

**Conference on New Techniques and Technologies for official Statistics
(NTTS 2025)**

Charlemagne Building, Brussels, 11–13 March 2025
Boulevard Charlemagne 52, 1000 Brussels

Draft Scientific programme
(updated on 13th February 2025)



The ‘**New Techniques and Technologies for Statistics**’ (NTTS) conference is a prominent international event, held every two years and organized by Eurostat. NTTS dives deep into the latest techniques and methodologies transforming official statistics, examining the game-changing role of emerging technologies in data collection, production, and dissemination.

NTTS 2025 is set to take place in Brussels from **March 11-13, 2025**, with additional satellite events scheduled for **March 10** and **March 14**. These pre- and post-conference events promise to enrich the NTTS experience further, and details can be found on the NTTS 2025 conference website.

The conference serves as a dynamic platform for presenting groundbreaking findings from ongoing research and innovation projects in the field of official statistics. More than just a showcase, NTTS aims to spark collaboration and inspire new projects that will drive the evolution of official statistics, enhancing their quality, relevance, and utility.

The 2025 conference will be held at the **Charlemagne Building** in Brussels, a fitting venue for the international gathering of statisticians, data scientists, and tech innovators eager to shape the future of statistical science.

Tuesday, 11 March 2025

08:00 – 09:00	REGISTRATION AND WELCOME COFFEE	room: LOBBY
09:00 – 09:10	OPENING SESSION Mariana KOTZEVA (<i>Eurostat</i>)	room: GASP
09:10 – 09:20	WELCOME ADDRESS (European Commission – Commissioner)	room: GASP
09:20 – 10:10	KEYNOTE: Generative AI for Official statistics Christophe LEY (<i>University of Luxembourg; Faculty of Science, Technology and Medicine</i>) Moderator: Cristiano TESSITORE (<i>Eurostat</i>)	room: GASP
10:10 – 10:30	COFFEE BREAK	Charlemagne Building
10:30 – 12:00	BIG DATA HACKATHON AWARD CEREMONY AND LECTURES Awards by Mariana KOTZEVA (<i>Eurostat</i>) Moderator: Monika WOZOWCZYK (<i>Eurostat</i>) Organiser: Monika WOZOWCZYK ,Albrecht WIRTHMANN (<i>Eurostat</i>)	room: GASP
12:00 - 13:00	FINANCIAL TRANSACTIONS DATA FOR EUROPEAN STATISTICS Panel Chair: Albrecht WIRTHMAN (<i>Eurostat</i>) Organiser: Monika WOZOWCZYK (<i>Eurostat</i>) Panellists -Daniel LENNARTSSON (<i>Statistics Sweden</i>), Erza ARUQAJ (<i>DG ECFIN</i>),Katerina LEVALLOIS (<i>Cartes Bancaires</i>),Joao VEIGA (<i>ECB</i>).	room: GASP
12:00 - 13:00	USE OF “R” AND CODING Session Chair: Mátyás MÉSZÁROS: (<i>Eurostat</i>) Inepir: an R package to query statistical data and metadata from National Statistics Institute (INE Spain) David CRESPO ROCES (<i>National Statistical Institute of Spain – INE</i>) Data Science in the Production of Official Statistics: Utilizing Reproducible Analytical Pipelines (RAPs) for Custom Declarations Processing at PCBS as a Case Study Asala AWNI KHALID (<i>Palestinian Central Bureau of Statistics</i>) Advancing Statistical Dissemination: Insights from the EMOS Coding Lab on Cultural Goods Prices in Europe Sona YAVRUMYAN (<i>University of Bologna</i>)	room: MANS
12:00 - 13:00	GREEN AND SUSTAINABLE STATISTICS	room: JENK

Session Chair: Maria Cristina BENINTENDI (*Journalist, freelance*)

Estimating CO2 emissions in Italy with local regression models

Raffaele MATTERA (*University of Rome: La Sapienza*)*; Antonio BALZANELLA, Gianmarco BORRATA, Rosanna VERDE (*Università della Campania Luigi Vanvitelli*)

Using Shape-Based Time Series Clustering to construct Machine Learning Forecasting Models for Short Panel Data: A Case Study on the Sustainable Development Goals

Manveer K MANGAT (*United Nation Industrial Development – UNIDO, Vienna*)

A hybrid machine learning approach for carbon price forecasting to support EU climate action

Despoina MAKARIOU (*University of St Gallen*)*; George TZOUGAS (*Heriot Watt University*); Rui ZHU (*City, University of London*); Andreas TSANAKAS (*City, University London*); Dimitris CHRISTOPOULOS (*Heriot Watt University*); Zezhun CHEN (*London School of Economics*)

13:00 – 14:00

LUNCH AND POSTER SESSION

2nd floor Charlemagne

New results for time-dependent models: a perspective for seasonal adjustment

Guy MÉLARD (*Université libre de Bruxelles*)*

Data Dialogue: Perspectives and guidelines on the use of Mobile Phone Data for Statistics, Development and Humanitarian Initiatives

Sophie DELAPORTE (*Flowminder*)*

Use of R in Official Statistics

Mubariz NURIYEV (*State Statistical Committee of the Republic of Azerbaijan*)*

Finding the usual environment of tourists in Mobile Phone Data: a case study applied to the same-day visits

Barbara DATTILO*, Mascia DI TORRICE, Mariangela SABATO (*Italian National Institute of Statistics – ISTAT*)

Municipal-Level Estimation of Tourism Perception: A Machine Learning-Based Approach to Small Area Estimation

Nina NIEDERHAMETHNER*, Rebecca DAUL (*Statistics Austria*)

