NTTS 2023
Conference on New Techniques and Technologies for official Statistics
(NTTS 2023)
Charlemagne Building, Brussels, 7–9 March 2023
(incl. satellite events on 06 and 10 March 2023)

Detailed Scientific programme
(updated on 22 February 2023)

'New Techniques and Technologies for Statistics' (NTTS) is an international biennial scientific conference series organised by Eurostat on new techniques and methods for official statistics, and the impact of new technologies on statistical collection, production and dissemination systems. **NTTS 2023** will take place in **Brussels on 7-9 of March 2023**, with satellite events on the 6 and 10 of March. The purpose of NTTS conferences is both to allow the presentation of results from currently on-going research and innovation projects in official statistics and to stimulate and facilitate the preparation of new innovative projects, with the aim of improving and enhancing the quality and usefulness of official statistics, as well as to prepare activities related to research in statistics. The target audience includes the official statistics R&D community at large: colleagues from statistical institutes, academia, European institutions and actors from the private sphere.

Tuesday, 07 March 2023

08:00 – 09:00	**Registrations & Welcome coffee** room: **Lobby**

09:00 – 09:30	**Opening session** room: **GASP** **Mariana Kotzeva** (*Eurostat, Luxembourg – Director General*) **Welcome Address** **Paolo Gentiloni** (*European Commission – Commissioner - Economy*)

09:30 – 10:15	**Keynote: Marko Grobelnik (AI Lab - Jozef Stefan Institute)** room: **GASP** Moderator: **Emanuele Baldacci** (*Eurostat*)

10:30 – 12:30	**Big Data Hackathon award ceremony and laureate lectures** room: **GASP** **Awards by Mariana Kotzeva** (*Eurostat*) Moderator: **Albrecht Wirthmann** (*Eurostat*)

10:30 - 11:30	**Web Data** room: **JENK** Session Chair: **Roeland Beerten** (*National Bank of Belgium*) **A Web-Intelligence information system to support the production of EGR statistics** Antonio Laureti Palma, Ioannis Sopranidis, Fernando Reis (Eurostat), Alexandros Bitoulas, Anca Maria Kiss, Gabriele Marconi *(Sogeti)* **Improving the quality of the job vacancy survey in Poland using administrative and online data** Maciej Beręsewicz *(Poznań University of Economics and Business)*, Marek Wydmuch *(Poznań University of Technology)*, Herman Cherniaiev, Robert Pater (University of Information Technology and Management in Rzeszow). **Using Webdata to derive the economic activity of businesses** Manveer Mangat *(Statistics Austria)*, Alexander Kowarik *(Statistics Austria)*

10:30 - 11:30	**Sampling** room: **MANS** Session Chair: **Cristiano Tessitore** (*Eurostat*) **Random Forest algorithm to adjust for Census population over-counts** Violeta Calian *(Statistics Iceland),* Margherita Zuppardo *(Statistics Iceland)* **The End of Random Sampling** Gary Brown *(Office for National Statistics-ONS)* **Combining probability and non-probability samples on an aggregated level** Ton de Waal *(Statistics Netherlands-CBS),* Sofia Villalobos Aliste *(Utrecht Universtity)*; Sander Scholtus *(Statistics Netherlands)*;

11:30 – 12:30	**Data Sources** room: **MANS** Session Chair: **Sofie De Broe** *(Sciensano / University of Maastricht)* **SORS - Integrated data collection system** Branko Josipovic *(Statistical Office of the Republic of Serbia)*, Nebojsa Tolic *(Statistical Office of the Republic of Serbia)* **How to identify private households in french surveys?** Lea E Tholozan (Insee)*; Helene Chaput (Insee) **Administrative Data assisting Data Collection through Machine Learning** Sonia P Quaresma (INE)*; Alvaro Combo (INE); Pedro Guerreiro (INE); Carlos Valente (INE); Paula Marques (INE)

11:30 – 12:30	**Data Integration** room: **JENK** Session Chair: **Mojca Bavdaž** *(University of Ljubiana)* **Intergration of social administrative data: The case of Turkish education-labour force database** Turgay Altun *(Turkish Statistical Institute- TURKSTAT)*

