EMOS WEBINAR PROGRAMME 2018

EUROPEAN
MASTER IN
OFFICIAL
STATISTICS
EMOS

eurostat

University of Ljubljana
FACULTY OF ECONOMICS

Organiser: The Faculty of Economics, University of Ljubljana (FELU)
Programme co-ordinator: Mojca Bavdaž

Frequency: Roughly twice per month during the period of January – June 2018
Day: Wednesday
Time: 16:15 – 17:30 CET

Tool: Adobe Connect
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Once you are ready, you can access the following test room for webinar participants (no password) and hear the music: https://vox.arnes.si/ef1_uni-lj_si-test-participants/.

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Registration: On a first-come, first-served basis. Required for each webinar separately at:
http://konference.ef.uni-lj.si/emos/webinars/

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PROGRAMME OVERVIEW

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1	10 Jan 2018	Opening of the 2018 series of EMOS webinars Mariana Kotzeva, Eurostat The European Statistical System (ESS) Åsa Jacob, Aaron Cachia & Dietmar Maass, Eurostat
2	31 Jan 2018	European System of Central Banks (ESCB) statistics Aurel Schubert, ECB
3	7 Feb 2018	Web surveys Vasja Vehovar & Nejc Berzelak, University of Ljubljana
4	21 Feb 2018	Innovations in business statistics data collection Ger Snijkers, Statistics Netherlands
5	28 Feb 2018	Statistical monitoring of sustainable development at global, EU and national level (with a case study of Poland) Nicola Massarelli, Eurostat, & Monika Gorzelak, Statistics Poland
6	21 Mar 2018	Big data methods and techniques Piet Daas & Marco Puts, Statistics Netherlands
7	4 Apr 2018	How to integrate information from different data files? An introduction to statistical matching Eva Endres & Thomas Augustin, University of Munich
8	11 Apr 2018	Introduction to statistical data editing Rudi Seljak, Statistical Office of the Republic of Slovenia
9	18 Apr 2018	From books to social media, from general public to specific user groups Maja Pekeč, Croatian Bureau of Statistics, & Ewelina Konars-ka – Michalczyk, Statistics Poland
10	16 May 2018	Experimental statistics: new methods for new data Martin Karlberg & Pierre Lamarche, Eurostat
11	23 May 2018	Statistical analysis of incomplete data Susanne Rässler, University of Bamberg
12	6 June 2018	Reflections about the role of official statistics Walter J. Radermacher, University La Sapienza, Rome

THE EUROPEAN STATISTICAL SYSTEM (ESS)

Presenter(s): **e-mail(s):** **Date:**	Åsa Jacob, Aaron Cachia & Dietmar Maass, Eurostat ESTAT-ESSC_DGINS_PG@ec.europa.eu **10 January 2018**
EMOS learning outcome addressed	The system of official statistics
Webinar aims	The webinar aims to introduce participants to the ESS, the role of its governance bodies, formal procedures and involvement of the EU member states. Examples will be used to illustrate the complexity of decision-making processes and importance of the ESSC as a comitology committee.
Webinar learning outcomes	To apprehend the broader picture to understand the composition and governance structure of the ESS. To be aware of the relations between the main governance bodies. To become familiar with the complex decision-making process in the ESS, and the role of the ESSC as a comitology committee.
Webinar content	• General presentation of the ESS. • Tasks and responsibilities of governance bodies in the ESS. • Strategic decision making in the ESS (bodies, procedures, examples) • Strategic advice to the ESS (bodies, procedures, examples). • Relationship between the ESS and the ESCB.
Difficulty level	Introductory
Prerequisites for the webinar	/
Further readings and resources	Regulation (EC) No 223/2009 of the European Parliament and of the Council of 11 March 2009 on European statistics

EUROPEAN SYSTEM OF CENTRAL BANKS (ESCB) STATISTICS

Presenter(s):	Aurel Schubert, ECB
e-mail(s):	aurel.schubert@ecb.europa.eu
Date:	**31 January 2018**

