

REPORT ON THE 20th IAOS CONFERENCE

Navigating the Data Revolution: Innovations
and Impact in Modern Statistics

12–14 May 2026, Vilnius, Lithuania



State Data
Agency
Statistics
Lithuania

eurostat 



esri

THE
SCIENCE
OF
WHERE™



I.	INTRODUCTION	2
II.	CONFERENCE MANAGEMENT.....	4
	a. ORGANISING COMMITTEES.....	4
III.	CONFERENCE AND SIDE-EVENTS PARTICIPANTS.....	5
IV.	SCIENTIFIC PROGRAMME	5
V.	KEYNOTE ADDRESSES AND PLENARY SESSIONS.....	7
	a. OPENING CEREMONY.....	7
	b. KEYNOTE ADDRESSES	8
	c. CLOSING CEREMONY.....	10
VI.	PRE-CONFERENCE EVENTS.....	11
	a. SHORT COURSES.....	11
	1. INTEGRATING NON-PROBABILITY SAMPLES: A MODERN APPROACH TO OFFICIALSTATISTICS	11
	2. AI, GIS, AND DATA SCIENCE FOR STATISTICS	12
	b. PRESIDENTIAL SESSION	13
VII.	NETWORKING EVENTS	14
	a. WELCOME RECEPTION.....	14
	b. GALA DINNER	15
VIII.	PARTNERS.....	16
VX.	ACKNOWLEDGMENTS.....	16

I. INTRODUCTION

In today's rapidly evolving data ecosystem, international statistical conferences provide important platforms for knowledge exchange, collaboration and innovation. Against this background, the State Data Agency (Statistics Lithuania), in cooperation with the International Association for Official Statistics (IAOS), organised the IAOS 2026 Vilnius Conference in Vilnius, Lithuania.

The 20th IAOS Conference was held from 12 to 14 May 2026, with pre-conference events taking place on 11 May 2026.

Under the theme "Navigating the Data Revolution: Innovations and Impact in Modern Statistics", the Conference addressed the profound transformations taking place across the global data landscape. As data are generated at unprecedented scale and speed, the event explored the opportunities and challenges arising for statistical organisations, researchers, policymakers and society as a whole.

Particular attention was given to the role of modern statistical methods, innovation, artificial intelligence and new data sources in producing meaningful insights, supporting evidence-based decision-making, and strengthening the relevance and impact of official statistics in a rapidly changing environment.

Hosted in Vilnius, a dynamic and welcoming European capital where rich cultural heritage meets innovation and modern technology, the Conference provided an inspiring setting for the exchange of ideas, experiences and new approaches within the global statistical community. The event promoted international cooperation, encouraged meaningful dialogue, and strengthened connections among producers, users and stakeholders of official statistics from around the world.

For Lithuania, hosting the IAOS 2026 Vilnius Conference was both an honour and a valuable opportunity to contribute to international discussions on the future of official statistics, while showcasing the country's achievements in statistical modernisation, innovation and international cooperation.

This report provides an overview of the IAOS 2026 Vilnius Conference, highlighting its main themes, activities, discussions and outcomes. It reflects the shared commitment of the international statistical community to advancing high-quality, trusted and forward-looking official statistics that support informed decision-making and sustainable development.



II. CONFERENCE MANAGEMENT

Planning and preparations for the IAOS 2026 Vilnius Conference began in 2025, with the objective of creating a platform for international dialogue on the future of official statistics in a rapidly evolving data environment.

The Conference theme, “Navigating the Data Revolution: Innovations and Impact in Modern Statistics”, was carefully selected to reflect the profound changes shaping the contemporary statistical landscape and the growing importance of data in society.

The theme encouraged discussion on how modern statistical methods, innovative technologies, new data sources and artificial intelligence are transforming the production, dissemination and use of statistics. It also highlighted the essential role of high-quality and trusted official statistics in supporting evidence-based decision-making, strengthening public trust and responding to emerging social, economic and environmental challenges in an increasingly complex and data-driven world.

Following the selection of the theme, the Conference website was launched, providing participants with all relevant information and enabling them to submit proposals for Invited Paper Sessions (IPS), Contributed Paper Sessions (CPS) and individual poster presentations, as well as to register for the Conference and its social events.

a. ORGANISING COMMITTEES

1. The Local Organizing Committee

Led by the State Data Agency (Statistics Lithuania), the Local Organizing Committee was responsible for all logistical arrangements and operational aspects of the Conference. Chaired by Dr Jūratė Petrauskienė, Director General of the State Data Agency, the Committee comprised nearly 30 staff members whose combined expertise ensured the professional coordination and successful organisation of the event.