	Quality measure to evaluate statistical matching methods Arnout van Delden (Statistics Netherlands)*; Francesca Goudie (Statistics Netherlands); Ton de Waal (Statistics Netherlands) **Data linking from different sources - key to better statistics** Paweł Murawski *(Statistics Poland)*
12:30 – 13:30	**Lunch** Charlemagne Building
12:30 – 13:30	**POST01: Poster session** Lobby by the catering **Exploring the Italian ecoregions: institutional fragmentation and socio-demographic characteristics** Raffaella Succi *(National Institute of Statistics–ISTAT)*, Marija Mamolo *(National Institute of Statistics– ISTAT)* **Estimation of hidden populations using single-source capture recapture models with singleRsource package** Piotr Chlebicki, Maciej Beręsewicz *(Poznań University of Economics and Business)* **Machine Learning for Estimating Commuting Population** Loredana Di Consiglio *(National Institute of Statistics–ISTAT)* **Protection of linked tables with a suppressive approach. Method and Use Cases** Julien Jamme (*Insee*)*; Nathanael Rastout (*Insee*); Clément Guillo (*Insee*) **Case studies in using Satellite Earth Observation for National Statistics: the GAUSS project** Phillip Harwood *(Evenflow)*, Orestis Speyer *(National Observatory of Athens),* Ewa Panek *(Institute of Geodesy and Cartography)* **Bootstrap procedure for variance estimation of small area estimates with application to job statistics** Djalel-Eddine Meskaldji *(Swiss Federal Statistical Office)* **Application of an Adaptive Survey Design on the Italian Population Census** Claudia De Vitiis (ISTAT)*; Stefano Falorsi (ISTAT); Francesca Inglese (ISTAT); Paolo Righi (ISTAT); Marco Dionisio Terribili (ISTAT); Alessio Guandalini (ISTAT) **A New Way to Learn Data Science: The Funathon, a Non-competitive Hackathon** Marie-Pierre de Bellefon (*Insee*)*; Romain Lesur (*Insee*) **Visualising the pathways in and out of employment during COVID-19 in Estonia** Kadri Rootalu *(Statistics Estonia)* **Towards an Open Source ETL Statistical System** Cristiano Tessitore (*Eurostat*), Marius Felecan (*Gopa Luxembourg*)
13:30 – 14:30	**Web scraping** room: **GASP** Session Chair: **Fernando Reis** *(Eurostat)* **Web scraped data in consumer price indexes** Peter Knížat *(Statistical Office of the Slovak Republic)* **Use of data obtained by web scraping for statistical purposes** Branka Raicevic *(Statistical Office of Montenegro)* **Can real estate web data augment official statistics?** Klaudia Peszat (Statistics Poland)*; Dominik Dabrowski (Statistics Poland); Dominika Nowak (Statistics Poland)
13:30 – 14:30	**Innovative data collection in Social Statistics** room: **JENK** Session Chair: **Eniel Ninka** *(Eurostat)* **What is the business case for a smart household budget survey? Experiences from the field in six countries**

Barry Schouten *(Statistics Netherlands-CBS)*, Jelmer de Groot *(Statistics Netherlands-CBS)*

CRŒSS: A cross-domain data collection platform for the ESS
Joeri Minnen *(hbits CV - spin-off VUB)*, Kelly Sabbe *(STATBEL)*, Jerome Olsen *(DESTATIS)*

13:30 – 14:30	**Data Visualization** room: **MANS**

Session Chair: **Susanne Taillemite** *(Eurostat)*

An innovation approach of the data dissemination and data visualisation in official statistics
Sokrat Palushi *(NTT DATA),* Elma Çali *(Albanian Institute of Statistics)*

Territorial Economic Data viewer (TEDv). Data integration and visualisation of multiple EU funds at regional level
Anabela Santos *(EC - Joint Research Centre)*

restatapi: an R package to search and retrieve data from the changing Eurostat dissemination chain
Mátyás Mészáros *(Eurostat)*

14:30 – 15:30	**Re-using privately held data: experimental statistics on online collaborative economy platforms** room: **GASP**

Session Chair: **Emanuele Baldacci** (*Eurostat*)

Speakers/panellists:

- **David Blanchard** (DG GROW Unit G-3 – Deputy head of unit Digital Transformation of Industry)
- **Simon Bley** (Eurostat Unit G-2 European businesses / tourism statistics)
- **Christophe Demunter** (Eurostat Unit G-2 European businesses / tourism statistics)
- **Jean-Philippe Monod** (Expedia Group - Senior Vice-President Government & Corporate Affairs)
- **Dita Zemite** (Statistics Latvia - Head of unit Transport and tourism statistics)

In the 21st century, the digitalisation of society and businesses helped statisticians to counter the limits of traditional surveys and address user needs better and faster. Re-use of privately held data is one of the promising paths. Since 2020, Eurostat and the NSIs have been exploring and using data obtained from Airbnb, Booking.com, Expedia Group and Tripadvisor to produce data on short-term accommodation booked via these online collaborative economy platforms. The session will take a multidisciplinary view on the enablers and the risks of this endeavour, covering methodological challenges as well as governance and cooperation models.