EMOS learning outcome addressed	The system of official statistics
Webinar aims	The webinar aims at making the participants aware of the role, functions, products, processes and challenges of ESCB statistics as the second pillar of European Official Statistics. It will address the ESCB statistics' status quo and the way ahead.
Webinar learning outcomes	To be aware of the tasks of the ECB and the role of evidence-based policymaking for the ECB. To raise the participants' knowledge about the ECB's statistical requirements, the current data availability and future development projects. To be familiar with the overall governance (legal basis and organisation) of the ESCB in the area of statistics. To understand the challenges in the production process (harmonisation, quality controls) of ESCB statistics.
Webinar content	• The functions of the ECB/Eurosystem/ESCB. • The data needs for ECB policymaking. • The legal basis for ECB statistics. • The statistical production process for ESCB statistics. • The cooperation of the ESCB with the ESS. • The main ESCB statistical products. • The current new data projects of the ECB/ESCB.
Difficulty level	Intermediate
Prerequisites for the webinar	Basic knowledge of the EU
Further readings and resources	ECB, Economic Bulletin, various issues. The Main Features of ECB Statistics: http://www.ecb.europa.eu/stats/ecb_statistics/html/index.en.html ESCB. Public commitment on European Statistics: https://www.ecb.europa.eu/stats/ecb_statistics/governance_and_quality_framework/html/escb_public_commitment_on_european_statistics.en.html

WEB SURVEYS

Presenter(s): **e-mail(s):** **Date:**	Vasja Vehovar & Nejc Berzelak, University of Ljubljana vasja.vehovar@fdv.uni-lj.si, nejc.berzelak@fdv.uni-lj.si **7 February 2018**
EMOS learning outcome addressed	Production models and methods
Webinar aims	The webinar aims to provide the participants with introductory insights into web surveys as an increasingly important survey data collection approach. It focuses on essential methodological considerations, implications for practical application of web surveys, and emerging directions of future developments.
Webinar learning outcomes	To be aware of a wide range of possibilities offered by modern web surveys in the official statistics and other fields. To become familiar with the basic principles and methodological considerations of web survey preparation and implementation. To understand the benefits, pitfalls, emerging developments and methodological challenges of web survey data collection.
Webinar content	• Characteristics, advantages and limitations of web surveys. • Specifics of web questionnaire design. • Measures for improvement of response rates and tackling Internet non-coverage problems in web surveys. • Web surveys on mobile devices and related recent technological advances.
Difficulty level	Introductory
Prerequisites for the webinar	Basic understanding of general survey methodology.
Further readings and resources	Callegaro, M., Lozar Manfreda, K. & Vehovar, V. (2015). Web survey methodology. Los Angeles, CA, US: Sage. Dillman, D.A., Smyth, J.S., Christian, L.M. (2014). Internet, phone, mail, and mixed-mode surveys. Hoboken, NJ, US: Wiley. Couper, M.P. (2008). Designing effective web surveys. New York, NY, US: Cambridge University Press.

INNOVATIONS IN BUSINESS STATISTICS DATA COLLECTION

Presenter(s):	Ger Snijkers, Statistics Netherlands
e-mail(s):	g.snijkers@cbs.nl
Date:	**21 February 2018**