2. The Scientific Programme Committee (SPC)

SPC was chaired by Roeland Beerten, Chief Statistician of the National Bank of Belgium. It comprised 13 members, including academics, statisticians, data scientists and experts from international organisations and national statistical offices worldwide.

The SPC reviewed all proposals for papers, sessions and posters and was responsible for developing and coordinating a diverse and high-quality scientific programme for the Conference.

Chair	
Roeland Beerten (Belgium)	
Members	
Misha Belkindas (United States of America / Lithuania)	Rabaa Mohammed Baniyas (United Arab Emirates)
Mariana Kotzeva (Eurostat)	Nthabiseng Makhata (South Africa)
Sophie Edgar-andrews (United Kingdom)	Mahinthan Mariasingham (Philippines)
Gary Dunnet (New Zealand)	Camilo Mendez (Colombia)
Marie Haldorson (Sweden)	Eric Rancourt (Canada)
Edmond Lee (Singapore)	Dominik Rozkrut (Poland)
Michael Lemay (United States of America)	

III. CONFERENCE AND SIDE-EVENTS PARTICIPANTS

The IAOS 2026 Vilnius Conference brought together participants from countries across the world, with the majority of attendees coming from Europe.

- On 12–14 May 2026, the Conference attracted more than 250 participants.
- The pre-conference events held on 11 May 2026, including the Presidential Session and short courses, were attended by more than 80 participants.

IV. SCIENTIFIC PROGRAMME

The Conference programme comprised 39 IPS and CPS sessions, a poster session, four keynote addresses and several administrative meetings.

The scientific programme was organised into six thematic strands, which ran in parallel and featured a combination of panel discussions and presentations.

Strand 1. New Sources and Tools for Effectiveness: AI and Machine Learning in Statistics

This strand explored how emerging technologies, particularly artificial intelligence and machine learning, are transforming statistical practices and improving their effectiveness. It focused on innovations in the use of privately held data, the modernisation of survey methodologies, and advances in data integration and quality.

Strand 2. Balancing the Scales: Ethics, Privacy and the Future of Statistics

As data become increasingly powerful and pervasive, statisticians face growing tensions between analytical potential and ethical responsibility. This strand examined how the principles of privacy, transparency and trust can be maintained in an evolving data environment.

Strand 3. Delivering Value: Statistics for an Informed and Digital Society

This strand highlighted the essential role of statistics in supporting an informed and digitally empowered society. It covered developments in public communication, geospatial statistics and mapping as effective tools for statistical visualisation, and innovative approaches to data reuse for policymaking and decision-making. The strand also emphasised the importance of statistical literacy for the digital generation and addressed the changing profiles, expectations and needs of users of statistics in today's data-driven world.

Strand 4. Shaping the Future of Statistics: Technology, Talent and AI Innovation

This strand explored how technological developments are transforming statistical processes and the roles of staff within statistical organisations. It focused on evolving skills requirements, the future of statistical education and training, and the potential of artificial intelligence to transform statistical workflows.

Strand 5. Data Interoperability: Developing New Ecosystems

This strand focused on advancing data interoperability through the development of new ecosystems that enable seamless data sharing and integration. It highlighted the essential roles of ontologies, metadata and data governance in creating connected, reliable and trustworthy data environments.

Strand 6. Building Symbiotic Partnerships: What Can We Achieve by Working Together?

This strand highlighted the benefits of strong and collaborative partnerships in achieving shared objectives. It covered topics including the measurement, modelling and understanding of response burden, as well as the development of effective partnerships with stakeholders, international organisations and society.

V. KEYNOTE ADDRESSES AND PLENARY SESSIONS

a. OPENING CEREMONY

The Opening Ceremony took place on 12 May 2026 and featured welcoming remarks by:

- Gary Dunnet, President of the International Association for Official Statistics (IAOS);
- Kristupas Vaitiekūnas, Minister of Finance of the Republic of Lithuania;
- Jūratė Petrauskienė, Director General of the State Data Agency (Statistics Lithuania);
- Roeland Beerten, Chief Statistician of the National Bank of Belgium;
- Mariana Kotzeva, Director-General of Eurostat;
- Ed Humpherson, Director General of the United Kingdom's Office for Statistics Regulation (OSR).