Timeliness criticality and its aggregated economic impact

Frank P. PIJPERS (*Statistics Netherlands*)*; Jose MORAN (*Ecole Polytechnique - Paris*); Matthijs ROMEIJNDERS (*Utrecht University*); Pierre LE DOUSSAL (*Ecole Normale supérieure - Paris*); Utz WEITZEL (*Vrije Universiteit Amsterdam*); Debrabata PANJA (*Utrecht University*); Jean-Philippe BOUCHAUD (*Academie des Sciences - Paris*)

Jordan National Interactive Data Center - Data as a Service

Faisal MINWER AL-ALWAN (*The Department of Statistics of Jordan*)*

Automated Product Classification Using Machine Learning and Natural Language Processing: A Case Study of Scanner Data

Egle KONDRATAITE (*State Data Agency – Lithuania*)*; Tomas RUDYS (*State Data Agency – Lithuania*)

Enhancing data quality of a building and dwellings register through mapping building coordinates to building polygons using a Random Forest classifier

Mathias KÄSTENBAUER (*Statistik Austria*)*

The use of NLP and Machine Learning in official statistics

Ibtissame SAHIR (*GOPA Luxembourg*)*

Enhancing European Business Statistics: A Harmonised Microdata Linking Approach

Nikola Sunjka (*Eurostat*)*

Detection and correction of quarterly effects in administrative versus survey turnover data

Arnout van DELDEN *, Sander SCHOLTUS, Jetske MARCELIS (*Statistics Netherlands – CBS*)

Farm register for agricultural sample surveys: toward a systematic integration of

administrative sources

Damien BABET (*Ministry of Agriculture, France*)*

Enhancing Household Budget Surveys through smart technology: Implementation of a receipt scanning microservice in Germany

Jerome OLSEN (*Destatis*)*

Innovations: digital data sources

Peter Knížat, * Petra Mazurekova, Helena Glaser-Opitzova (*Statistical Office of the Slovak Republic*)

A new composite index for evaluation livestock farms digitalization

Colomba Sermoneta *, Khadija Sossey Alaoui (*Eurostat*)

Improving estimates of short-stay accommodation occupancy in the EU using online platform data

Simon BLEY*, (*Eurostat*)

The role of official statistics in the fast-evolving data ecosystem (focus on European Data Strategy)

Verena Manthe*, Judith Czepek (*Statistics Germany - Destatis*); Maarten Alders, Barteld Braaksma (*Statistics Netherlands*); Jaana Tael, Liina Osila (*Statistics Estonia*)

14:00 – 15:00

FROM “LAB TO FAB”, INNOVATION IN THE ESS

room: **GASP**

Session Chair: Francesca KAY (*Central Statistics Office – CSO*)

Organiser: Kostas GIANNAKOURIS (*Eurostat*)

Using Cloud and Open Source for Continuous Innovation in Statistical Production

Trygve FALCH* (*Statistics Norway – SSB*)

Open Infrastructure and Open Source Datalab to Strengthen Collaboration and Innovation

Romain Lesur (*National Institute of Statistics – INSEE*)*; Frédéric Comte (*National Institute of Statistics – INSEE*)

New challenges demand new solutions

Liina OSILA* (*Statistics Estonia*)

14:00 – 15:00

Applications of LLMs

room: **MANS**

Session Chair: Artur QUEIROZ (*DIGIT, European Commission*)

An ML-based automatic coding machine as an integral element in an overall strategy for NACE implementation

Adrián PÉREZ BOTE*, Carlos SÁEZ CALVO, David SALGADO (*National Statistical Institute of Spain – INE*)

Gemma 2 Large Language Models for Aspect-Based Sentiment Analysis on Italian Texts: A Use Case for Tourism Statistics

Francesco ORTAME*, Francesco PUGLIESE, Elena CATANESE, Mauro BRUNO (*Italian National Institute of Statistics – ISTAT*)

Large language models for COICOP classification in Norway’s household budget survey

Boriska TOTH (*Statistics Norway – SSB*)*

14:00 – 15:00

ESTIMATES

room: **JENK**

Session Chair: Aleša LOTRIC DOLINAR (*University of Ljubljana*)

Flash estimates of income and poverty indicators: an empirical study predicting labour market transitions

Andrea FASULO*, Aura LEULESCU, Adriano DI GUGLIELMO, Mihaela AGAFITEI (*Eurostat*)

Small area estimation using incomplete auxiliary information

Andrius ČIGINAS*; Donatas ŠLEVINSKAS, Leva BURAKAUSKAITĖ (*Vilnius University; State Data Agency - Lithuania*)

“I don’t know what I did last summer” – measurement error and memory effect in tourism statistics

Christophe DEMUNTER (*Eurostat*)*; Koen HOOYBERGHS (*Statistics Belgium*)

15:00 – 16:00

EUROPEAN STATISTICS AWARDS PROGRAMME ON NOWCASTING

room: **GASP**

Session Chair: Martin KARLBERG (*Eurostat*)

Organiser: Agnieszka ZAJĄC (*Eurostat*)

Utilisation of publicly accessible data for timely official statistics on available electricity

Rafael FINCK

Nowcasting gas demand based on timely available data sources

Maximilian OFNER and Daniel STRENGER (*Graz University of Technology, Austria*)

An end-to-end architecture for enhancing reproducibility in nowcasting

Thomas FARIA, Antoine PALAZZO, Laurent BENICHOU (*National Institute of Statistics – INSEE*)

15:00 - 16:00

DATA FUSION

room: **MANS**

Session Chair: Enrica MORGANTI (*Eurostat*)

Combining Longitudinal Administrative Registries, Test Results and Stakeholders’ Input to Protect Educational Trajectories in Uruguay

Maria GIMENA CASTELAO*, María SEIJAS, Jennifer VIÑAS FORCADE (*Uruguayan National Institute of Educational Assessment – INEEd*)

RUMS – how to compare structures of enterprise groups?