14:30 – 15:30	**Smart data** room: **MANS**

Session Chair: **Michelle Jouvenal** *(National Institute of Statistics–ISTAT)*

Impact of smart versus non-smart data collection in official statistics?
Nina Berg *(Statistics Norway-SSB)*

Challenges in the Smart Household Budget Survey: how to involve & motivate respondents
Jelmer de Groot *(Statistics Netherlands-CBS)*

Advances in Eye-Tracking and Cognitive Interviewing Methodology: Dos, Don'ts, and Decisions
Mátyás Gerencsér *(Hungarian Central Statistical Office)**; Anna Sára Ligeti (Hungarian Central Statistical Office); Ferenc Mújdricza (Hungarian Central Statistical Office); Linda Mohay (Hungarian Central Statistical Office)   3

14:30 – 15:30	**Demography** room: **JENK**

Session Chair: **Lewis Dijkstra** *(European Commission)*

Avoiding the avoidable: Simulating long-term population changes in Germany without avoidable mortality
Jannek Mühlhan *(German Federal Statistical Office-DESTATIS)*

Estimation of mode effects in the French population census
Loreline COURT (INSEE)*; Simon QUANTIN (INSEE)

Geographic Infrastructure for the 2021 Population and Housing Census

15:30 – 16:00	**Coffee-break** Charlemagne Building

	Rossano Figueiredo (Statistics Portugal)*; Ana Santos (Statistics Portugal); Bartholomeus Schoenmakers (Statistics Portugal)
15:30 – 16:00	**Coffee-break** Charlemagne Building
16:00 – 17:00	**From Classifications to Artificial Intelligence:** **innovative services of the Publications Office** room: **GASP**
	Session Chair: **Franck Noël** *(Publications Office of the European Union)*
	A successful collaboration on classifications and what is in it for the statistical community Denis Dechandon *(Publications Office of the European Union)*, Christine LAABOUDI *(Eurostat)*
	Machine Learning Support for Repository Services — Reception, Cellar, and Semi-automated Metadata Automation Nasredine CHENIKI *(Infeurope)*, Marc Küster *(Publications Office of the European Union)*
16:00 – 17:30	**Confidentiality** room: **JENK**
	Session Chair: **Aleksandra Bujnowska** *(Eurostat)*
	Data linkage with a search engine: identifying individuals in a population register Heidi Koumarianos (Insee)*; Yves-Laurent Bénichou (Insee); Séverine Gilles (Insee)
	Synthetic Dataset Generation for Anonymised Machine Learning Applications Elisabeth Petersen (Deimos Space UK Ltd.)*; David Smith (Deimos Space UK Ltd.); Andrew Harvey (Deimos Space UK Ltd.); David Petit (Deimos Space UK Ltd.)
	Releasing survey microdata with exact cluster locations and additional privacy safeguards Alejandra Arias Salazar (University of Costa Rica)*; Till Koebe (Freie Universität Berlin); Timo Schmid (Otto-Friedrich-Universität Bamberg
16:00 – 17:30	**R/Julia/Python** room: **MANS**
	Session Chair: **Dario Buono** *(Eurostat)*
	Julia as a software for Official Statistics and Social Sciences Josep Espasa Reig *(LIS)*
	New Scientist IT Infrastructure Marius Felecan (Gopa Luxembourg)
	An R package for automatically generating candidate correspondence tables between classifications Martin Karlberg *(Eurostat)*, Christine Laaboudi *(Eurostat)*, Mátyás Mészáros *(Eurostat)*

Wednesday, 08 March 2023

09:00 – 09:45	**Keynote: Stefan Thurner (***Medical University of Vienna***)** room: **GASP**
10:00 – 11:00	**New skills in Symbolic Data Analysis for Official statistics** room: **GASP**
	Session Chair: **Rosanna Verde** *(University Vanvitelli)*
	Ranking "concordance" and "discordance" between a class and a set of classes Diday Edwin *(Paris-Dauphine University)*
	An illustration of the use of the measures s-concordance and s-discordance in applications Simona Korenjak-Cerne *(University of Ljubljana, SEB, and IMFM Ljubljana)*, Jasminka Dobša *(University of Zagreb)*, Diday Edwin *(Paris-Dauphine University)*
	Exactly mergeable summaries Vladimir Batagelj *(IMFM Ljubljana)*
	Discovering Patterns and Trends with Distributional Data Paula Brito *(Faculdade de Economia, Universidade do Porto & LIAAD-INESC TEC)*
10:00 – 11:00	**Citizen Science** room: **JENK**
	Session Chair: **Monica Pratesi** *(National Institute of Statistics–ISTAT)*

Data donation of Google Location History information: willingness, donation, and non-donation biases
Bella STRUMINSKAYA (Utrecht University)*; Laura Boeschoten (Utrecht University)

To what extent do data privacy concerns and digital distrust act as barriers to smartphone sensor data collection in general population surveys and what can be done to mitigate them?
Caroline Roberts (University of Lausanne)*; Marc Asensio Manjon (University of Lausanne); Nicolas Pekari (FORS)

Eurostatistics - from PDF format to interactive web visualisation using R
Rosa Ruggeri Cannata *(Eurostat)*, Piotr Ronkowski *(Eurostat)*, Johannes Buck *(Technical University of Munich)*