The speakers welcomed participants, expressed their wishes for engaging and thought-provoking discussions, and emphasised the important role of official statistics in a period of profound transformation.

The Opening Ceremony also featured performances of traditional Lithuanian dances, introducing participants to an important element of Lithuania's cultural heritage.



b. KEYNOTE ADDRESSES

The IAOS 2026 Vilnius Conference featured four keynote addresses:

On 12 May 2026:

- Mariana Kotzeva, Director-General of Eurostat, delivered the keynote address entitled “Rethinking Official Statistics for the Age of Agentic AI”. Her address highlighted the need for European official statistics to adapt to a rapidly evolving technological environment. She discussed the opportunities and challenges presented by artificial intelligence, the growing importance of innovative data sources, and the need to strengthen the dissemination and communication of official statistics. The keynote also explored how official statistics can remain trustworthy, relevant and resilient in an era characterised by rapid technological change and an increasing risk of misinformation.
- Ed Humpherson, Director General of the Office for Statistics Regulation (OSR), delivered the keynote address entitled “Statistics as an Act of Love”. His address offered a compelling and human-centred perspective on statistics, highlighting their role not only as tools for analysis, but also as essential instruments for promoting trust, transparency and informed decision-making in society.

On 13 May 2026:

- Professor Audronė Jakaitienė, Professor and Chief Researcher at Vilnius University, delivered the keynote address entitled “Critical Thinking and Statistical Literacy in an AI-Driven World: A Necessity, Not a Luxury”. Her address explored one of the most pressing challenges of our time: ensuring that individuals and societies are equipped with the skills needed to understand, critically assess and responsibly use data in an increasingly AI-driven world. She emphasised the essential role of critical thinking and statistical literacy in enabling informed decision-making and responsible engagement with artificial intelligence and data.

On 14 May 2026:

- Steve MacFeely, Chief Statistician and Director of the Statistics and Data Directorate at the OECD and Adjunct Professor in the Department of Economics at University College Cork, Ireland, delivered the keynote address entitled “Reflections on the Dataverse: Revolutions and Spillovers”. The address explored the transformative changes shaping the global data ecosystem and examined how innovations in data are influencing economies, governance and society more broadly. It provided valuable insights into the opportunities and challenges arising from an increasingly interconnected and rapidly evolving data landscape.



c. CLOSING CEREMONY

The IAOS 2026 Vilnius Conference, held in Vilnius in 2026, concluded with inspiring closing remarks delivered by Gary Dunnet, Dr Jūratė Petrauskienė and Steve MacFeely.

The speakers reflected on the achievements of the preceding three days and highlighted future opportunities for collaboration, innovation and continued progress within the international statistical community.



VI. PRE-CONFERENCE EVENTS

The pre-conference events provided participants with a valuable opportunity to deepen their knowledge and engage in focused discussions on key topics in official statistics. Through the short courses and the Presidential Session, participants explored current challenges, innovative methodologies and emerging trends shaping the statistical community.

These activities promoted the exchange of experience and good practices, strengthened professional networks, and supported the development of technical and analytical skills required in an evolving data environment.

a. SHORT COURSES

1. INTEGRATING NON-PROBABILITY SAMPLES: A MODERN APPROACH TO OFFICIAL STATISTICS

The short course was held on 11 May 2026 at the Faculty of Mathematics and Informatics of Vilnius University in Vilnius. It was delivered by the State Data Agency (Statistics Lithuania) and led by Dr Andrius Čiginas, Ieva Ramašauskienė and Donatas Šlevinskas.

The course focused on modern methods for integrating probability and non-probability data sources, reflecting the increasing importance of administrative records, big data and other non-traditional data sources in official statistics. Participants were introduced to a practical framework combining design-based and model-based approaches, including propensity score adjustment, calibration, doubly robust estimation and other data integration methods.

The programme also covered techniques for addressing selection bias, estimating variance and producing reliable domain-level and small-area estimates. Practical examples from the State Data Agency, including applications in census, tourism and business statistics, illustrated how these methods can be implemented in practice.

The course was designed for statisticians, methodologists and researchers working with mixed data sources and seeking to improve data quality. Overall, it strengthened participants' understanding of modern data integration methods and their application in official statistics.