Simon ROMMELSPACHER*, Adrian URBAN (*Federal Statistical Office of Germany – Destatis*)

Use of public data sources to increase the accuracy and completeness of the Eurogroups Register

Pau GAYA RIERA (*Eurostat*)*

15:00 - 16:00

Streamlining Statistical Reporting

room: **JENK**

Session Chair: Svilen KOLEV (*National Statistical Institute of Bulgaria*).

Applying a Non-Parametric “Benefit of the Doubt” Approach for Identifying Low-Quality Responses in Online Panels

Marco DE LA CRUZ*, Femke DEKEULENAER (*IPSOS*); Katarzyna BANKOWSKA, Athanasios TSIORTAS (*European Central Bank*)

Future of Data Collection – automated Data-Based Reporting

Maarja MÄNNIK (*Statistics Estonia*)*

How many diary days? Smart surveys can help to reduce burden of data collection for household statistics

Danielle REMMERSWAAL (*Utrecht University and Statistics Netherlands*)*; Barry SCHOUTEN (*Statistics Netherlands – CBS*); Bella STRUMINSKAYA (*Utrecht University*)

16:00 – 16:30

COFFEE-BREAK

Charlemagne Building

16:30 – 17:30

UNVEILING THE POWER OF AI: CHALLENGES OR OPPORTUNITIES FOR STATISTICIANS, DECISION-MAKERS AND DATA USERS. EXPERIMENTS AND BEST PRACTICES

room: **GASP**

Session Chair: Massimo FEDELI (*Italian National Institute of Statistics - ISTAT*)

Organiser: Simona CAFIERI (*Italian National Institute of Statistics - ISTAT*)

A machine learning approach for small samples: an application on EHIS survey

Simona CAFIERI (*Italian National Institute of Statistics – ISTAT*)*, Francesco PETRUCCI (*Sapienza University*)

Artificial Intelligence and Governance, driving innovation with responsibility

Massimo FEDELI, Francesca ORECCHINI*, Sara LETARDI (*Italian National Institute of Statistics – ISTAT*)

AI Solutions in Istat Contact Centre for Knowledge Seekers, Data Users and Survey Respondents

Roberta RONCATI*, Paola BOSSO, Gabriella FAZZI (*Italian National Institute of Statistics – ISTAT*)

16:30 – 17:30

MULTI-DIMENSIONAL FRAMEWORK

room: **MANS**

Session Chair: Mojca BAVDAZ (*University of Ljubljana*)

A risk-utility framework for anonymized georeferenced health microdata

Lydia JEHLICH*, Simon CREMER, Rainer LENZ (*TH Köln*)

Bayesian spatial modelling for prevalence of child mortality and morbidity: A bivariate Cauchit Link Model

Oluwafunmilayo ADENIKE DAWODU*, Osafu EGBON, Francisco LOUZADA (*Universidade de Sao Paulo*)

Joint Estimation of Common and Specific Dynamic Factors from Vectors of Time Series: Application to Electricity Prices in Several Markets in the EU

Carolina S. GARCIA-MARTOS*, Julio RODRÍGUEZ, María JESÚS SÁNCHEZ (*Universidad Politécnica de Madrid*)

16:30 – 17:30

SHARING STATISTICAL TOOLS

room: **JENK**

Session Chair: Adrian JUAN VERDEJO (*DG Reform, European Commission*)

The Journey Towards a Governance of Open Source Statistical Tools at Istat

Marcello D'ORAZIO*, Orietta LUZI, Marco DI ZIO, Mauro SCANU (*Italian National Institute of Statistics – ISTAT*)

An open innovation platform to share ideas and knowledge, and an open-source project for NSO's to work with their own sensitive data

Frédéric COMTE* (*National Institute of Statistics – INSEE*)

A long journey toward a shared statistical survey software suite

Lionel HÉBRARD*, Juliette FOURCOT, (*Department of Statistics and Foresight Analysis - Ministry of Agriculture and Food*)

