



European  
Commission

# New Techniques and Technologies for Statistics 2019

Brussels  
11-15 March 2019

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## Programme



Eurostat

## Monday, 11 March 2019

09:00-13:00

### Satellite Event: Big Data hackathon – presentations

MANS & JENK

The European statistics Big Data Hackathon is organised by Eurostat to gather teams from all over Europe to compete for the best data product combining official statistics and big data to support policy makers in a pressing policy question or statistical challenge facing Europe.

16:00-16:30

### Hackathon winners' announcement

## Tuesday, 12 March 2019

07:00-08:00

### Warming-up, with 5k Morning Run

Parc du Cinquantenaire

08:00-18:00

### Registration

Charlemagne building

09:00-09:30

### Welcome Coffee

Charlemagne building

09:30-10:00

### Opening session

GASP

**Chair:** Mariana Kotzeva (European Commission, Director General of Eurostat)

**Moderator:** Eduardo Barredo Capelot (Eurostat - European Commission)

### Welcome address

**Speaker:** Marianne Thyssen (European Commission, Commissioner for Employment, Social Affairs, Skills and Labour Mobility)

10:00-10:15

### PLEN01: Keynote

**Speaker:** Sandy Pentland (MIT, United States)

**Title:** Best Practice for Next Generation Statistics: Questions, Security, Privacy, and Governance

**Moderator:** Eduardo Barredo Capelot (Eurostat - European Commission)

10:15-11:00

### Big Data Hackathon award ceremony and laureate lectures

**Awards by** Mariana Kotzeva (European Commission, Director General of Eurostat)

**Moderator:** Eduardo Barredo Capelot (Eurostat - European Commission)

11:00-12:30

12:30-13:30

### Lunch

Charlemagne building

12:30-13:30

### POST01: Poster session: Big Data Analytics

Charlemagne building

#### Supervised learning as a method to reduce clerical effort

Joerg Feuerhake (Federal Statistical Office (Destatis), Germany)

#### Attributes for big data for official statistics – An application to scanner data in Luxembourg

Ibtissame Sahir, Florabela Carausu & Botir Radjabov (GOPA Luxembourg, Luxembourg)

#### Big data financial sentiment analysis in the European bond markets

Luca Tiozzo & Elisa Tosetti (Joint Research Center (JRC) – European Commission)

#### Implementing big data in official statistics: Capture-recapture techniques to adjust for underreporting in transport surveys using sensor data

Jonas Klingwort<sup>1,2</sup>, Bart Buelens<sup>3</sup> & Rainer Schnell<sup>2, 1</sup> (University of Duisburg-Essen, Germany); <sup>2</sup> (Statistics Netherlands (CBS), Netherlands); <sup>3</sup> (Vlaamse Instelling voor Technologisch Onderzoek, Belgium)

#### Extraction of occupation, competences and qualifications from Internet job offers for official statistics

Robert Pater<sup>1,2</sup>, Maciej Beręsewicz<sup>3</sup> & Łukasz Cywiński<sup>1, 1</sup> (University of Information Technology and Management, Poland); <sup>2</sup> (Educational Research Institute, Poland); <sup>3</sup> (Poznan University of Economics and Business, Poland)

#### Forecasting tourist arrivals with online data: An application to the Valencian Community

Desamparados Blazquez<sup>1</sup>, Fernando Reis<sup>2</sup> & Josep Domenech<sup>1, 1</sup> (Universitat Politècnica de València, Spain); <sup>2</sup> (Eurostat - European Commission)

#### Reducing response burden by using administrative cash machine data in Hungarian retail trade statistics

Agnes Andics, István Macsári & Zsolt Takács (Hungarian Central Statistical Office (HCSO), Hungary)

#### Using big data for official statistics: Web scraping as a data source for Statistical Business Registers

Donato Summa, Gianpiero Bianchi, Monica Consalvi, Barbara Gentili, Flavio Pancella & Francesco Scalfati (Istat, Italy)

#### Smart business cycle statistics

Clara Schartner & Markus Zwick (Destatis, Germany)

#### Smart meter data as a source for official statistics

Karin Kraft & Ingegerd Jansson (Statistics Sweden, Sweden)

#### Social indicators and big data: A case study on social indicators and active citizenship

Silvia Biffignandi, Camilla Salvatore & Annamaria Bianchi (University of Bergamo, Italy)

# Tuesday, 12 March 2019

12:30-13:30

## Youth cultures: a text-driven automatic approach

Felicia Pellagali (*Culture srl & Sapienza University of Rome, Italy*)

## A Data Integration System for RIAD Bundesbank

Katja Ziprik & Alexandru Mandes (*Deutsche Bundesbank, Germany*)

## Crowd-sourcing: Integrated data collection systems: Palestinian statistical business register, obstacles and methodologies

Osaid Ismail (*Palestinian Central Bureau of Statistics, Palestine*)

## Using web scraped data to verify Egyptian consumer price indices

Mina Gerges (*CAPMAS – National Statistics Office of Egypt, Egypt*)

## Statistics' dissemination metadata

Josep Sort, Josep Jimenez & Estela Tonzan (*Institut d'Estadística de Catalunya (Idescat), Spain*)

## Modernisation of time-use data collection in EU Member States. A concrete use case: the Belgian way

Joeri Minnen<sup>1</sup>, Kelly Sabbe<sup>2</sup>, Hubertus Cloodt<sup>3</sup> <sup>1</sup> (*Vrije Universiteit Brussel – hbits, Belgium*), <sup>2</sup> (*Statistics Belgium, Belgium*), <sup>3</sup> (*Eurostat – European Commission*)

## Digital process data from the truck toll collection as a new building block of official short-term statistics

Michael Cox<sup>1</sup>, Stefan Linz<sup>2</sup>, Claudia Fries<sup>2</sup> & Julia Völke <sup>1</sup> (*Federal Office for Goods Transport, Germany*); <sup>2</sup> (*Destatis, Germany*)

13:30-14:15

## PLEN02: Keynote

GASP

**Speaker:** Alan Smith (*Financial Times, United Kingdom*)

**Title:** Data visualisation: why technology is both a blessing and a curse

**Moderator:** Martina Hahn (*Eurostat – European Commission*)

14:30-15:30

## IPS01: (R)Evolution of Statistics in a datafied society

GASP

**Chair:** Eduardo Barredo Capelot (*Eurostat – European Commission*)

**Discussant:** David Spiegelhalter (*University of Cambridge, United Kingdom*)

**Moderator:** Dario Buono (*Eurostat – European Commission*)

## Paving the way forward for a modern and responsive national statistical office

Susie Fortier (*Statistics Canada (StatCan), Canada*)

## Deep data and shared computation: Shaping the future Trusted Smart Statistics

Fabio Ricciato, Albrecht Wirthmann, Michail Skaliotis, Fernando Reis & Konstantinos Giannakouris (*Eurostat – European Commission*)

## ClairCity: Official statistics as an enabler in a citizen-led European air quality project

Olav ten Bosch, Dick Windmeijer, Alex Priem, Wiet Koren & Martijn Tennekes (*CBS, Netherlands*)