10:00 – 11:00	**Nowcasting**	room: **MANS**

Session Chair: Gian-Luigi Mazzi *(Senior Consultant)*

GDP-Flash estimates: a quality assessment
Philipp Wegmüller *(State Secretariat for Economic Affairs SECO)*

Density forecasts of inflation: a quantile regressions forest approach
Inès Moutachaker (INSEE)*; Michele Lenza (ECB); Joan Paredes (ECB)

Analyses of the connection and the interaction between retail products markets and cash-holding ratio through panics using dynamic factor
Klaudia Máténé Bella (*Hungarian Central Statistical Office*), Ildikó Ritzl-Kazimir *(Magyar Nemzeti Bank, the central bank of Hungary)*

11:30 – 12:45	**European Master in Official Statistics (EMOS)**	room: **GASP**

Session Chair: **Mariana Kotzeva** *(Eurostat)*

Moderator: **Maja Islam** *(Eurostat)*

Estimating Spatial Distribution of the NEET Rate in Italy by Small Area Methods
Sara Sodini *(University of Pisa)*

Measuring competitiveness: a new composite indicator for Italian municipalities
Anna Scaccabarozzi *(University of Bergamo)*

Interactions within a multi-layer EU inter-bank network
Chloé Maisonnave *(Ensai/Rennes 1)*

11:30 – 12:30	**Online Data**	room: **JENK**

Session Chair: **Matyas Meszaros** *(Eurostat)*

Development of an OJA gold standard to classify occupation
Anca Maria Kiss *(Sogeti)*, Gabriele Marconi *(Sogeti)*, Alexandros Bitoulas *(Sogeti)*, Fernando Reis *(Eurostat)*

URL finding methodology
Heidi Kühnemann *(Statistik Hessen)*

National Accounts in a World of Naturally Occurring Data: A Proof of Concept for Consumption
Gergely Buda *(Barcelona School of Economics)*,Vasco Carvalho *(Faculty of Economics)*, Stephen Hansen *(Imperial College London)*

11:30 – 12:30	**Data Literacy**	room: **MANS**

Session Chair**: Remco Paulussen** *(Statistics Netherlands-CBS)*

Creating, testing and maintaining a functional library for statistical methods
Susie Jentoft *(Statistics Norway)*

Eurostat Education corner
Romina Brondino and Nina Jere *(Eurostat)*

12:30 – 13:30	**Lunch**
12:30 – 13:30	**POST02: Poster session** Lobby by the catering **Using Digital Trace Data to Generate Representative Estimates of Disease Prevalence [COVID 19 Infections] in Belgian Municipalities** Sen Dishani *(KU Leuven)* **Integration of land use vector data from administrative sources for agri-environmental analysis** Pietro Macedoni *(University of Bologna)* **Development of methodology for automated crop mapping in Greece using Neural Networks and Sentinel-2 satellite imagery** Eleni Papadopoulou *(Aristotle University of Thessaloniki)* **Evaluation of some methods of detecting outliers** Adaku Obikee *(University of Agriculture and Environmental Sciences Umuagwo)* **Pre and post COVID-19 related statistics analysis for identifying future opportunities based on historical dynamics** Sergio Gallego García *(UNED)* **Unsupervised ranking and categorisation of companies using web scraping and machine learning** Michael Reusens *(Statistics Flanders)*, Cedric De Boom *(Statistics Flanders)* **Integrating multimode survey data with VTL** Benoit Werquin *(National Institute of Statistics–INSEE)* **Modelling local level housing demand based on the Multi-sectoral Regional Microsimulation Model (MikroSim)** Sarah Bohnensteffen (*German Federal Statistical Office-DESTATIS*) **Non-traditional data and methods for identifying patterns of inequality to digital access in the EU** Patrizia Sulis *(European Commission)* **Natural Language Processing to automate data coding** Costas Diamantides *(Statistical Service of Cyprus-CYSTAT)* **Maritime mobility statistics using open data** Danila Filipponi *(National Institute of Statistics–ISTAT)* **The use of synthetic data for data sharing : An application on survey data** Isabella Corazziari *(National Institute of Statistics–ISTAT)*, Loredana Di Consiglio *(National Institute of Statistics–ISTAT)* **Statistical Data Triplification : The case of semi-automatic generation of RDF triples from relational databases** Stamatios Theocharis *(Ministry of the Interior)* **Local population projections with Bayesian hierarchical models** Violeta Calian *(Statistics Iceland)* **Data circularity for the circular economy** Firuza Nahmadova *(Datastake)*
13:30 – 14:30	**Statistics during pandemics** room: **GASP** Session Chair: **Ebba Barany** *(Eurostat)* **SORS decision making support system in COVID-19 emergency situations** Branko Josipovic, Nebojsa Tolic *(Statistical Office of the Republic of Serbia)*