EMOS learning outcome addressed	Production models and methods
Webinar aims	The key statement of the webinar is: "Technological innovations make new developments possible; the applied methodology and the organisational context make it work."
Webinar learning outcomes	To be aware of businesses as a major stakeholder in the business data collection process. To be aware of consequences for NSIs. To be familiar with the main characteristics of business data collection and main technological developments in this field. To understand the key statement.
Webinar content	The webinar discusses: • Three main characteristics of business data collection • A general Data collection strategy • A brief history of business data collection • Directions of technological innovations with regard to business surveys as well as other data sources • Methodological and organizational innovations • One or two examples of innovations
Difficulty level	Advanced
Prerequisites for the webinar	Familiarity with: • The basics of survey methodology • The concept of response burden (for basics see 2017 EMOS Webinars: Response burden I + II) • Web survey design (see 2018 EMOS Webinar: Web surveys) • Innovations in official statistics (see 2017 EMOS Webinar: Innovations in official statistics and multi-source statistical production)
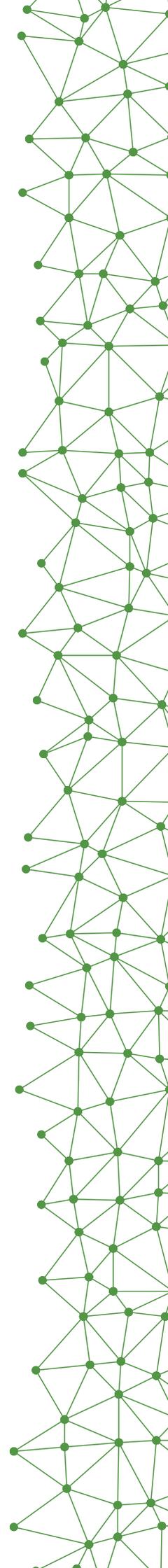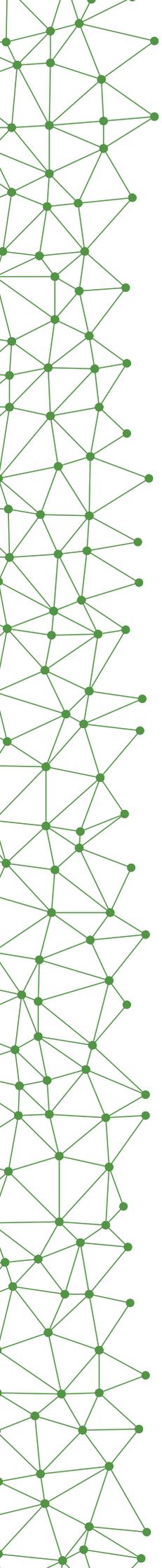
Further readings and resources

Snijkers, G., 2016, Achieving Quality in Organizational Surveys: A Holistic Approach. In: Liebig, S., and W. Matiaske (eds.), Methodische Probleme in der empirischen Organisationsforschung: Ch 3. Springer, Wiesbaden.

Bharosa, N., R. van Wijk, N. de Winne, and M. Janssen (eds), 2015, Challenging the chain. Governing the automated exchange and processing of business information. Amsterdam: IOS Press (www.iospress.nl/book/challenging-the-chain/).

Snijkers, G., G. Haraldsen, J. Jones, and D. Willimack, 2013, Designing and Conducting Business Surveys. Wiley, Hoboken.

STATISTICAL MONITORING OF SUSTAINABLE DEVELOPMENT AT GLOBAL, EU AND NATIONAL LEVEL
(WITH A CASE STUDY OF POLAND)

Presenter(s):	Nicola Massarelli, Eurostat & Monika Gorzelak, Statistics Poland
e-mail(s):	nicola.massarelli@ec.europa.eu & m.gorzelak@stat.gov.pl
Date:	**28 February 2018**