14:30-15:30

## STS01: New data sources for MultiNational Enterprises

MANS

**Chair:** August Götzfried (*Eurostat – European Commission*)

**Organiser:** Dimitar Nenkov (*Eurostat – European Commission*)

## Open data sources for retrieving information on multinational enterprise groups

Dimitar Nenkov<sup>1</sup>, Sebastian Hellmann<sup>2</sup> & Johannes Frey<sup>2</sup> <sup>1</sup> (*Eurostat – European Commission*); <sup>2</sup> (*Leipzig University, Germany*)

## Estimating enterprise characteristics from web data: Achievements and future developments

Monica Scannapieco<sup>1</sup>, Peter Struijs<sup>2</sup> & Galya Stateva<sup>3</sup> <sup>1</sup> (*Istat, Italy*); <sup>2</sup> (*CBS, Netherlands*); <sup>3</sup> (*National Statistical Institute of the Republic of Bulgaria (BNSI), Bulgaria*)

## Measuring MNEs using big data: The OECD Analytical Database on Individual Multinationals and their Affiliates (ADIMA)

Nadim Ahmad, Diana Doyle & Graham Pilgrim (*Organisation for Economic Co-operation and Development (OECD)*)

14:30-15:30

## CPS01: Mobile Phone Data

JENK

**Chair:** Piet Daas (*CBS, Netherlands*)

**Discussant:** Christophe Demunter (*Eurostat – European Commission*)

## Re-identification risk in mobile phone data

Fabrizio De Fausti, Roberta Radini, Luca Valentino & Tiziana Tuoto (*Istat, Italy*)

## Inference with mobile network data

David Salgado<sup>1</sup>, Bogdan Oancea<sup>2</sup> & Luis Sanguiao<sup>1</sup> <sup>1</sup> (*Statistics Spain (INE), Spain*); <sup>2</sup> (*Statistics Romania (INS), Romania*)

## Mobile device tracking and transportation mode detection

Yvonne Gootzen & Marco Puts (*CBS, Netherlands*)

15:30-16:00

## Coffee break

# Tuesday, 12 March 2019

## 16:00-17:00

### IPS02: Big data and consumer price statistics

**GASP**

**Chair:** Dirk-Jan Hoogerdijk (Eurostat - European Commission)

**Discussant:** Claude Lamboray (Eurostat - European Commission)

**Organiser:** Dirk-Jan Hoogerdijk (Eurostat - European Commission) & Claude Lamboray (Eurostat - European Commission)

Exploring the use of scanner data in the Norwegian CPI for products with high churn

Ragnhild Nygaard (Statistics Norway, Norway)

Integration of volatile online prices into the consumer price index

Christian Blaudow & Daniel Seeger (Destatis, Germany)

Research into using alternative data sources in the production of consumer price indices

Tanya Flower (Office for National Statistics (ONS), United Kingdom)

Evaluating multilateral index methods on scanner data

Ken Van Loon (Statistics Belgium, Belgium)

## 16:00-17:00

### STS02: Data integration in the European Statistical Business Registers

**MANS**

**Chair:** Ioannis Xirouchakis (Eurostat - European Commission)

**Organiser:** Ioannis Xirouchakis (Eurostat - European Commission)

Data integration methods and tools in the ESBRS

Razvan Cristian Ionescu & Enrica Morganti (Eurostat - European Commission)

Integration of European data about globalization into the French Statistical Business Register

Olivier Haag & Isabelle Collet (National Institute of Statistics and Economic Studies (INSEE), France)

A live multi-source Statistical (Business) Register

Barry Coenen & John Hacking (CBS, Netherlands)

Multi-source data integration with SBR

Steen Joergensen & Christian Bendtsen (Statistics Denmark, Denmark)

## 16:00-17:00

### CPS02: The "Geo" dimension of Official Statistics

**JENK**

**Chair:** Laurent Ferrara (Banque de France, France)

**Discussant:** Sofie De Broe (CBS, Netherlands)

Satellite-Net: Automatic extraction of land cover indicators from satellite imagery by deep learning

Eleonora Bernasconi, Francesco Pugliese, Diego Zardetto & Monica Scannapieco (Istat, Italy)

Big data on vessel traffic: An innovative approach to nowcast trade flows in real-time

Marco Marini, Serkan Arslanalp & Patrizia Tumbarello (International Monetary Fund, United States)

Implementation of the statistical territory register

Eduard Suñé, Anna Bernaus, Daniel Ibáñez, Roser Condal, Mireia Farré & Cristina Rovira (Idescat, Spain)

## 17:15-18:15

### IPS03: Data exploration and visualisation

**GASP**

**Chair:** Giuditta De Prato (JRC - European Commission)

**Discussant:** Renato Loiero (Senate of the Republic, Italy)

Human-centred machine learning through interactive visualizations: Reflections on the design of a visual analytics tool for criminal intelligence analysis

Leishi Zhang, William Wong & Neesha Kodagoda (Middlesex University, United Kingdom)

Network analysis on persons for official statistics

Edwin de Jonge & Jan van der Laan (CBS, Netherlands)

ScattR - A Shiny app for exploratory data analysis

Philipp Leppert (Destatis, Germany)

Efficient screen real estate management: improving data visualization for small screens

Jorge Camoes (Wisevis, Portugal)

## 17:15-18:15

### STS03: Remote sensing and GIS for agriculture statistics

**MANS**

**Chair:** Marjo Kasanko (Eurostat - European Commission)

**Discussant:** Oscar Gomez Prieto (Eurostat - European Commission)

Exploring and integrating data from digital farm reporting, smart surveying, crowdsourcing and Sentinels

Marijn van der Velde (JRC - European Commission)

Sentinel-1 coherence for agricultural statistics

Kaupo Voormansik & Karlis Zalite (OÜ KappaZeta, Estonia)

Use of Sentinel 1 and 2 data to assess crop area in Poland

Artur Łączyński (Statistics Poland, Poland)



## Tuesday, 12 March 2019

17:15-18:15

### CPS03: Linked Open Data

JENK

**Chair:** Benjamin Sakarovitch (*INSEE, France*)

**Discussant:** Tanya Chetcuti (*DG Informatics - European Commission*)

**Publishing georeferenced statistical data using linked open data technologies**

Mirosław Migacz (*Statistics Poland, Poland*)

**A generic data-API for implementing GSIM: Linked Data Store**

Brynjar Ulva (*Statistics Norway, Norway*)

**Linking open data in the European Statistical System**

Eoin MacCuirc (*Central Statistics Office (CSO), Ireland*)

**Breaking data silos and closing the semantic gap with linked open data: An example with Eurostat data and metadata and statistical concepts**

Alexander Skibinski, Sybille Luhmann, Jacopo Grazzini & Jean-Marc Museux (*Eurostat - European Commission*)