2. AI, GIS, AND DATA SCIENCE FOR STATISTICS

The short course was held on 11 May 2026 at the Faculty of Mathematics and Informatics of Vilnius University in Vilnius. It was delivered by Esri and led by instructors Kate Hess and Lydia Troup.

The course focused on the growing role of Geographic Information Systems (GIS), enhanced by artificial intelligence, in addressing complex challenges faced by national statistical offices. Participants were introduced to the fundamentals of GeoAI, including deep learning for image analysis, spatial predictive analytics, and the application of large language models and generative artificial intelligence.

The programme also explored practical applications, such as developing interactive tools, automating workflows and improving decision-making in official statistics through AI-driven spatial analysis. Hands-on exercises demonstrated how GIS and artificial intelligence can be combined to generate insights from large and complex datasets at scale.

No prior GIS experience was required, and participants completed practical browser-based exercises using ArcGIS tools. Overall, the course demonstrated the potential of AI-enhanced GIS to transform statistical analysis and support more efficient, evidence-based decision-making.



b. PRESIDENTIAL SESSION

The Presidential Session, entitled “Official Statistics for Crisis Response: Communication with Stakeholders”, focused on the role of official statistics in supporting effective crisis response, together with the importance of clear and trusted communication with ministers, policymakers and other key stakeholders.

The speakers – Mariana Kotzeva, Gary Dunnet, Jūratė Petrauskienė and Roeland Beerten – together with the invited participants, emphasised the importance of using modern technologies, including artificial intelligence, to provide timely, accurate and relevant information in support of evidence-based decision-making and effective public communication.

The discussion highlighted that combining data-driven insights with well-coordinated engagement with ministers, policymakers and other stakeholders strengthens transparency, builds trust and helps ensure that both decision-makers and the public receive meaningful and actionable information during rapidly evolving crises.



VII. NETWORKING EVENTS

a. WELCOME RECEPTION

The Welcome Reception was held in the lobby of the Radisson Blu Hotel Lietuva, which also served as the venue for the Conference. All registered conference participants and accompanying persons were invited to attend the event in a welcoming and informal atmosphere.

Guests were greeted with welcome drinks and had the opportunity to network and engage with fellow participants before the commencement of the main Conference programme.

The reception also featured a traditional Lithuanian musical performance on the skrabalai, a distinctive Lithuanian folk instrument, offering participants an introduction to an important element of Lithuania's cultural heritage.



b. GALA DINNER

The Gala Dinner was held at the National Museum – Palace of the Grand Dukes of Lithuania in Vilnius. The event welcomed registered guests, conference participants and accompanying persons in an elegant and historically significant setting.

The dinner provided an exclusive and welcoming atmosphere for networking and social interaction, allowing participants to continue professional discussions in a more informal environment while experiencing one of Lithuania's most important cultural and historical landmarks.

Combining professional exchange, cultural heritage and social engagement, the Gala Dinner was a memorable highlight of the IAOS 2026 Vilnius Conference.



VIII. PARTNERS

The IAOS 2026 Vilnius Conference had the privilege of collaborating with four partners, each of whom made a significant contribution to different aspects of the event.

- Eurostat, through a grant administered by the United Nations Statistics Division (UNSD), provided financial support for the participation of statisticians from developing countries in the IAOS 2026 Vilnius Conference and its short courses. Through this funding instrument, 36 participants from various countries were able to attend.
- Esri organised the short course “AI, GIS and Data Science for Statistics” and hosted a stand in the exhibition area, where it presented its work and highlighted potential opportunities for future collaboration.
- IPUMS also hosted a stand in the exhibition area, where it showcased its activities and presented opportunities for cooperation.

IX. ACKNOWLEDGMENTS

We would like to express our sincere appreciation to all participants for their active engagement and valuable contributions.

We extend our special thanks to the keynote speakers, whose presentations were both inspiring and insightful.

We are also deeply grateful to our partners for their support and significant contribution to the success of the Conference.

We would like to express our sincere gratitude to the International Statistical Institute (ISI) for its invaluable support throughout the entire organisational process and for sharing its extensive experience and expertise.

It has been a great honour and privilege to host the IAOS Conference.

REPORT ON THE 20th IAOS CONFERENCE

Navigating the Data Revolution: Innovations
and Impact in Modern Statistics

12–14 May 2026, Vilnius, Lithuania



State Data
Agency
Statistics
Lithuania

eurostat 



THE
SCIENCE
OF
WHERE™