Wednesday, 12 March 2025

09:00 – 09:45	<p>KEYNOTE: Democracy dies without Official Statistics Luca DI GENNARO (<i>University of Malta</i>)</p> <p>Moderator: TBD (<i>Eurostat</i>)</p>	room: GASP
10:00 – 11:00	<p>FROM WEB TO DATA: WIN. THE HACKATHON WINNERS</p> <p>Session Chair: Alexander KOWARIK (<i>Statistics Austria</i>) Organiser: Dominika NOWAK (<i>Statistics Poland</i>)</p> <p>From web to data: Quality and Methodological Considerations Alexander KOWARIK*, Magdalena SIX (<i>Statistics Austria</i>); Piet DAAS (<i>Statistics Netherlands – CBS</i>)</p> <p>From web to data: Selective scraping and WIN. The hackathon Olav ten BOSCH (<i>Statistics Netherlands – CBS</i>)*</p> <p>From web to data: Winning Hackathon with Offline AI for E-Commerce Site Detection Strategies Riccardo CORRADINI*, Rita LIMA (<i>ISTAT</i>)</p> <p>Enhanced Social Media and E-commerce Detector aka Roshna OMER, (<i>UNHCR, UN Refugee Agency</i>)</p>	room: GASP
10:00 – 11:00	<p>DATA REVOLUTION</p> <p>Session Chair: Monica PRATESI (<i>Italian National Institute of Statistics – ISTAT</i>)</p> <p>Two methods for integrating smart surveys with traditional surveys Danielle MC COOL (<i>Utrecht University</i>)*; Bella STRUMINSKAYA, Peter LUGTIG (<i>Utrecht University</i>)</p> <p>AI-powered nomenclature codification Jeremy LOMBAERTS, Christophe Van DIJCK (<i>Sopra Steria</i>); Youri A BAEYENS*, Ann DEPOORTER (<i>Statistics Belgium</i>)</p> <p>Use of AI for built-up area land use mapping: A study on construction sites Athithya SEETHALAKSHMI LOGANATHAN*, Saim MUHAMMAD (<i>Statistics Netherlands – CBS</i>)</p>	room: MANS
10:00 – 11:00	<p>NEW DATA SOURCES</p> <p>Session Chair: Markus ZWICK (<i>Federal Statistical Office of Germany – Destatis</i>)</p> <p>Using machine learning to produce census population count from an administrative data system Antonio LAURETI PALMA*; Antonella BERNARDINI, Nicoletta CIBELLA, Giampaolo DE MATTEIS (<i>The Italian National Institute of Statistics</i>)</p> <p>Mobile Network Data as a New Source for Transport Planning and Mobility Analyses Yannik BUHL*, Markus ZWICK (<i>Federal Statistical Office of Germany – Destatis</i>)</p> <p>Measuring skill-level progression using web-scraping Susie JENTOFT (<i>Statistics Norway</i>)*</p>	room: JENKS
11:00 – 11:30	COFFEE-BREAK Charlemagne Building	
11:30 – 12:30	SMART SURVEY IMPLEMENTATION	room: GASP

Session Chair: Peter LUGTIG (*Utrecht University*)

Organiser: Peter LUGTIG

Experiences from experiments with smart surveys in the Smart Survey Implementation project
 Florian KEUSCH*, Maren FRITZ (*University of Mannheim*); Anne ELEVELT (*Statistics Netherlands – CBS*); Monica PEREZ (*Italian National Institute of Statistics – ISTAT*)

When are you ready for a smart survey?

Marc HOUBEN*, Remco PAULUSSEN (*Statistics Netherlands – CBS*)

Development and Integration of Microservices for Smart End-to-End Surveys

Joeri MINNEN*, Pieter BEYENS (*hbits CV - Belgium*); Jerome OLSEN (*Federal Statistical Office of Germany – Destatis*); Claudia DE VITIIS, Fabrizio DE FAUSTI, Francesca INGLESE, Marco DIONISIO TERRIBILI, Angela PAPPAGALLO (*Italian National Institute of Statistics – ISTAT*)

11:30 – 12:30

DEEP LEARNING and WEB SURVEYS

room: **MANS**

Session Chair: Husam KHALEIFEH (*Palestinian Central Bureau of Statistics PCBS*)

Evaluating an ESCO skill classifier

Gabriele MARCONI*; Inès BAER (*Agence Pour Le Développement De L'emploi, ADEM, Luxembourg*)

Enhancing housing surveys in Overseas Departments using Deep Learning and Satellite Data

Thomas FARIA*; Raya BEROVA, Clément GUILLO (*National Institute of Statistics – INSEE*)

Redesigning the French Census Online Questionnaire: A User-Centered Methodology and its Limitations

Sébastien HALLÉPÉE* (*National Institute of Statistics – INSEE*)

11:30 – 12:30

STATISTICAL CONFIDENTIALITY

room: **JENK**

Session Chair: Aleksandra BUJNOWSKA (*Eurostat*)

Protecting high-resolution grid data with additive noise while retaining fitness for use

Martin MÖHLER (*Federal Statistical Office of Germany – Destatis*)*

Recent Guidelines for Statistical Disclosure Control

Peter-Paul de WOLF (*Statistics Netherlands – CBS*)*

Towards Statistical Disclosure Control for Complex Networks

Mark PJ van der LOO (*Statistics Netherlands – CBS*)*; Rachel de JONG, Frank W. TAKES (*Leiden University*)

12:30 - 13:30

LUNCH AND POSTER SESSION

2nd floor Charlemagne

Access to microdata at ECB

Matthias RUMPT (*European Central Bank – ECB*)*

Accessibility, JSON-stat and SDMX-JSON: Simplifying structures and harmonising metadata for dissemination

Rolf MACH (*Federal Statistical Office of Germany – Destatis*)*

Model explainability: a use case on FastText for automatic coding

Meilame TAYEBJEE (*National Institute of Statistics – INSEE*)*

The Visual Display of Skewed Data: Boxplot, Beeswarm and Beyond

Michael NEUTZE (*Federal Statistical Office of Germany – Destatis*)*

Research Network: Anonymization for Secure Data Use

Jannek MÜHLHAN*; Markus ZWICK (*Federal Statistical Office of Germany – Destatis*)

Using CI/CD methods for continuous benchmarking of statistical methods

Samo KOSÍK (*SamokosikGroup*)*

Independent Address Identification Search Engine for National Statistical Institute Using ElasticSearch

Raya BEROVA)*, Lino GALIANA, Julien PRAMIL (*National Institute of Statistics – INSEE*)

Inveus. Remote access to data space for researchers

Jose Jabier ZURIKARAI*, Jesus NIETO, Javier SAN VICENTE, Marivi GARCIA (*EUSTAT- Basque Statistical Institute*); Izaola ZUNBELTZ, Belen MUÑIZ (*Mondragon University*); Begoña LAIBARRA (*Software Quality Systems - SQS*)

Accelerating Data-Driven Insights with EasyMorph's Intuitive Interface

Kam CHAT (*Novo Nordisk A/S*)*

Working with a mobile network operator (MNO) to create a privacy-conform method for a better access to MNO data