18:15-19:30

Networking cocktail

Charlemagne building

## Wednesday, 13 March 2019

07:00-08:00

Warming-up, with 5k Morning Run

Parc du Cinquantenaire

09:00-09:45

### PLEN03: Keynote

GASP

**Speaker:** Regina Nuzzo (*data journalist and Professor of statistics, United States*)

**Moderator:** Emilio Di Meglio (*Eurostat - European Commission*)

10:00-11:00

### IPS04: Using R in the National Statistical Institutes

GASP

**Chair:** Alexander Kowarik (*Statistics Austria, Austria*)

**Discussant:** Diego Kuonen (*Statoo Consulting & University of Geneva, Switzerland*)

**Organiser:** Alexander Kowarik (*Statistics Austria, Austria*)

**Transforming health and social care publications in Scotland**

Anna Price (*Information Services Division - NHS Scotland, United Kingdom*)

**RJDemetra: An R interface to JDemetra+**

Alain Quartier-la-Tente & Anna Michalek (*INSEE, France*)

**Systematic data cleaning using R**

Mark van der Loo & Edwin de Jonge (*CBS, Netherlands*)

10:00-11:00

### STS04: Time series analysis, from theory to practice

MANS

**Chair:** Anastaska Nikolova (*ONS, United Kingdom*)

**Discussant:** Gian Luigi Mazzi (*GOPA Luxembourg, Luxembourg*)

**Organiser:** Duncan Elliott (*ONS, United Kingdom*)

**Estimating unmetered photovoltaic power consumption using causal models**

Jan van den Brakel<sup>1,2</sup> & Bart Buelens<sup>1,1</sup> (*CBS, Netherlands*); <sup>2</sup> (*Maastricht University, Netherlands*)

**A diagnostic for seasonality based upon autoregressive roots**

Tucker McElroy (*U.S. Census Bureau, United States*)

**Cycle extraction: Should the Hamilton regression filter be preferred to the Hodrick-Prescott filter?**

Roberto Astolfi<sup>1</sup>, Philip Chan<sup>1</sup>, Matthew Dequeljoe<sup>1</sup> & Luigi Falasconi<sup>1,2,1</sup> (*OECD*); <sup>2</sup> (*Universitat Pompeu Fabra, Spain*)

**ARMA models with time dependent coefficients**

Guy Mélard (*Université libre de Bruxelles, Belgium*)

# Wednesday, 13 March 2019

## 10:00-11:00

### CPS04: Administrative data, registers and beyond

JENK

**Chair:** Giorgio Alleva (*Sapienza University of Rome, Italy*)

**Organiser:** Piero Demetrio Falorsi (*Istat, Italy*)

Population statistics without a census or register

Owen Abbott (*ONS, United Kingdom*)

Building the Italian integrated system of statistical registers: Methodological and architectural solutions

Piero Falorsi<sup>1</sup>, Giorgio Alleva<sup>2</sup> & Orietta Luzi<sup>1, 2</sup> (*Istat, Italy*); <sup>2</sup> (*Sapienza University of Rome, Italy*)

A bootstrap method for estimators based on combined administrative and survey data

Sander Scholtus (*CBS, Netherlands*)

The EuroGroups Register

Agne Bikauskaite & August Götzfried (*Eurostat - European Commission*)

## 11:00-11:30

### Coffee break

## 11:30-12:30

### IPS05: Statistical and data literacy

GASP

**Chair:** Britta Gauckler (*Eurostat - European Commission*)

**Discussant:** Patrizia Collesi (*Istat, Italy*)

How to enlarge our audience: Attract and explain

Louise Corselli-Nordblad (*Eurostat - European Commission*)

On data literacy in the context of rational ignorance – Some evidence from the Eurobarometer survey

Lyubomira Dimitrova (*Department of Public Administration – Sofia University, Bulgaria*)

## 11:30-12:30

### STS05: Removing seasonality for a better economic reading

MANS

**Chair:** Dominique Ladiray (*INSEE, France*)

**Discussant:** Luca Di Gennaro (*National Statistics Office, Malta*)

**Organiser:** Dominique Ladiray (*INSEE, France*)

(In)Stability of Reg-ARIMA models for seasonal adjustment

Dominique Ladiray & Alain Quartier-la-Tente (*INSEE - France*)

Transition to JDemetra+ in a centralised system for seasonal adjustment: issues and benefits

Francesca Tuzi, Giancarlo Bruno & Anna Ciammola (*Istat, Italy*)

Using the state-space framework of JDemetra+ in R

Jean Palate (*National Bank of Belgium, Belgium*)

Time-varying end-of-month effects in German currency in circulation

Karsten Webel & Andreas Dietrich (*Deutsche Bundesbank, Germany*)

## 11:30-12:30

### CPS05: Data linking and statistical matching

JENK

**Chair:** Roeland Beerten (*Statistics Flanders, Belgium*)

**Organiser:** Faiz Alsuhaib (*Statistics Finland, Finland*)

Joint distribution of income, consumption and wealth

Friderike Oehler (*Eurostat - European Commission*)

Administrative data and statistical matching (EU-SILC and Microcensus environment)

Alexandra Wegscheider-Pichler (*Statistics Austria, Austria*)

Statistical learning in official statistics: The case of statistical matching

Marcello D'Orazio (*Office of Chief Statistician – Food and Agriculture organization of the United Nations*)

Integration of inconsistent data sources using Hidden Markov Models

Paulina Pankowska<sup>1</sup>, Bart Bakker<sup>1,2</sup>, Daniel Oberski<sup>3</sup> & Dimitris Pavlopoulos<sup>1, 2</sup> (*Vrije Universiteit Amsterdam, Netherlands*);

<sup>2</sup> (*CBS, Netherlands*); <sup>3</sup> (*Utrecht University, Netherlands*)

## 12:30-13:30

### Lunch

### Charlemagne building

# Wednesday, 13 March 2019

12:30-13:30

## POST02: Poster session: Advanced Estimation

Charlemagne building

### On the Coefficient of Variation and its Inverse

Georgia Giamloglou, Athina Maleganou, Myrto Papageorgiou, Nikolaos Farmakis (*Aristotle University of Thessaloniki, Greece*)

### Quantifying the development of Hungarian counties with LISREL estimation procedure during the period 1990-2016

Ildiko Ritzlne Kazimir & Klaudia Matene Bella (*Corvinus University Budapest, Hungary*)

### Refugees in undeclared employment - A case study in Turkey

Melina Ludolph<sup>2,3</sup>, Till Koebe<sup>1,3</sup>, Fabian Bruckschen<sup>1,3</sup>, Timo Schmid<sup>1</sup> & Maria Francesca Marino<sup>4,1</sup> (*Freie Universitaet Berlin, Germany*); <sup>2</sup> (*Humboldt Universität Berlin, Germany*); <sup>3</sup> (*Knuper, Germany*); <sup>4</sup> (*Universita delgi Studi di Firenze, Italy*)

### The definition of the final disposition codes in the household surveys in the context of the new integrated management system in Istat

Manuela Morricone, Novella Cecconi, Rita Ranaldi (*Istat, Italy*)

### Application and quality assessment of simulated geo-coordinates for regional analysis of the parliamentary elections for the Bundestag 2017

Kerstin Erfurth (*EMOS Master Thesis Competition, Germany*)

### Modelling enterprises responses to the ICT (Information Communication Technology) survey

Noémie Morénillas (*INSEE – ENSAI, France*)