	The Effect of Non-pharmaceutical Policy Interventions on Population Mobility During the COVID-19 Pandemic Jonas Klingwort, Joep Burger*, Jan van den Brakel (Statistics Netherlands-CBS)* **The behaviour of alternative trend-cycle decomposition methods during the pandemic** Ferdinando Biscosi *(GOPA Luxembourg)*, Gian-Luigi Mazzi *(Senior Consultant)*, Piotr Ronkowski *(Eurostat)*, Rosa Ruggeri Cannata *(Eurostat)*	
13:30 – 14:30	**Equality** room: **JENK** Session Chair: **Sorina Vâju** *(Eurostat)* **Promoting the collection and use of equality data** Rossalina Latcheva (European Union Agency for Fundamental Rights) **Beyond the gender pay gap** Marina Perez Julian *(Eurostat)*, Denis Leythienne *(Eurostat)* **New statistics on discrimination and gender based violence at EU level** Aura Leulescu, Merle Paats *(Eurostat)*	
13:30 – 14:30	**Machine learning 1** room: **MANS** Session Chair: **Sarah Bohnensteffen** (Destatis) **Early provision of economic short-term indicators using Machine Learning** Elena Rosa-Perez *(National Statistical Institute-INE)*, David Salgado *(National Statistical Institute-INE)*,Sandra Barragan *(National Statistical Institute-INE)* **Machine learning methods to support a modernized household budget survey** Boriska Toth, Ruben Mustad, Susie Jentoft *(Statistisk sentralbyrå)* **Machine learning and wealth measurement : an experiment on housing wealth of French households** Olivier Meslin *(National Institute of Statistics–INSEE)*	
14:30 – 15:30	**Social statistics** room: **GASP** Session Chair: **Francesca di Iorio** *(University of Naples)* **Subjective poverty in the European Union: the EU-SILC approach** Estefania Alaminos (European Commission - Eurostat)*; Agata Kaczmarek-Firth (European Commission - Eurostat); Rasim Ryustem (European Commission - Eurostat) **Chatbots to 'talk' with public data: the case of the Luxembourg Income Study *(LIS)*** Marcos Gómez Vázquez (*Open University of Catalonia*), Jordi Cabot *(ICREA - UOC),* Josep Espasa Reig *(LIS)* **Adding a new mode to the mix: Implementation and evaluation of CAWI in EU-SILC** Angela Hammer *(Statistics Austria)*, Marlene Blüher *(Statistics Austria)* **Tracing respondents' footpaths – How user journey analysis can offer new insight into survey experience** Katharina Roßbach, Anna Lena Keute *(Statistics Norway)*	
14:30 – 15:30	**High frequency Data** room: **JENK** Session Chair: **Dominique Ladiray** *(Consultant)* **COVID-19 daily number of diagnoses: an ARIMA analysis** Luis Sanguiao-Sande *(National Statistical Institute-INE)* **Time disaggregation in the Labour Force Survey using statistical learning and state-space models** Sandra Barragan *(National Statistical Institute-INE)*, David Salgado *(National Statistical Institute-INE)*, Miguel Ángel García Martínez *(National Statistical Institute-INE)* **Temporal Disaggregation of the Services Producer Price Index** Maria Novás Filgueira *(National Statistical Institute-INE)*, Carlos Sáez Calvo *(National Statistical*	