Lorenz ADE,* Maurice BRANDT (*Federal Statistical Office of Germany – Destatis*)

WEBQA Project (using Generative AI)

Ainhoa VERGARA LÓPEZ*, Marina AYESTARÁN ARREGI (*EUSTAT*)

DETECTING CHANGE POINTS OF EXPECTATIONS AND JUDGMENTS OF PRICE DYNAMICS WITHIN THE ITALIAN POPULATION

Rosaria SIMONE*, Carmela CAPPELLI, francesca DI IORIO (*University of Naples Federico II*)

Development of a Satellite Account for Culture at the Local Level - First results for Tuscany (Italy)

Alessandra COLI (*University of Pisa*)*; Sabrina IOMMI, Donatella MARINARI (*IRPET*)

Cyclic Outlier Detection in AIS Data: A Direct Approach Based on Average Speed

Automatic analysis of metadata for secondary tabular data protection

Francesco SISTI*, Angela PAPPAGALLO, Luca VALENTINO (*Italian National Institute of Statistics – ISTAT*)

Automatic analysis of metadata for secondary tabular data protection

Clara BAUDRY (*National Institute of Statistics – INSEE*)*

The Effect of Working Conditions on Health and Healthcare Use

Méline HILLION (*National Institute of Statistics – INSEE*)*

Optimizing Text Classification with Deep Learning: The Impact of Preprocessing on ATECO Code Assignment in Italian Business Descriptions

Giulio MASSACCI,* Giorgia SACCO, Mauro BRUNO, Francesco ORTAME (*Italian National Institute of Statistics – ISTAT*)

JDemetra+ 3.2.4: New (R) tools for (high-frequency) time series analysis

Tanguy BARTHELEMY (*National Institute of Statistics – INSEE*)*

The path of Earth Observation to official statistics

Carla A MARTINS*, Hannes I. REUTER (*Eurostat*)

EurostatRtool: an R package for disseminating European Statistics

Rosa RUGGERI-CANNATA*, Antonio GROSSO (*Eurostat*)

An innovation score based on financial data and web-augmented firms' characteristics

Carlo BOTTAI*, Marco GUERZONI, Caterina LIBERATI (*Università di Milano-Bicocca*), Lisa CROSATO (*Università Ca' Foscari – Venezia*)

Session Chair: Sophie LIMPACH (*Eurostat*)

European Master in Official Statistics: the- EMOS project

Carola CARSTENS(*Eurostat*)

Fostering the collaboration between Eurostat and the Academia

Tiziana LAURETI*, Ilaria IL BENEDETTI (*University of Tuscia*); Dario BUONO (*Eurostat*)*; Cristiano TESSITORE (*Eurostat*); Hionia VLACHOU (*GOPA Luxembourg*)

A blockchain solution enabling the reproducibility of findings based on official statistics

Martin KARLBERG (*Eurostat*)*; Petre TURLIU (*Eurostat*)

14:30 - 15:30

ESSNET AIML4OS PROJECT

room: **GASP**

Session Chair: Mauro BRUNO (*Italian National Institute of Statistics - ISTAT*)

Organisers: Giulio MASSACCI, Mauro BRUNO (*Italian National Institute of Statistics - ISTAT*); Francesca KAY (*Central Statistics Office – CSO*)

One-Stop-Shop for Artificial Intelligence and Machine Learning for Official Statistics: Reflections on the First Year

Eimear CROWLEY* (*Central Statistics Office – CSO*)

AIML4OS: Use of Large Language Models and Generative AI

Jakob ENGDAHL (*Statistics Sweden*)*

Fostering Collaboration: Communication Strategies in the AIML4OS Project

Orietta LUZI (*Italian National Institute of Statistics - ISTAT*)

14:30 - 15:30

THE MOVE TO OPEN SOURCE IN OFFICIAL STATISTICS

room: **MANS**

Session Chair: Conor CROWLEY (*Central Statistics Office – CSO*)

Organiser: Conor CROWLEY, Francesca KAY (*Central Statistics Office – CSO*)

Sustainable open-source projects – key success factors

Eric ANVAR (*OECD*)*

SAS to R Training: A collaborative approach to promote a learning culture in statistical programming

Kathryn FOSKIN (*Central Statistics Office – CSO*)*

Embracing Open Source: The European Commission’s Journey

Miguel DIEZ BLANCO (*European Commission - DIGIT*)*

14:30 - 15:30

ENHANCING MODELLING PERFORMANCE

room: **JENK**

Session Chair: Ioannis SOPRANIDIS (*Eurostat*)

MILC vs. Tree-MILC: a simulation study comparing correction methods for multi-source statistics

Danielle REMMERSWAAL (*Utrecht University and Statistics Netherlands*)*; Laura BOESCHOTEN (*Utrecht University*); Ton de Waal (*Statistics Netherlands – CBS*)

Analysing EU unemployment and underemployment in a fuzzy perspective: the comparison between fuzzy and official rates

Alessandra COLI*, Bruno CHELI (*University of Pisa*); Andrea REGOLI (*University of Naples Part*)

Improving AI Language Models via Specialised Training Corpora for Official Statistics

Cristiano TESSITORE (*Eurostat*)*; Marius FELECAN, Jean-Marc MUSEUX (*Eurostat*)

15:30 – 16:00

COFFEE-BREAK

Charlemagne Building

16:00 - 17:00

MEASUREMENT OF DIGITALISATION – HOW CAN WE GRASP THE OPPORTUNITIES THE DIGITALISATION BRINGS FOR STATISTICS?

room: GASP

Session Chair: Alvaro DIEZ SOTO (*Eurostat*)