### Aggregating flags – A standardised and rational approach

Matyas Meszaros (*Eurostat - European Commission*)

### Seasonal and calendar adjustment of daily time series

Sylwia Grudkowska (*National Bank of Poland, Poland*)

### Estimating regional wealth in Germany: How different are west and east really?

Ann-Kristin Kreutzmann<sup>1</sup>, Philipp Marek<sup>2</sup>, Nicola Salvati<sup>3</sup>, Timo Schmid<sup>1</sup> & Sylvia Harmening<sup>1, 2</sup> (*Freie Universität Berlin, Germany*); <sup>2</sup> (*Deutsche Bundesbank, Germany*); <sup>3</sup> (*University of Pisa, Italy*)

### Estimation of the number of post-Soviet foreigners in Poland in 2015 and 2016 using capture-recapture methods

Marcin Szymkowiak<sup>1,2</sup> & Maciej Beresewicz<sup>1,2, 1</sup> (*Poznan University of Economics and Business, Poland*); <sup>2</sup> (*Statistical Office in Poznan, Poland*)

### Mixed mode data collection and adaptive survey design for Structure of Earnings Statistics

Guy Vekeman & Pieter Vermeulen (*Statistics Belgium, Belgium*)

### Hidden Markov Models to estimate Italian employment status

Roberta Varriale, Danila Filippini & Ugo Guarnera (*Istat, Italy*)

### The Nautille project of new French master sample

Pierre-Arnaud Pendoli, Sébastien Faivre, Thomas Merly-Alp, Ludovic Vincent, Clément Guillo & Laurent Costa (*INSEE, France*)

### Using the Business Process Model and Notation (BPMN) standard for the automatisisation of survey fieldwork within an integrated data collection systems for social surveys

Josef Kytir (*Statistics Austria, Austria*)

### Weighting adjustments using micro and macro auxiliary variables

Seppo Laaksonen (*University of Helsinki, Finland*)

### The effect of using new technology and Geographic Information System on the quality of official statistics: The Implementation of the General Palestinian Census 2017 as a case study

Aya Amro & Mosab Abualhayja (*Palestinian Central Bureau of Statistics, Palestine*)

### Adaptation of winsorization caused by weight share method

Fizzala Arnaud (*INSEE, France*)

### Alternative "optimal" calibration weights using a modified distance measure

Per Gösta Andersson (*Department of Statistics – Stockholm University, Sweden*)

### Experimental statistics from an unlikely source

Laurie Reedman & Andrew Brennan (*StatCan, Canada*)

### Study on using different modes as a new techniques in CAPMAS's economic census data quality

Said Kamal (*Central Agency for Public Mobilization And Statistics, Egypt*)

### New weighting methods, including explicit correction of sampling weights for non-response and attrition, in the reformed Belgian Labour Force Survey

Camille Vanderhoeft, Astrid Depickere & Anja Termote (*Statistics Belgium, Belgium*)

### Looking for immigrants in the European Labour Force Survey and the EU census: A comparison based on the 2011 figures

Georgiana Ivan & Mihaela Agafitei (*Eurostat - European Commission*)

### Use of R for Quarterly National Accounts

Julia Knoebl (*Statistics Austria, Austria*)

# Wednesday, 13 March 2019

13:30–14:15

## PLEN04: Keynote

GASP

**Speaker:** Piyushmita Thakuria (Rutgers University, USA)

**Moderator:** Britta Gauckler (Eurostat – European Commission)

14:30–15:30

## IPS06: Engaging with data users

GASP

**Chair:** Marko Kristof (CBS, Croatia)

**Discussant:** Liza Donnelly (New Yorker, CBS News and CNN, USA)

**Targeting a wider public – Storytelling with statistical data**

Zsolt Czinkos (HCSO, Hungary)

**Citizen to Government geospatial data partnerships. What can we learn from and recommend to those working in the official statistics domain?**

Javier Andres Carranza Torres<sup>1,2</sup> <sup>1</sup> (GeoCensos Foundation, Colombia); <sup>2</sup> (Twente University ITC faculty, Netherlands)

**Engaging with users to modernise the dissemination of European statistics**

Julia Urhausen & Maja Islam (Eurostat – European Commission)

14:30–15:30

## STS07: Temporal disaggregation for higher frequencies data

MANS

**Chair:** Dario Buono (Eurostat – European Commission)

**Discussant:** Francesca Di Iorio (University of Naples Federico II, Italy)

**Organiser:** Fernando Reis (Eurostat – European Commission)

**An improved multiobjective approach of temporal disaggregation, a special case of multivariate Denton**

Gábor Lovics (HCSO, Hungary)

**Wikipedia online activity data for temporal disaggregation of tourism indicators**

Serena Signorelli<sup>1</sup> & Fernando Reis<sup>2</sup> <sup>1</sup> (Independent researcher, Italy); <sup>2</sup> (Eurostat – European Commission)

**Estimation of monthly business turnover using administrative data in the UK**

Paul Labonne<sup>1,2</sup> & Martin Weale<sup>1,2,3</sup> <sup>1</sup> (King's College London, United Kingdom); <sup>2</sup> (Economic Statistics Centre of Excellence, United Kingdom); <sup>3</sup> (Centre For Macroeconomics, United Kingdom)

14:30–15:30

## CPS06: Survey Design

JENK

**Chair:** Natalie Shlomo (University of Manchester, United Kingdom)

**Discussant:** Cristiano Tessitore (Eurostat – European Commission)

**On robustness of the supervised multiclass classifier for autocoding system**

Yukako Toko<sup>1</sup>, Shinya Iijima<sup>1</sup> & Mika Sato-Ilic<sup>1,2</sup> <sup>1</sup> (National Statistics Center, Japan); <sup>2</sup> (University of Tsukuba, Japan)

**Outlier detection methods for mixed-type and large-scale data like census**

Frantisek Hajnovic & Alessandra Sozzi (ONS, United Kingdom)

**Gustave – An R package for variance estimation in surveys**

Nicolas Pallod, Lionel Delta, Thomas Deroyon & Martin Chevalier (INSEE, France)

**optimStrat: An R package for assisting the choice of the sampling strategy**

Edgar Bueno (Department of Statistics – Stockholm University, Sweden)

15:30–16:00

## Coffee Break

16:00–17:00

## IPS07: Lectures and award ceremony of the European Master in Official Statistics (EMOS)

GASP

**Chair:** Annika Näslund (Eurostat – European Commission)

**Discussants:** Mojca Bavdaz (University of Ljubljana, Slovenia) & Rosanna Verde (University of Campania, Italy)

**Organiser:** Heli Lehtimäki (Eurostat – European Commission)

**Regional analysis of business survey: Methods and applications in the context of small area statistics**

Julia Manecke (University of Trier, Germany)

**Estimation of measurement errors in social survey**

Nhu Tho Nguyen (University of Leuven, Belgium)

**VAT Tax gap prediction: a 2-steps gradient boosting approach**

Giovanna Tagliaferri (University of Rome, Italy)