Institute-INE), Luis Sanguiao-Sande *(National Statistical Institute-INE)*

14:30 – 15:30	**Machine Learning 2** room: **MANS**
	Session Chair: **Jean Marc Museaux** *(Eurostat)*
	Measuring the Italian Sentiment on economy: a Deep Learning application to the sentiment analysis
	Elena Catanese *(National Institute of Statistics–ISTAT)*, Francesco Pugliese *(National Institute of Statistics–ISTAT)*
	An Experimental Study on Using NLP to Summarize Biotechnology Activities in Türkiye in a Few Words
	Bilal Kurban *(Turkish Statistical Institute-TURKSTAT)*
	Fuzzy Clustering based Autocoding Methods for Family Income and Expenditure Surveys
	Yukako Toko *(National Statistics Center)*, Mika Sato-Ilic *(University of Tsukuba)*
15:30 – 16:00	**Coffee-break** Charlemagne Building
16:00 – 17:30	**MNO data** room: **GASP**
	Session Chair: **Fabio Ricciato** *(Eurostat)*
	Estimation of the length of stay of foreigners in Poland using mobile big data
	Maciej Beręsewicz *(Poznań University of Economics and Business)*
	Use of mobile network data for official statistics
	Dorian Le Jeune (Statistisches Bundesamt (Destatis))*; Sandra Hadam (Statistisches Bundesamt (Destatis)); Natalie Rosenski (Statistisches Bundesamt (Destatis))
	Synthetic mobile networks data generation
	Bogdan Oancea *(National Institute of Statistics and University of Bucharest)*, David Salgado *(National Statistical Institute-INE)*, Marian Necula *(National Statistical Institute-INSSE)*, Sandra Barragan *(National Statistical Institute-INE)*, Luis Sanguiao-Sande *(National Statistical Institute-INE)*
	Generation of Synthetic Data from actual data of Mobile Network Operators (MNO) through Generative Adversarial Networks (GANs): motivations, techniques and preliminary results
	Francesco Pugliese *(National Institute of Statistics–ISTAT)*, Massimo De Cubellis *(National Institute of Statistics–ISTAT)*
16:00 – 17:30	**Transport Statistics** room: **JENK**
	Session Chair: **Evangelia FORD-ALEXANDRAKI** *(Eurostat)*
	Port Visits Using New Data Sources
	Nele van der Wielen, Justin McGurk, Time Linehan, John Flanagan (CSO)
	TranStat - application of maritime data in the traffic intensity and transportation volume
	Michał Bis *(Statistics Poland)*
	Using Open-source Data to Estimate Mobility Statistics
	Laurent Smeets *(GOPA Luxembourg)*
	Smart Mobility Surveys: Current App Developments, Methodological Perspectives, and Respondent Interaction
	Yvonne Gootzen, Jonas Klingwort, Mike Vollebregt, Barry Schouten *(Statistics Netherlands-CBS)*
16:00 – 17:30	**Blockchain and Artificial Intelligence** room: **MANS**
	Session Chair: **Joao Rodrigues Frade** *(European Commission)*
	Exploring the potential of blockchain to support innovation in European statistics - An interactive workshop by the European Blockchain Services Infrastructure
	Maxine Lemm *(European Commission)*
	webAI - A new type of web-based indicators for economic analyses: The example of

sustainability
Sebastian Schmidt *(ISTARI.AI)*, Jan Kinne *(ISTARI.AI)*

The usage of blockchain technology for official statistics
Cristiano Tessitore *(Eurostat)*

Thursday, 09 March 2023

09:00 – 09:45	**Keynote: Johanna Laiho-Kauranne** *(DAIN-Studio, FInland)*	room: **GASP**

10:00 – 11:00	**Microsimulation**	room: **GASP**

Session Chair: **Markus Zwick** *(German Federal Statistical Office-DESTATIS)*

A microsimulation model for population projections in official statistics
Pauline Pohl (Statistics Austria)*; Philip Slepecki (Statistics Austria); Martin Spielauer (WIFO)

A combined methodology SimulSTAT for public data indicators by using statistical and simulation means for improving decision-making in administration policies
Sergio Gallego García (UNED)*; Manuel García García (UNED)

A confidentiality concept for a simulation data centre
Martin Palm (*German Federal Statistical Office-DESTATIS*)

10:00 – 11:00	**Privately Held Data**	room: **JENK**

Session Chair: **Michail Skaliotis** *(European Commission)*

(Re-)using privately held data : experimental statistics on online collaborative economy platforms
Christophe Demunter *(Eurostat)*

Practical Privacy-Aware Data Linkage and Statistical Aggregation based on Privacy Enhancing Techniques
Chris Dugdale (Statistics Canada); Benjamin Santos (Statistics Canada)*; Zachary Zanussi (Statistics Canada)

Towards a Taxonomy for Business-to-Government Data Sharing
Serena Signorelli *(European Commission - Joint Research Centre)*

10:00 – 11:00	**Agriculture Statistics**	room: **MANS**

Session Chair: **Jose Domingo Martinez Solano** *(Eurostat)*

Strategy to Modernise Agricultural Statistics: New Pathways for the Future
Nicolas Lampach *(Eurostat)*

Strengthen the statistical capacities in the developing country to close the agricultural data gap
Neli Georgieva Mihaylova *(FAO)*

The Modern 2020 Agricultural Census in Spain: a Massive Use of Registers and Alternative Data Sources
Antonio Martínez Serrano (*INE Spain*)

11:30 – 12:30	**Communication and dissemination**	room: **GASP**

Session Chair: **Jean Pierre Poncelet** *(Eurostat)*

The release package of the Eurostat regional yearbook 2022 - Something for everyone?
Bianka Fohgrub *(European Commission)*

ESA interactive: towards a new generation of statistical standards
Nicola Massarelli *(Eurostat)*

Visualization and communication of statistics
Martin Tennekes *(Statistics Netherlands-CBS),* Marco Puts *(Statistics Netherlands-CBS)*