Organisers: Magdalena KAMIŃSKA and Alvaro DIEZ SOTO (*Eurostat*)

A Statistical Analysis of Internet Standards Implementation on Dutch Enterprises' Websites

Elisca MASTENBROEK (*Statistics Netherlands – CBS*)*

Use of web scraped data for analysing labour market demand for ICT specialists

Magdalena Kaminska*, Cristina FERNANDEZ ALVARO (*Eurostat*)

MICRO-LEVEL BANK CARD DATA FOR THE USE OF OFFICIAL STATISTICS

Natasha MIFSUD*, Brandon SACCO (*National Statistics Office of Malta – NSO*)

16:00 - 17:00

ESSNET MNO-MINDS

room: MANS

Session Chair: Alexander KOWARIK (*Statistics Austria*)

Organiser: Alexander KOWARIK

Integration of Mobile Network Operator (MNO) data with further data sources: How to treat errors and biases

Gloria DEETJEN*, Maurice BRANDT (*Federal Statistical Office of Germany – Destatis*)

Which data to combine with Mobile Phone Data? Landscaping of the most promising sources and associated challenges

Marie-Pierre JOUBERT (*National Institute of Statistics – INSEE*)*

Mobile Network Operator data for Tourism Statistics: facing the challenge of cross-roaming

Tiziana TUOTO*, Loredana DI CONSIGLIO (*Italian National Institute of Statistics – ISTAT*)*; Egle RÜÜTLI, Margus TIRU, Kadri ARRAK (*Positium*); Juan ARRANZ, Miguel PICORNELL, Ricardo HERRANZ (*Nommon*); Florabela Carausu (*GOPA Worldwide Consultants GmbH*)

16:00 - 17:00

USING SMART DATA COLLECTION MODES: FINDINGS FROM IMPLEMENTATION

room: JENK

Session Chair: Eniel NINKA (*Eurostat*)

Organiser: Eniel NINKA (*Eurostat*)

Smart Features in Surveys: Respondent navigation and its impact on outcomes – Insights from the 2023 French time use survey web App test

Fanny MIKOL (*National Institute of Statistics – INSEE*)*

Multi-Mode Protocol for the French Household Budget Survey: More Choices, More Respondents?

Claire-Lise DUBOST*, Simon MOREAU (*National Institute of Statistics – INSEE*)

Detecting and correcting erroneous OCR and manual diary registrations in a modernised household budget survey

Marius LARSSON (*Statistics Norway*)*

19:00 – 20:30

COCKTAIL DINNER

Charlemagne Building

Thursday, 13 March 2025

09:00 – 09:45 **KEYNOTE: Data science skills for next generation of statisticians** room: **GASP**

Shalise S. AYROMLOO (*U.S. Census Bureau*)

Moderator: Dario BUONO (*Eurostat*)

10:00 - 11:00 **DISSEMINATION AND USERS** room: **GASP**

Session Chair: Ioannis XIROUCHAKIS (*Eurostat*)

Statistical Information Communication: past insights, future innovations

Reinoud STOEL*, Ger SNIJKERS, Martijn TENNEKES, Edwin de JONGE, Nynke KROL, Marco PUTS, Vivian MEERTENS, Duco HOOGENDOORN, Nicole BONGERS, Darren den BOER (*Statistics Netherlands – CBS*)

Enhance statistical literacy among non-expert users: Eurostat's experience

Nina JERE* (*Eurostat*)

Visualizing Official Statistics Using Reproducible Analytical Pipelines

Fethi Saban OZBEK (*Turkish Statistical Institute*)*

10:00 - 11:00 **ECOSYSTEM ACCOUNTING USING SPACE BASED TECHNIQUES** room: **MANS**

Session Chair: Marc PAGANINI (*European Space Agency - ESA*), Ekkehard PETRI (*Eurostat*)

Organiser: Phillip HARWOOD (*Evenflow SRL*)

Processing of receipts in Household budget survey

Urška PIRNAT*; Črt GRAHONJA (*Statistical Office of the Republic of Slovenia*)

Development of crop pollination ecosystem service accounts in Ireland

Sam P Belton*, Alan Cahill; Nova Sharkey, David O'Connell, Harry Hodgins (*Central Statistics Office – CSO*)

The ESA "PEOPLE – Ecosystem Accounting" project: experiences from GreeceXXX

Ioannis P. KOKKORIS (*Department of Sustainable Agriculture, University of Patras*)*, Bruno SMETS; Marcel BUCHHORN; Mathilde De VROEY; Tim JACOBS (*VITO*), Lars HEIN (*Wageningen University*); Stefano BALBI; Villa FERDINANDO; Alessio BULCKAEN (*Basque Centre for Climate Change - BC3*); Giorgos MALLINIS (*Laboratory of Photogrammetry and Remote Sensing (PERS Lab), School of Rural and Surveying Engineering, Aristotle University of Thessaloniki*); Panayotis DIMOPOULOS (*Department of Biology, University of Patras*)

10:00 - 11:00 **DATA COLLECTION** room: **JENK**

Session Chair: Christophe DEMUNTER (*Eurostat*)

Measurement effects in the Time Use test survey

Loreline COURT*; Simon QUANTIN (*National Institute of Statistics – INSEE*)

Open source software sharing through the awesome list of official statistics software

Olav ten BOSCH (*Statistics Netherlands*)*; Mark PJ van der LOO (*Statistics Netherlands*)

Better enlighten local public decision-makers on the situation of the real estate market

Matthieu WYCKAERT*; Hélène SOUAL; Philippe BERTRAND (*National Institute of Statistics – INSEE*)