# Wednesday, 13 March 2019

16:00–17:00

## STS07: Multisource statistics

MANS

**Chair:** Matyas Meszaros (*Eurostat - European Commission*)

**Discussant:** Walter Radermacher (*FENStatS, Germany*)

**Assessing multi-source processes: The new total process error framework**

Roberta Varriale, Fabiana Rocci & Orietta Luzi (*Istat, Italy*)

**Measuring the quality of multisource statistics**

Ton de Waal<sup>1,2</sup>, Arnout van Delden<sup>1</sup> & Sander Scholtus<sup>1,1</sup> (*CBS, Netherlands*); <sup>2</sup> (*Tilburg University, Netherlands*)

**Functional geographies through the R package LabourMarketAreas**

Daniela Ichim & Luisa Franconi (*Istat, Italy*)

**Predictive performance of a hybrid technique for the multiple imputation of survey data**

Humera Razzak<sup>1</sup> & Christian Heumann<sup>2,1</sup> (*Ludwig-Maximilians-Universität, Germany*); <sup>2</sup> (*Institute of statistics LMU, Germany*)

16:00–17:00

## CPS07: Small Area Estimation

JENK

**Chair:** Ibtissam Sahir (*GOPA Luxembourg, Luxembourg*)

**Small area estimation for the Dutch investment survey**

Sabine Krieg & Joep Burger (*CBS, Netherlands*)

**Measuring poverty and social exclusion by small area estimation**

Andrea Fasulo<sup>1</sup>, Michele Dalo<sup>1</sup>, Gaia Bertarelli<sup>2</sup>, Loredana Di Consiglio<sup>1</sup>, Maria Giovanna Ranalli<sup>3</sup> & Fabrizio Solari<sup>1,1</sup> (*Istat, Italy*); <sup>2</sup> (*University of Pisa, Italy*); <sup>3</sup> (*University of Perugia, Italy*)

**Small area estimation of the LFS-based monthly unemployment rate in Poland**

Marcin Szymkowiak<sup>1,2</sup>, Maciej Beresewicz<sup>1,2</sup>, Tomasz Józefowski<sup>2</sup> & Kamil Wilak<sup>1,2,1</sup> (*Poznan University of Economics and Business, Poland*); <sup>2</sup> (*Statistical Office in Poznan, Poland*)

17:00–18:00

## PLEN05: Lectio Magistralis

GASP

**Speaker:** Domenico Piccolo (*University of Naples Federico II, Italy*)

**Title:** A paradigm for rating data models

**Moderator:** Francesca Di Iorio (*University of Naples Federico II, Italy*)

18:15–20:00

## Guided city tour of the European Quarter

Meeting point  
Charlemagne Building

20:00–22:00

## Conference dinner

Berlaymont building,  
Piazza

# Thursday, 14 March 2019

07:00-08:00

Warming-up, with 5k Morning Run

Parc du Cinquantenaire

09:00-09:45

## PLEN06: Keynote

GASP

**Speaker:** Emmanuel Letouzé (*Data-Pop Alliance, United States*)

**Moderator:** Jacopo Grazzini (*Eurostat - European Commission*)

10:00-11:00

## IPS08: Panel Session

GASP

### Demystifying artificial intelligence, big data and Internet of Things

**Chair:** Yvo Volman (*DG Communications Networks, Content and Technology - European Commission*)

**Speakers:** Diego Kuonen (*Statoo Consulting & University of Geneva, Switzerland*), Piet Daas (*CBS, Netherlands*), Stefano Bertolo (*DG Communications Networks, Content and Technology - European Commission*), Cecile Huet (*DG Communications Networks, Content and Technology - European Commission*)

10:00-11:00

## STS08: Data collection and integration

MANS

**Chair:** Alessandra Petrucci (*University of Florence, Italy*)

**Discussant:** Eileen Capilit (*GOPA Luxembourg, Luxembourg*)

Assessing and adjusting bias due to mixed mode in aspect of daily life survey

Claudia De Vitiis, Francesca Inglese, Alessio Guandalini & Marco Dionisio Terribili (*Istat, Italy*)

Centralised data collection: Process innovations and main results in business surveys

Pasquale Papa, Giampaola Bellini & Francesca Monetti (*Istat, Italy*)

Metadata driven monitoring of electronic data capture

Mauro Bruno<sup>1</sup>, Joshua Handley<sup>2</sup>, Aaron Whitesell<sup>2</sup>, Guido Drovandi<sup>1</sup>, Milena Grassia<sup>1</sup> & Paolo Giacom<sup>1</sup> <sup>1</sup> (*Istat, Italy*); <sup>2</sup> (*U.S. Census Bureau, United States*)

Mining big data for finite population inferences

Siu-Ming Tam, <sup>1</sup> (*Australian Bureau of Statistics, Australia*)

10:00-11:00

## CPS08: Ensuring privacy when accessing to data

JENK

**Chair:** Aleksandra Bujnowska (*Eurostat - European Commission*)

**Discussant:** Rachel Skentelbery (*ONS, United Kingdom*)

Privacy and data confidentiality for official statistics: New challenges and new tools

Fabio Ricciato & Aleksandra Bujnowska (*Eurostat - European Commission*)

Instant access to microdata

Johan Heldal<sup>1</sup> & Ørnulf Risnes<sup>2</sup> <sup>1</sup> (*Statistics Norway, Norway*); <sup>2</sup> (*Norwegian Centre for Research Data, Norway*)

Perturbative methods for ESS census tables

Peter-Paul de Wolf (*CBS, Netherlands*)

11:00-11:30

Coffee Break

11:30-12:30

## IPS09: SmartStatistics4SmartCities

GASP

**Chair:** Martina Hahn (*Eurostat - European Commission*)

**Discussant:** Teodora Brandmueller (*Eurostat - European Commission*)

**Organisers:** Albrecht Wirthmann (*Eurostat - European Commission*) & Barteld Braamska (*CBS, Netherlands*)

Designing urban experience with rhythm and data: Lessons from the City Rhythm Project

Caroline Nevejan<sup>1</sup> & Scott Cunningham<sup>2</sup> <sup>1</sup> (*Municipality of Amsterdam, Netherlands*); <sup>2</sup> (*Faculty of Technology, Policy and Management - Delft University of Technology, Netherlands*)

Urban big data as innovation platform in smart city context - Case Helsinki

Ilpo Laitinen (*City of Helsinki, Finland*)

A data-driven approach to urban digitalization

Giuseppe Sindoni (*Comune di Milano, Italy*)

11:30-12:30

## STS09: Integrating standards for the modernisation of statistics

MANS

**Chair:** Carlo Vaccari (*Istat, Italy*)

**Organisers:** Marina Signore, Carlo Vaccari (*Istat, Italy*)

ModernStats World: Modernising official statistics through standards and sharing

Taeke Gjaltema (*United Nations Economic Commission for Europe, Switzerland*)

Towards an integrated view of modernisation models

Marina Signore (*Istat, Italy*)

Statistics Norway and implementing ModernStats models

Trygve Falch (*Statistics Norway, Norway*)

GSBPM next level - A proposed evolution of the model

Laurie Reedman, Jackie Mayda, Paul Holness & Alice Born (*StatCan, Canada*)