EMOS learning outcome addressed	Specific themes

Webinar aims	The webinar will familiarise participants with the concept of sustainable development and with the UN Sustainable Development Goals (SDGs) and will introduce the UN and EU SDG monitoring frameworks. The webinar will also provide a practical example of monitoring sustainable development at national level by looking at the specific case of Poland. In particular, it will outline the genesis, development and directions of further work on the Polish set of sustainable development indicators, and the strategy for their dissemination.
Webinar learning outcomes	To become aware of the different monitoring levels of the SDGs (global, EU, national) and of the challenges and requirements to define appropriate indicator sets at each level. To learn about the conceptual framework, grouping method and selection criteria for the Polish set of sustainable development indicators. To become familiar with an IT tool for presenting and disseminating data on sustainable development – Sustainable Development Indicators Application.
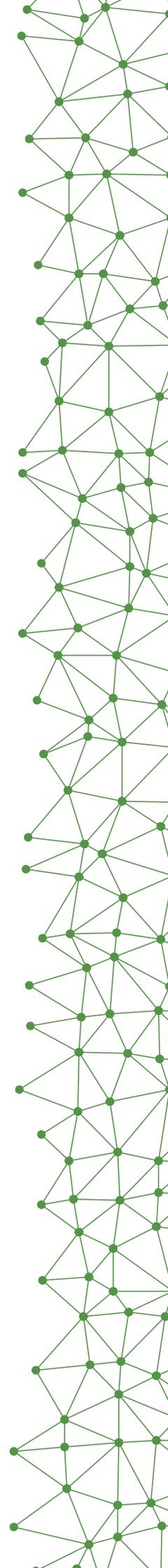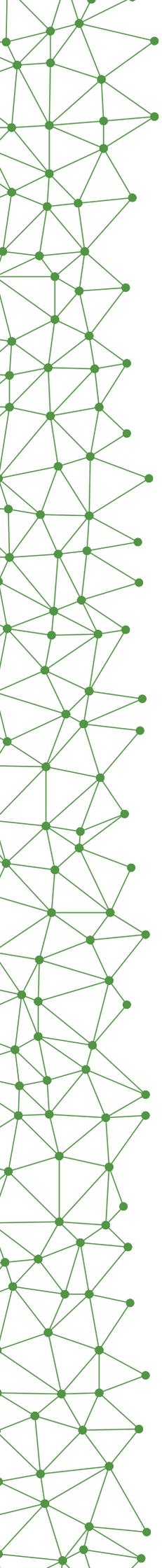
Webinar content	I. Monitoring the sustainable development goals at global, EU and national level: • Brief history of sustainable development. • Overview on the UN 2030 Agenda for sustainable development. • Global SDG monitoring (actors; definition, implementation and review of the indicator set; global reporting). • EU SDG monitoring (definition of the indicator set; 2017 EU SDG monitoring package; next steps at EU level). II. A case study of Poland: • Monitoring the sustainable development in Poland at the national level before the 2030 Agenda (genesis; conceptual foundation, grouping method and selection criteria). • Strategy for Polish SDI set dissemination & SDI Application. • Further work on the Polish SDI set in terms of the 2030 Agenda (SDI Application; SDG indicators; Strategy for Responsible Development).
Difficulty level	Introductory
Prerequisites for the webinar	/
Further readings and resources	Transforming our world: the 2030 Agenda for Sustainable Development. United Nations. Retrieved from https://sustainabledevelopment.un.org/post2015/transformingourworld Sustainable Development Goals. United Nations. Available at https://sustainabledevelopment.un.org/sdgs SDG indicators. United Nations Statistics Division. Available at https://unstats.un.org/sdgs/indicators/indicators-list/ Eurostat's SDG dedicated website http://ec.europa.eu/eurostat/web/sdi/overview Sustainable Development in the European Union — Monitoring report on progress towards the SDGs in an EU context. Eurostat (2017). Retrieved from http://ec.europa.eu/eurostat/web/products-statistical-books/-/KS-04-17-780 Sustainable Development Indicators Application. Central Statistical Office of Poland. Available at http://wskaznikizrp.stat.gov.pl/index.jsf Sustainable development [website]. Central Statistical Office of Poland. Available at http://stat.gov.pl/en/sustainable-development/ Sustainable Development Indicators for Poland [reports]. Available at http://stat.gov.pl/en/sustainable-development/publications/