11:00 – 11:30 **COFFEE-BREAK** Charlemagne Building

11:30 - 12:30

INNOVATION IN DATA EXCHANGE

room: **GASP**

Session Chair: Serena SIGNORELLI (European Commission - Joint Research Center)

Classification and prediction of rating data with flexible uncertainty trees

Rosaria SIMONE (University of Naples Federico II)*

Statistical Interoperability Node

Cecilia ALBÉRICA GARCÍA RODRÍGUEZ *; Jesús ALBERTO GONZÁLEZ YANES (Canary Islands Statistics Institute). Carlos BALLANO FERNÁNDEZ (National Statistics Institute); Agustín TOMÁS VILLAR IGLESIAS (Statistical and Cartographic Institute of Andalusia); Jorge VELASCO LÓPEZ (National Statistics Institute); Ana María LÓPEZ LAGO (National Statistics Institute); Adrián JUAN VERDEJO (DG Reform)

Mixture models and graphical tools to analyse the perception of work-related stress across EU countries

Francesca DI IORIO*, Stefania CAPECCHI (*Università di Napoli Federico II*)

11:30 - 12:30

COMBINING PROBABILITY AND NON-PROBABILITY samples

room: **MANS**

Session Chair: Annamaria BIANCHI (*University of Bergamo*)

Organiser: Annamaria BIANCHI

Analysis of voluntary survey data under missing not at random

Jae-Kwang KIM (*Iowa State University, US*)

Combining non-probability samples with probability samples to correct for selection bias

Ton de WAAL (*Statistics Netherlands – CBS and Tilburg University*)

Integration of MNO data with survey data to produce commuting statistics

Tiziana TUOTO (*Italian National Institute of Statistics – ISTAT*)*, Erika CERASTI, Loredana DI CONSIGLIO, Danila FILIPPONI, Tiziana PICHIORRI, (*Italian National Institute of Statistics – ISTAT*) Li-Chun ZHANG (*University of Southampton, SSB*)

11:30 - 12:30

REGRESSIONS

room: **JENK**

Session Chair: Marina PEREZ (*Eurostat*)

Harnessing Machine Learning for Superior GDP Forecasting: A Comparative Study of Machine Learning versus Econometric Models

Bogdan OANCEA (*National Institute of Statistics and University of Bucharest*)*

Statistical Insights about Elderly Hospitalization in India: Count Data Model

Kripa JOSTEN (*Manipal Academy of Higher Education, India*)*

Functional Clusterwise LDQ Regression for Assessing Poverty Risk Across European States

Francisco CARVLHO (*Universidade Federal de Pernambuco*); Gianmarco BORRATA (*University of Naples "Federico II"*)*; Rosanna VERDE, Antonio BALZANELLA (*Università della Campania Luigi Vanvitelli*)

12:30 - 13:30

LUNCH AND POSTER SESSION

2nd floor Charlemagne

Speeding up the release of the Total Market Production Index (TMPI)

Mojca BAVDAŽ, Aleša LOTRIČ DOLINAR, Sašo POLANEC, Tjaša REDEK (*University of Ljubljana, School of Economics and Business*); Tjaša BARTOLJ (*Institute for Economic Research*)

A population map of Europe by age

Julien GAFFURI (*Eurostat*)*

R package for creating multi-resolution grids of census and sample data

Jon O SKOIJEN*, Renate KOEBLE (*ARHS Developments*); Nicolas LAMPACH, Helena RAMOS, Rudolf SELJAK (*Eurostat*); Linda SEE (*IIASA*); Marijn van der VELDE (*European Commission - Joint Research Centre*)

An agricultural atlas for Europe – based on IFS 2020

Marijn van der VELDE (*European Commission - Joint Research Centre*); Nicolas LAMPACH (*Eurostat*); Jon O SKOIJEN*, Renate KOEBLE (*ARHS Developments*); Helena RAMOS, Julien GAFFURI (*Eurostat*); Linda SEE (*IIASA*)

Prediction of crop yields at field scale from earth observation data

Damien BABET (*Ministry of Agriculture of France*)*

Households and their dwellings as communities in administrative data

Helle VISK (*Statistics Estonia*)*

From NACE 08 to NACE 2025: Retraining an ML model in production using Large Language Models

Thomas FARIA*, Julien PRAMIL (*National Institute of Statistics – INSEE*)

Implementation of a new coding service at Insee

Yves COLTIER *, Julien GUAY (*National Institute of Statistics – INSEE*)

Streamlining the Supply and Analysis of Big Data at Research Data Centers

Oliver HAUKE (*Federal Statistical Office of Germany – Destatis*)*

Telling Stories with Data: Enhancing Museum Accessibility for Blind Visitors Through User Feedback

Lucia DE MAIO*, Andrea D'Andrea (*Università degli Studi di Napoli "L'Orientale"*)

Where people live and work: a register-based spatial and longitudinal analysis for Italy

Andrea DE PANIZZA *, Stefano DE SANTIS (*Italian National Institute of Statistics – ISTAT*)

Who are the flood victims? Monitoring the effects of the disaster using Earth Observation, GIS and administrative data

Marek PIENAŻEK (*Statistics Poland*)*

Binding Surveys and Deep Learning Statistics on Arrival Ports for Maritime Mobility via AIS Data

Francesco PUGLIESE *, Mauro BRUNO, Giulio MASSACCI, Francesco ORTAME (*Italian National Institute of Statistics – ISTAT*)

Spatial Mobility in the Dynamic Microsimulation Model MikroSim

Sarah BOHNENSTEFFEN (*Federal Statistical Office of Germany – Destatis*)*; Julian ERNST (*Trier University*)

Choice of Sampling Effort in a Schnabel Census

Su NA CHIN (*University of Southampton*)*

DATA CATALOGUE - a modern and harmonised approach to standardised data management in the NSI