# Thursday, 14 March 2019

## 11:30-12:30

### CPS09: Measuring well-being

JENK

**Chair:** Gaby Umbach (*Globalstat, European University Institute, Italy*)

**Discussant:** Filomena Maggino (*Sapienza University of Rome, Italy*)

**Organiser:** Caterina Francesca Guidi (*European University Institute, Italy*)

Creating a synthetic database for research in migration and subjective well-being: Statistical matching techniques for combining the basic and complementary questionnaires of the Hungarian Microcensus 2016

Zoltán Csányi, Gergely Bagó, Anna Ligeti, Zita Ináncsi, Ferenc Urbán & Zoltán Vereczkei (*HCSO, Hungary*)

Migrants and European welfare systems: What data tell us on their well-being and impact on health systems

Caterina Francesca Guidi (*European University Institute, Italy*)

Equitable and sustainable well-being indicators for small areas

Cecilia Colasanti<sup>1,2</sup>, Flavia Marzano<sup>1</sup> & Clementina Villani<sup>1</sup> <sup>1</sup> (*Roma Capitale, Italy*); <sup>2</sup> (*Istat, Italy*)

Well-being indicators for national and local policies in Italy

Maria Pia Sorvillo & Stefania Taralli (*Istat, Italy*)

## 12:30-13:30

### Lunch

Charlemagne building

## 12:30-13:30

### POST03: Poster Session: New Methods & Techniques

Charlemagne building

Process innovations, integrated approach and development perspectives in the implementation of data collection of agricultural surveys

Loredana De Gaetano & Pasquale Papa (*Istat, Italy*)

Nowcasting GDP for the Baltic States: A comparative approach in support of official quarterly GDP forecasts

Dan A. Rieser (*DG Economic and Financial Affairs - European Commission*)

The use of metadata to manage data processing processes and the definition of data validation rules

Marek Panfilow (*Statistics Poland, Poland*)

Login on smartphones: A triviality?

Johannes Volk (*Destatis, Germany*)

Reproducible maps for everyone

Martijn Tennekes (*CBS, Netherlands*)

Using online job vacancies to create labour market intelligence

Vladimir Kvetan (*European Center for the Development of Vocational Training, Greece*)

AnaleVR: An interactive R-Based analysis platform as a service for utilizing official statistics data in Indonesia

Erika Siregar & Aris Prawisudatama (*Statistics Indonesia, Indonesia*)

Plutus – A new tool to handle metadata of seasonal adjustment

Mária Pécs (*HCSO, Hungary*)

Semantic modeling of official statistics – The case of the Greek statistics

Stamatios Theocharis (*Ministry of Interior & University Of Piraeus, Greece*)

GDP flash estimates for Germany

Xaver Dickopf, Christian Janz & Tanja Mucha (*Destatis, Germany*)

IST - Data integration metadata driven concept

Branko Josipović, Mira Nikić & Siniša Cimbalević (*Statistical Office of the Republic of Serbia, Serbia*)

First step towards a digital National Statistical Institute

Concetta Ferruzzi, Maria Assunta Del Santo & Daniela Carbone (*Istat, Italy*)

A method for minimizing the residual term of the decomposable Gini index

Eleni Ketzaki & Nikolaos Farmakis (*Department of Mathematics – Aristotle University of Thessaloniki, Greece*)

City users and daytime population. An approach with administrative data

Roberta Vivio, Sara Casacci, Stefania Di Domenico & Maria Liria Ferraro (*Istat, Italy*)

App for the "Time Budget" Survey

Carmen Guinea Lete & Teresa Ibarrola (*Basque Statistical Office (EUSTAT), Spain*)

Dwelling and Building Register - Identification of rented apartments

Nofar Ben Haim (*Central Bureau of Statistics, Israel*)

CYSTAT: The road to modernisation

Costas Diamantides & Charoulla Charalambous (*Statistical Service of Cyprus, Cyprus*)

The FSDA Matlab toolbox. An integrated framework to assess and apply robust methods to complex datasets

Francesca Torti (*JRC – European Commission*)

Sustainability, consumption, resource productivity: Regional material flow accounts

M. Carme Saborit, Jordi Galter & Cristina Rovira (*Idescat, Spain*)

On the design of a reference architecture in Istat

Mauro Bruno, Giuseppina Ruocco & Monica Scannapieco (*Istat, Italy*)

Design of a roadmap for implementing the CoP for the ENP south countries at ONS-Algeria

Tarik Bourezgue (*Office National des Statistiques, Algeria*)

COMUNIKOS: COMMunicating UNCertainty In Key Official Statistics

Dario Buono<sup>1</sup>, Gian Luigi Mazzi<sup>2</sup>, Massimiliano Marcellini<sup>6</sup>, George Kapetanios<sup>4</sup>, James Mitchell<sup>4</sup>, Tiziana Laureti<sup>5</sup>, Edwin de Jonge<sup>3</sup>, Florabela Carausu<sup>2</sup> & Ibtissam Sahir<sup>2</sup> <sup>1</sup> (*European Commission, Eurostat*); <sup>2</sup> (*GOPA Luxembourg, Luxembourg*); <sup>3</sup> (*CBS, Netherlands*); <sup>4</sup> (*independent, United Kingdom*); <sup>5</sup> (*independent, Italy*); <sup>6</sup> (*independent, Italy*)

# Thursday, 14 March 2019

13:30-14:15

## PLEN07: Master Class

GASP

**Speaker:** Gianluca Iaccarino (*Stanford University, United States*)

**Title:** Metrics for uncertainty quantification

**Moderator:** Dario Buono (*Eurostat - European Commission*)

14:30-15:30

## IPS10: Panel Session

GASP

### Data4Policy

**Chair:** Natalia Aristimuño Pérez (*DG Informatics - European Commission*)

**Speakers:** Eduardo Barredo Capelot (*Eurostat - European Commission*), Yvo Volman (*DG Communications Networks, Content and Technology - European Commission*), Mario Mariniello (*EPSC*), Konstantin Pashev (*DG Communications Networks, Content and Technology - European Commission*)

14:30-15:30

## STS10: Machine learning in statistical production

MANS

**Chair:** Diego Kuonen (*Statoo Consulting & University of Geneva, Switzerland*)

**Discussant:** Jose Cervera Ferri (*Devstat, Spain*)

**Organiser:** Dario Buono (*Eurostat - European Commission*)

**Applying machine learning for automatic product categorization**

Andrea Roberson (*U.S. Census Bureau, United States*)

**Improving data validation using machine learning**

Christian Ruiz, Christine Ammann Tschopp, Elisabeth Kuhn, Laurent Inversin, Mehmet Aksözen & Stefan Rueber (*Swiss Federal Statistical Office, Switzerland*)

**The Innovation Lab**

Mauro Bruno, Gerarda Grippo & Mario Magarò (*Istat, Italy*)

14:30-15:30

## CPS10: Open, transparent and reproducible

JENK

**Chair:** Per Nymand-Andersen (*European Central Bank*)

**Discussant:** Elise Coudin (*INSEE, France*)

**Organiser:** Jacopo Grazzini (*Eurostat - European Commission*)

**Transparency and reproducibility of models and algorithms: Examples from the UN Global Platform**

Joni Karanka & Joe Peskett (*ONS, United Kingdom*)

