged the challenges posed by estimations and underscored the need for credible methodologies to ensure the soundness of the ICT Development Index (IDI) and Global

Cybersecurity Index. He also discussed the progress made in bridging the digital divide, noting improvements in least developed countries (LDCs) and efforts to enhance cybersecurity.

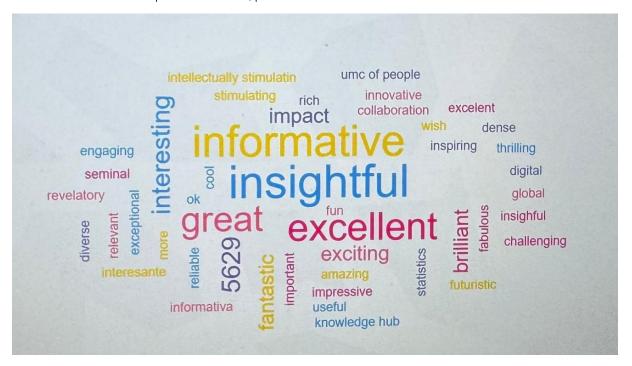
Furthermore, Mr. Zavazava praised the role of international partnerships, particularly with the European Commission, in driving initiatives such as broadband infrastructure mapping and universal meaningful connectivity. He acknowledged the ongoing cooperation and contributions of the private sector and industry players to ITU's mission. He concluded by urging continued collaboration and engagement from all stakeholders, reminding participants that the ITU's work is driven by a desire to create meaningful impact for people worldwide.

Ms. Miosotis Rivas Peña, in her closing remarks, expressed gratitude to all participants for their active engagement over the two-day symposium. She highlighted the discussions on data gaps and the critical role of metrics in driving universal and meaningful connectivity. Ms. Rivas Peña emphasized that translating metrics into actionable strategies is key to improving the lives of millions globally.

She also touched on important topics covered during the symposium, such as the risks and opportunities posed by AI, the environmental footprint of the ICT sector, and new measurement models. Ms. Rivas Peña reiterated the importance of strategic partnerships, inclusive policies, and international cooperation in closing connectivity gaps. She praised the contributions of experts, panellists, and the ITU team for their dedication and knowledge-sharing, which enriched the debates.

Ms. Rivas Peña concluded by urging continued collaboration toward achieving inclusive, transformative connectivity, expressing confidence that the shared knowledge will bring participants closer to the goal of universal and meaningful connectivity.

Results of the Mentimeter poll "In one word, please define this edition of WTIS-24".



Based on 88 responses.



Thank you to all the WITS-24 participants!