Antoaneta ILKOVA (*National Statistical Institute of Bulgaria*)*

Evaluating the Completeness of Business Databases: A Comparison with Official Records Using Web Scraping Techniques

Xin-Hui Huang, Josep Domenech (*Universitat Politècnica de València*)

How far would you walk to the supermarket? Estimating access to shops across the United Kingdom

Joni Karanka*, Davide Deflorio, Ahmet Aydin (*Office for National Statistics*)

Efficiently Selecting Representative Audit Samples

Lotte MENSINK (*Utrecht University*)

New Challenges in Official Statistics: Big Data Analytics and Multi-level Product Classification

of Web Scraped Data

Juliana MACHADO (*University of Porto*)

Regularizing Probability Sample Estimates Through an Angle-Based Similarity Approach

Jacob WESTLUND (*Leiden University*)

13:30 - 14:30

European Master in Official statistics (EMOS), MASTER THESIS AWARD

room: **GASP**

Session Chair: Rosanna VERDI (*Università della Campania Luigi Vanvitelli*)

Organizer: Tina STEENVOORDEN (*EMOS secretariat, Eurostat*)

Predicting Travel Purpose in a Smartphone-Based Travel Survey

Solichatus ZAHROH (*Utrecht University*)

Methods for integrating survey data and big non-survey data

Elena VITI (*University of Pisa, University of Trier*)

Privacy-Enhancing Technologies for Synthetic Data Creation with Deep Generative Models

Alessio CRISAFULLI CARPANI (*University of Bologna*)

13:30 - 14:30

RELEVANCE OF A MULTISOURCES HARMONISED DATA FRAMEWORK ON LIVING CONDITIONS FOR MULTIPURPOSE USE

room: **MANS**

Session Chair: Nadja LAMEI (*Statistics Austria*)

Session Organisers: Sigita GESKE; Estefania ALAMINOS (*Eurostat*)

Harmonised statistics on income and living conditions in Europe, innovations and development over time

Estefania ALAMINOS*, Alessandro ALBANO, Emilio DI MEGLIO, Agata KACZMAREK-FIRTH (*Eurostat*); Ruzhdie BICI (*Sogeti*)

The Uses of Administrative Data in the Danish Survey on Income and Living Conditions

Daniel GUSTAFSSON, Martin FARIS SAWAED NIELSEN (*Statistics Denmark*)*

Building a Comparable Measure of Consumption: Concepts and Measurement Challenges Faced by Emerging and Advanced Economies

Teresa MUNZI, Peter LANJOUW (*Luxembourg Income Study - LIS*)*

13:30 - 14:30

MACHINE LEARNING I

room: **JENK**

Session Chair: Mark VAN DER LOO (CBS - Statistics Netherlands)

Analyzing Accessibility to Citizenship Services. A Network Analysis and Machine Learning Approach

Gianluca MONTURANO *, Angela Stefania BERGANTINO, Mario INTINI (*University of Bari*)

Towards dynamic Land Cover data for Austria using satellite imagery and time-series classification

Nina HOFER*, Nils von NORSINSKI (*Statistics Austria*)

An end-to-end statistical process to aggregate high-resolution temporal survey microdata: the monthly Labour Force Survey use case

Sandra BARRAGAN *, María BLAS PORTERO, Carlos SÁEZ CALVO, Luis SANGUIAO-SANDE, Guillermo GORGAS RUIZ (*National Statistical Institute of Spain – INE*)

14:30 - 15:30

EARTH OBSERVATION

room: **GASP**

Session Chair: REMCO PAULSSEN (CBS)

Earth Observation and AI for Construction Statistics

Maren Koehlmann (Federal Statistical Office)*

Earth Observation to accelerate Ecosystem Accounting

Bruno SMETS*, Marcel BUCCHORN, Mathilde De VROEY, Tim JACOBS (VITO); Stefano BALBI, Alessio BULCKAEN, Ferdinando VILLA (BC3 Research); Lars HEIN (Ecounting); Ioannis P. KOKKORIS, Panayotis DIMOPOULOS (University of Patras)

Towards buildings demography

Julien GAFFURI (Eurostat)*

14:30 - 15:30

TIME SERIES ANALYSIS

room: **MANS**

Session Chair: Anna SMYK (National Institute of Statistics – INSEE)

JDemetra+ 3.2.4: New (R) tools for (high-frequency) time series analysis

Tanguy BARTHELEMY (National Institute of Statistics – INSEE)*

Time Series Exhaustive Automatic Modelling (TEAM)

Carlos SÁEZ CALVO*, Luis SANGUIAO-SANDE, Félix APARICIO PÉREZ, José Fernando ARRANZ ARAUZO (National Statistical Institute of Spain – INE)

ESS Guidelines on seasonal adjustment (2024 edition)

Dominique LADIRAY (National Institute of Statistics – INSEE)*,

14:30 - 15:30

MACHINE LEARNING II

room: **JENK**

Session Chair: Agne BIKAUSKAITE (Eurostat)

Applying Machine Learning to educational level: An empirical evaluation

Marco DI ZIO*, Fabrizio DE FAUSTI, Romina FILIPPINI, Simona TOTI; (Italian National Institute of Statistics – ISTAT)

Applicable AI in Official Statistics: A New Research Theme at Statistics Netherlands

Marco PUTS*, (Statistics Netherlands – CBS)

US Injuries Flood Prediction with Large Language Models Data Augmentation

Claudio GIANCATERINO*, (Data Scientist, USA)

15:30 - 16:00

CLOSING

room: **GASP**

Sophie LIMPACH (Eurostat)