**Promoting reproducibility-by-design in statistical offices**

Sybilie Luhman, Jacopo Grazzini, Fabio Ricciato, Matyas Meszaros, Konstantinos Giannakouris & Jean-Marc Museux (*Eurostat - European Commission*)

**Reproducible analysis with Renku**

Andreas Bleuler & Rok Roskar (*Swiss Data Science Center - ETH, Switzerland*)

15:45-16:45

## IPS11: Big data infrastructures within NSIs

GASP

**Chair:** Michail Skaliotis (*Eurostat - European Commission*)

**Discussant:** Juri Marcucci, (*Bank of Italy, Italy*)

**Organiser:** Piet Daas (*CBS, Netherlands*)

**Big Data Architectures @ Istat**

Monica Scannapieco & Natale Renato Fazio (*Istat, Italy*)

**IT Infrastructure for a Data Science Campus**

Craig Pritchard (*Data Science Campus - ONS, United Kingdom*)

**IT infrastructure for big data and data science: Challenges at Statistics Netherlands**

Marco Puts (*CBS, Netherlands*)

15:45-16:45

## STS11: Sharing data and statistical services

MANS

**Chair:** Eduardo Barredo Capelot (*Eurostat - European Commission*)

**Data(trans)forming**

Roberto Barcellan (*DG Informatics - European Commission*)

**Developer and method services in the UN Global Platform**

Joni Karanka (*ONS, United Kingdom*)

**Delivering official statistics as Do-It-Yourself services to foster producers' engagement with Eurostat open data**

Jacopo Grazzini, Julien Gaffuri & Jean-Marc Museux (*Eurostat - European Commission*)

## Thursday, 14 March 2019

15:45-16:45

### CPS11: Experimental Statistics

JENK

**Chair:** Martin Karlberg (Eurostat - European Commission)

**Discussant:** Jens Mehrhoff (Eurostat - European Commission)

**On the operational definition of homogeneous products in transaction data**

Olivia Ståhl (Statistics Sweden, Sweden)

**MARS: A method for linking barcodes and stratifying products for price index calculation**

Antonio Chessa (CBS, Netherlands)

**New experimental statistics at Istat: The social mood on economy index**

Diego Zardetto, Cristina Fabbri, Pasquale Testa & Luca Valentino (Istat, Italy)

**Big data: EUSTAT experience, development of the pilot project towards production**

Jorge Aramendi, Elena Goni, Marina Ayestaran & Javier San Vicente (EUSTAT, Spain)

17:00-17:30

### PLEN08: Closing Speech

GASP

**Speaker:** Kurt Vandenbergh (DG Research and Innovation, European Commission)

**Title:** Data needs for evidence based policy making

17:30-18:00

### Farewell with NTS Scientific and Organising Committees

**Moderator:** Eduardo Barredo Capelot (Eurostat - European Commission)

## Friday, 15 March 2019

09:30-17:00

### Satellite Event - Measuring the digital economy

ALBERT BORSCHETTE  
CONGRESS CENTER

**Organisers:** Andreas Dollt (Eurostat - European Commission), Marianne Paasi (TU Berlin, Germany) & Christoph Maier (DG Economic and Financial Affairs - European Commission)

The objective of this satellite session is to look deeper into the various challenges of measuring GDP and productivity in an ever more digitalised economy. It will discuss if current macroeconomic statistics are still adequate in picking up the effects brought about by investment in digital tools, the consumption of free digital services, new forms of transacting in goods and services (B2B and B2C), and other phenomena associated with the digital economy.

09:30-10:00

#### Opening session

**Speakers:** Mary Veronica Tovšak Pleterški (DG Economic and Financial Affairs - European Commission, Director for Investment, growth and structural reforms) & John Verrinder (Eurostat, acting Director for macro-economic statistics)

10:00-10:30

#### Keynote: Conceptual and statistical challenges of measuring the digital economy

**Speaker:** Nadim Ahmad (OECD)

10:30-11:00

#### Coffee break

11:00-11:30

#### The impact of digitalisation on growth and productivity - a UK perspective

**Speaker:** Rebecca Riley (UK Economic Statistics Centre of Excellence)

11:30-12:00

#### The digital economy from a Finnish perspective

**Speaker:** Heli Koski (Aalto University and ETLA Institute, Finland)

12:00-13:15

#### Lunch break

13:15-13:45

#### Measuring and treatment of digital platforms in National Accounts - Concrete example: Measuring Airbnb in the NL

**Speaker:** Leo Hiemstra (CBS, Netherlands)

13:45-14:15

#### Digitalisation: A business statistics perspective

**Speaker:** Carsten Olsson (Eurostat - European Commission, Head of Unit for European Business statistics)

14:15-14:45

#### Mapping digitalisation: The Digital Economy and Society Index

**Speaker:** Balazs Zorenyi (DG Communications Networks, Content and Technology - European Commission)

14:45-15:15

#### Coffee break

15:15-15:45

#### Growth, Inequality, and Redistribution in the Age of Automation

**Speaker:** Philipp Pfeiffer (DG Economic and Financial Affairs - European Commission)

15:45-16:30

#### Panel session: Measuring the digital economy: where should we improve and how do we prepare for the future

**Moderator:** John Verrinder (Eurostat - European Commission)

**Panelists:** Nadim Ahmad (OECD), Fabrizia Benini (DG Communications Networks, Content and Technology - European Commission),

Rebecca Riley (Economic Statistics Centre of Excellence, United Kingdom) & Werner Röger (DG Economic and Financial Affairs - European Commission)

16:30-16:45

**Closing session** John Verrinder (Eurostat - European Commission)



Friday, 15 March 2019

09:30-13:00



JENK

### Satellite Event – Main findings and looking forward

**Organisers:** Fabio Bacchini (*Istat, Italy*) & Monica Pratesi (*University of Pisa, Italy*)

MAKING Sustainable development and WELL-being frameworks work for policy analysis (MAKSWELL) is a project financed in H2020. MAKSWELL aims to extend and harmonize indicators able to capture the main characteristics of the 'Beyond GDP' approach proposing a new framework that includes them in the evaluation of the public policies.

At the same time MAKSWELL improves the existing well-being and sustainable indicators by using new data collection tools and modern statistical methods to have timely and accurate data and by combining new data sources (big data) with traditional ones especially where there are data gaps. The production of local estimates of poverty and living conditions are an example of these objectives. At a macro level the project provides a framework that include specific measures for well-being in the traditional macro econometric models. The project explores also the relationship among well-being and sustainable indicators with policy evaluation.

Scope of the satellite event is to disseminate the research results of the project, encouraging the floor discussion on them, sharing the research experiences and promoting interactive discussions with invited keynote speakers.

The discussion will be on the research results on monitoring of Sustainable Development Goals, their indicators at regional level using non-traditional data sources and nowcasting.

Other particular issues will be tackled by specific paper presentation of MAKSWELL members.

Participants will be invited to discuss the experiments done by the partners, challenges and opportunities of new sources, frameworks and methods for official statistics that aim to provide innovative policy support frameworks in "Beyond GDP" perspective.