11:30 – 12:30	**Environmental Statistics** room: **JENK**
	Session <mark>Chair: **TBD**</mark>
	Satellite altimetry to water level monitoring: Italian and Finnish case studies
	Cristina Deidda *(Politecnico di Milano)*
	Degree of urbanization in Catalonia: high-resolution grids and commuting times
	Clara Hormigos Feliu *(European Commission-Joint Research Centre)*, Eduard Suñé, Daniel Ibáñez, Mireia Farré, Cristina Rovira *(Statistical Institute of Catalonia)*
	Remote sensing application in official statistics. Urban green index for Romanian cities
	Marian Necula *(National Statistical Institute-INSSE)*, Bogdan Oancea *(National Statistical Institute-INSSE and University of Bucharest)*
11:30 – 12:30	**Energy data spaces and statistics** room: **MANS**
	Session Chair: **Carola Carstens** *(Eurostat)*
	PLATOON- Digital PLAtform and analytical TOOls for eNergy
	Valentina Janev, *(The Mihajlo Pupin Institute, University of Belgrade)*
	Smart Statistics from Smart Meters
	Soren Andersen, *(Statistics Denmark)*
	Big Data for OPen innovation Energy Marketplace
	Jordi Jené Jaume *(Aněll)*
12:30 – 13:30	**POST03: Poster session** Lobby by the catering
	Eurostat's GISCO services at your disposal
	Hannes Reuter *(Eurostat)*
	From a glossary to a controlled vocabulary: a preliminary Istat experience
	Emanuela Recchini *(National Institute of Statistics–ISTAT)*
	An open source data science platform to foster innovative and reproducible statistical projects
	Romain Avouac *(National Institute of Statistics–INSEE)*, Frédéric Comte *(National Institute of Statistics–INSEE)*
	Mapping circular economy EU funded projects using text mining
	Anabela Santos *(European Commission-Joint Research Centre)*
	Integrating Big Data in the traditional survey of maritime transport statistics: open challenges
	Angela Pappagallo *(National Institute of Statistics–ISTAT)*, Luca Valentino *(National Institute of Statistics–ISTAT)*, Francesco Amato *(National Institute of Statistics–ISTAT)*
	How well-behaved are revisions to quarterly fiscal data in the euro area?
	Krzysztof Bankowski *(European Central Bank)*, Thomas Faria *(Insee)*
	An Android app for continuous census management
	Eleonora Sibilio *(National Institute of Statistics–ISTAT)*, Giuseppe Giuliano *(National Institute of Statistics–ISTAT)*
	Bridging independent taxonomies using AI: an application to skills mismatch using PIAAC, ESCO Skills and Online Job Ads
	Francesco Trentini *(University of Milano-Bicocca)*, Fabio Mercorio *(University of Milan Bicocca)*, Mario Mezzanzanica *(University of Milan-Bicocca)*, Filippo Pallucchini *(Università di Milano Bicocca)*, Yuchen Guo *(University of KU - Leuven)*
	Use of multilevel grids to release protected grid data from the French 2021 Census
	Julien Jamme *(INSEE)*
	Hedonic House Price Index for Poland based on listings
	Radoslaw Trojanek *(Poznań University of Economics and Business)*
	Geospatial Data Store - centralization of spatial data in Statistics Poland
	Amelia Wardzinska-Sharif *(Statistics Poland)*

13:30 – 14:30	**Business statistics** room: **GASP**
	Session Chair: <mark>TBD</mark>
	The Italian Social Mood on Economy Index: sub-indices focused on business Luca Valentino *(National Institute of Statistics–ISTAT)*, Elena Catanese *(National Institute of Statistics–ISTAT)*
	Business register improvements: a balance between search, scrape and 3rd party web data Olav ten Bosch *(Statistics Netherlands-CBS),* Arnout van Delden *(Statistics Netherlands-CBS)*
	Innovating Business Data Collection: System-to-System Data Communication applied to an agricultural survey Ger Snijkers *(Statistics Netherlands-CBS)*
13:30 – 14:30	**Geospatial statistics 1** room: **JENK**
	Session Chair: **Marta NAGY-ROTHENGASS** *(Eurostat)*
	Towards standardised geospatial statistics Rina Tammisto *(Statistics Finland)*, Jerker Moström *(Statistics Sweden)*
	New and improved tools for spatial statistics and centralization of spatial data in Statistics Poland Mirosław Migacz *(Statistics Poland)*
	GSGF Europe – opportunity to re-assess national geospatial and statistical data practices Igor Kuzma *(Statistical Office of the Republic of Slovenia-SORS)*
13:30 – 14:30	**Price data** room: **MANS**
	Session Chair: **Doris Rijnbeek (***Oesterreichische Nationalbank***)**
	Evaluating energy prices and costs impacts on households and industry's costs Stavros Lazarou *(Eurostat),* Viktor Hauk *(European Commission - DG Ener)*
	Automatic classification for price statistics using machine learning methods Bogdan Oancea *(National Statistical Institute-INSSE and University of Bucharest)*, Marian Necula *(National Statistical Institute-INSSE)*
	Price imputation methods based on statistical algorithms Botir Radjabov *(GOPA Luxembourg)*
14:30 – 15:30	**Statistics for the Public Good in the Data Ecosystem of the Digital Society** room: **GASP**
	Session Chair: **Walter J. Radermacher** *(chair ISI Advisory Board on Ethics)*
	Panellists:
	Pádraig Dalton *(Central Statistics Office-CSO, chair UNECE CES)*
	Jan Robert Suesser, Martine Durand *(co-chairs of the IAOS "Krakow Working Group")*
	Katharina Schüller *(chair IEEE P7015 - Data and AI Literacy, Skills, and Readiness Working Group)*
14:30 – 15:30	**Geospatial statistics 2** room: **JENK**
	Session Chair: **Hannes Reuter** *(Eurostat)*
	Wasserstein Distances for Spatial Statistics: The Spatial-KWD library Stefano Gualandi *(University of Pavia)*, Fabio Ricciato *(Eurostat)*
	On the Application of the Fourier-based Distance to Spatial Statistics Stefano Gualandi *(University of Pavia)*, Andrea Codegoni *(Università degli Studi di Pavia)*, Fabio Ricciato *(Eurostat)*
	Exploring Spatial and Demographic Official Statistics on Personal Insolvency Sven Brocker (University of Duisburg-Essen), Jonas Klingwort *(Statistics Netherlands-CBS)*, Christian Borgs *(IT.NRW)*