### Satellite Event – Workshop of MAKSWELL

**09:00 – 09:10** Welcome and opening address

**09:10 – 09:15** Introduction to the MAKSWELL project

**Speaker:** M. Gandolfo (*Istat, Italy*)

**09:15 – 09:30** Frameworks on well-being and implementation of the Sustainable Development Goals at national and international level for policy making (WP1)

**Speaker:** A. Tinto (*Istat, Italy*)

**09:30 – 09:45** Non-traditional data sources for measuring sustainable development goal indicators (WP2)

**09:45 – 10:00** Regional poverty measurements (WP3)

**Speaker:** F. Ertz (*University of Trier, Germany*)

**10:00 – 10:15** Potentiality and challenges of nowcasting (WP4)

**10:15 – 10:45** National experiences from the project

Coffee break

### New sources, frameworks and methods for official statistics

**Chair:** M. Pratesi (*University of Pisa, Italy*)

**11:05 – 11:25** Beyond GDP: key conclusion of the High Level Expert Group

**Chair:** M. Mira d'Ercole (*OECD*)

**11:25 – 11:45** New methods for enriching official statistics on distributions and inequality

**Speakers:** A. Leulescu (*Eurostat – European Commission*)

### The challenges for statistics and policies

**Chair:** F. Bacchini (*Istat, Italy*)

**11:45 – 12:25** Round table: Suggestions for the project

**Moderators:** B. Chaudhuri (*DG Research and Innovation, European Commission*)

**Panellists:** F. Maggino (*Sapienza University of Rome / Italian Presidency of the Council of Ministers, Italy*), G. Umbach (*Globastat, EUI*) & M. Karlberg (*Eurostat – European Commission*)

**12:25 – 12:50** The importance of well-being for policies

**Speakers:** L. Fioramonti (*Deputy Minister for University and Research, Italy*)

**12:50 – 13:00** Closing and farewell

## NTTS 2019 Scientific Committees

Eduardo Barredo Capelot (*European Commission - Eurostat*), chair  
 Emanuele Baldacci (*European Commission - DG Informatics*)  
 Dario Buono (*European Commission - Eurostat*)  
 Piet Daas (*Statistics Netherlands*)  
 Francesca Di Iorio (*University of Naples Federico II*)  
 Jacopo Grazzini (*European Commission - Eurostat*)  
 Duncan Elliott (*Office for National Statistics, UK*)  
 Boro Nikic (*Statistical Office of the Republic of Slovenia*)  
 Rebecca Killick (*Lancaster University*)  
 Diego Kuonen (*Statoo Consulting & University of Geneva*)  
 Alexander Kowarik (*Statistics Austria*)  
 Christoph Maier (*European Commission - DG Economic and Financial Affairs*)  
 Marianne Paasi (*formerly European Commission - DG Research and Innovation*)  
 Monica Pratesi (*University of Pisa*)  
 Giuditta de Prato (*European Commission - IPTS*)  
 Natalie Shlomo (*University of Manchester*)  
 Marina Signore (*Italian National Institute of Statistics*)  
 Piyushimita Thakuriah (*Rutgers University, USA*)  
 Yvo Volman (*European Commission - DG Communications Networks, Content and Technology*)

## NTTS 2019 Organising Committee

Martina Hahn (*European Commission - Eurostat*), chair  
 Dario Buono (*European Commission - Eurostat*), programme & networking  
 Britta Gauckler (*European Commission - Eurostat*), logistics  
 Maria Serfioti (*European Commission - Eurostat*), social media & twitter wall  
 Maribel Lazaro (*European Commission - Eurostat*), international relations

### Conference on New Techniques and Technologies for official Statistics (NTTS 2019)

'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 2019** (the 10<sup>th</sup> edition of the NTTS series) will take place in **Brussels from 12-14 of March 2019**, with satellite events on the 11 and 15 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.

Follow us on Twitter <https://twitter.com/NTTS2019> and use **#NTTS2019**

Follow us on Instagram <https://www.instagram.com/ntts2019>

More info <https://ec.europa.eu/eurostat/cros/NTTS2019>

## NTTS 2019 at a glance

Monday 11 March	09:30 – 17:00	EU Big Data Hackathon		
Tuesday 12 March	07:00 – 08:00	Warming-up with 5k morning run		
	09:30 – 10:00	Opening (Kotzeva, Eurostat)		
	10:00 – 10:15	Video Message by Commissioner Thyssen		
	10:15 – 11:00	Keynote (Pentland, MIT)		
	11:00 – 12:30	Big Data Award		
	12:30 – 13:30	Lunch	Big Data analytics (poster)	
	13:30 – 14:15	Keynote (Smith, Financial Times)		
	14:30 – 15:30	(R)Evolution of Statistics	New data sources for MNEs	Mobile phone data
	15:30 – 16:00	Coffee break		
	16:00 – 17:00	Big data and Consumer Price	Data integration in the ESBRS	Geospatial information
	17:15 – 18:15	Data exploration & visualisation	Remote sensing and GIS for agriculture	Linked Open Data
	18:15 – 19:30	Networking Cocktail		
	Wednesday 13 March	07:00 – 08:00	Warming-up with 5k morning run	
09:00 – 09:45		Keynote (Nuzzo, data journalist)		
10:00 – 11:00		Using R in Statistical Institutes	Time series analysis	Administrative data, registers and beyond
11:00 – 11:30		Coffee break		
11:30 – 12:30		Statistical & data literacy	Seasonality for economics	Data linking and statistical matching
12:30 – 13:30		Lunch	Estimation techniques (poster)	
13:30 – 14:15		Keynote (Thakuriah, Urban Big Data Centre)		
14:30 – 15:30		Engaging with data users	Temporal disaggregation	Survey design
15:30 – 16:00		Coffee break		
16:00 – 17:00		EMOS award	Multisource statistics	Small area estimation
17:00 – 18:00		Lectio Magistralis by Prof. Piccolo (University of Naples)		
18:15 – 22:00		Guided city tour of the European Quarter & Conference Dinner		
Thursday 14 March		07:00 – 08:00	Warming-up with 5k morning run	
	09:00 – 09:45	Keynote (Letouze, Data-Pop Alliance)		
	10:00 – 11:00	Big data, Smart statistics & AI (panel)	Data collection and integration	Data Privacy
	11:00 – 11:30	Coffee break		
	11:30 – 12:30	Smart statistics for Smart Cities	Standards for modernisation	Measuring well-being
	12:30 – 13:30	Lunch	New methods & techniques (poster)	
	13:30 – 14:15	Master Class on Uncertainty (Iaccarino, Stanford)		
	14:30 – 15:30	Data4Policy (panel)	Machine learning in production	Open, transparent & reproducible
	15:45 – 16:45	Big data infrastructures	Sharing data & statistical services	Experimental statistics
	17:00 – 17:30	Closing Speech (Vandenberghe, DG Research and Innovation)		
	17:30 – 18:00	Farewell with NTTS Organising & Scientific Committees		
Friday 15 March	09:30 – 17:00	Digital Economy	MAKSWELL	