	Geocoding millions of addresses in a reproducible manner for Big Data Climate Risk analysis Jörn Franke, Daphné Aurouet, Malgorzata Osiewicz (*European Central Bank*)
14:30 – 15:30	**Energy Statistics** room: **MANS** Session Chair: **Madelaine Mahosky** (*Eurostat*) **Energy consumption decomposition analysis using European official statistics – methodology and input data** Stavros Lazarou (*Eurostat*) **Y-0 Estimates of supply side of Energy balances and key indicators** Maja Božičević Vrhovčak (*Energy Institute Hrvoje Požar*), Stavros Lazarou (*Eurostat*) **Import dependency by origin indicator** Cristina Martello (*Eurostat*) **Evaluating energy prices and costs impacts on households and industry's costs** Stavros Lazarou (*Eurostat*),
15:30 – 16:00	**Coffee-break** Charlemagne Building
16:00 – 17:30	**On line Job Advertisment** room: **GASP** Session Chair: **Fernando Reis** (*Eurostat*) **Using online job adverts data to understand labour market demand for skills** Nora Condon (*SLMRU (SOLAS)*) **Towards statistics on skills: considerations on using WIH OJA data** Vladimir Kvetan (*Cedefop*) **Changes of skill requirements across jobs and labour markets: evidence from web vacancies** Emilio Colombo (*Universita' Cattolica del Sacro Cuore*) **Demand for digital skills: experimenting with information extraction from online job advertisements** Joanna Napierala (*Cedefop*) **Online Job Advertisements: the Italian Case Study** Annalisa Lucarelli, Elena Catanese, Francesco Amato, Francesca Inglese, Giuseppina Ruocco (*National Institute of Statistics–ISTAT*)
16:00 – 17:30	**GISCO** room: **JENK** Session Chair: **Hannes Reuter** (*Eurostat*) **New spatial snow statistics in Finland using Earth observation data and modelling** Sari Metsämäki (*Finnish Environment Institute*) **Innovative in situ and other Earth Observation platforms for air quality official statistics: the GAUSS project** Orestis Speyer (*National Observatory of Athens*) **Web cartography for gridded statistics – the Gridviz library** Julien Gaffuri (*Eurostat*) **The Polish Use Case in Project GAUSS – extent and quality of green areas Smart Statistics based on EO data** Ewa Panek (*Institute of Geodesy and Cartography*),Orestis Speyer (*National Observatory of Athens*), Phillip Harwood (*Evenflow*)
16:00 – 17:30	**Time series analysis** room: **MANS** Session Chair: **Jean Palate** (*National Bank of Belgium*) **Online job ads' time series: A novel approach** Gabriele Marconi (*Sogeti*), Alexandros Bitoulas (*Sogeti*), Anca Maria Kiss (*Sogeti*), Fernando Reis (*Eurostat*)

	Fixing the model for the seasonal component: a new revision policy Maria Novás Filgueira *(National Statistical Institute-INE)*, Carlos Sáez Calvo *(National Statistical Institute-INE)*, David Salgado *(National Statistical Institute-INE)*, Luis Sanguiao-Sande *(National Statistical Institute-INE)* **The complexity of the turning points detection in 2022** Gian-Luigi Mazzi *(Senior Consultant),* Rosa Ruggeri Cannata *(Eurostat),* Piotr Ronkowski *(Eurostat)* **Testing for cointegration in STAR models: A simulation-based study** Gülşah Sedefoğlu *(Istanbul Commerce University)* **JDemetra+ 3.0: New (R) tools for (high-frequency) time series analysis** Anna Smyk *(National Institute of Statistics–INSEE)*
17:30 – 18:00	**Closing** Moderator: **Emanuele Baldacci** (*Eurostat*) room: **GASP**