BIG DATA METHODS AND TECHNIQUES

Presenter(s): **e-mail(s):** **Date:**	Piet Daas & Marco Puts, Statistics Netherlands pjh.daas@cbs.nl, m.puts@cbs.nl **21 March 2018**
EMOS learning outcome addressed	Statistical methods
Webinar aims	The webinar aims to show statisticians how to deal with big data in real world statistical applications.
Webinar learning outcomes	To be aware of the need for a paradigm shift when using big data. To be familiar with methods that enable extraction of information from big data in a reliable way. To understand the importance of the need for good quality data and well thought of checks and controls.
Webinar content	In the webinar, the current state of art of using big data for official statistics is discussed. These are illustrated by walking through a big data based production process. The observations are generalised to other big data based applications.
Difficulty level	Advanced
Prerequisites for the webinar	The webinar will build on the content presented in: 2017 EMOS Webinars: Bid Data I and II
Further readings and resources	Daas, P.J.H., Puts, M.J.H. (2014). Big data as a Source of Statistical Information. The Survey Statistician 69, 22-31. Singh, D., Reddy, C.K. (2014). A survey on platforms for big data analytics. Journal of Big Data, 1-8. Daas, P.J.H., Puts, M.J., Buelens, B., van den Hurk, P.A.M. (2015). Big Data and Official Statistics. Journal of Official Statistics 31(2), 249-262. Daas, P.J.H., Burger, J., Quan, L., ten Bosch, O., Puts, M. (2016). Profiling of Twitter Users: a big data selectivity study. Discussion paper 201606, Statistics Netherlands, The Hague/Heerlen, The Netherlands. Puts, M., Daas, P., de Waal, T. (2017). Finding Errors in Big Data. In: The Best Writing on Mathematics 2016, Princeton, USA. (Pitici, M., ed.), pp. 291-299, Princeton University Press, USA.
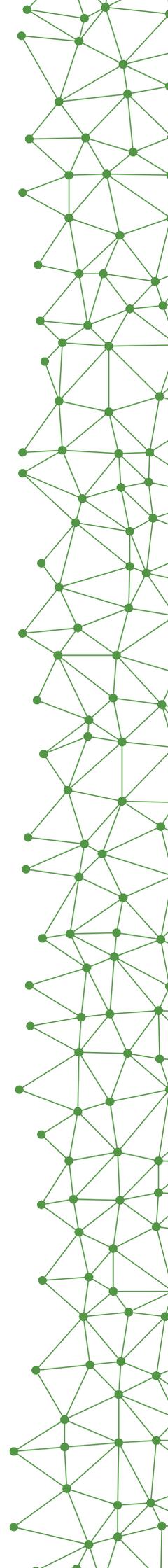
HOW TO INTEGRATE INFORMATION FROM DIFFERENT DATA FILES?
AN INTRODUCTION TO STATISTICAL MATCHING

Presenter(s):	Eva Endres & Thomas Augustin, Ludwig-Maximilians-Universität München
e-mail(s):	eva.endres@stat.uni-muenchen.de augustin@stat.uni-muenchen.de
Date:	**4 April 2018**
EMOS learning outcome addressed	Statistical methods
Webinar aims	The combination of information from different available surveys is a task which can be solved by statistical matching. In contrast to record linkage, statistical matching integrates the information of data files which are based on different observations. This webinar gives an overview on the statistical matching problem and how it can be solved. A special focus is set on conditional independence which forms the basis for a group of statistical matching procedures.
Webinar learning outcomes	To understand fundamental aspects of statistical matching, including its aim and limitations. To be aware of the crucial role of the conditional independence assumption in matching. To gain insights into selected micro and macro approaches for statistical matching.
Webinar content	• Basics, framework and aims of statistical matching. • Conditional independence. • Selected micro and macro approaches for statistical matching. • Framing the statistical matching problem as a problem of missing data and imputation. • The maximum likelihood approach in statistical matching.
Difficulty level	Introductory
Prerequisites for the webinar	Basic knowledge of probability theory and statistics is sufficient.
Further readings and resources	D'Orazio, M., Di Zio, M. and Scanu, M. (2006). Statistical Matching – Theory and Practice, Wiley, Chichester, United Kingdom.

INTRODUCTION TO STATISTICAL DATA EDITING

Presenter(s):	Rudi Seljak, Statistical Office of the Republic of Slovenia
e-mail(s):	rudi.seljak@gov.si
Date:	**11 April 2018**

EMOS learning outcome addressed	Statistical methods

Webinar aims	The webinar aims to introduce the basic theoretical concepts of statistical data editing in official statistics and their implementation in practice regardless of the data source (e.g. surveys, administrative data, model-based data). The focus will be on the methods and practices that support transition from the "classical", mainly manual data editing to the modern, mainly automated editing procedures.

Webinar learning outcomes	To understand the basic theoretical concepts of statistical data editing. To understand the role of data editing in the statistical process and its impact on the final statistical results. To become familiar with the most commonly used imputation methods. To become familiar with some practical implementations of the editing methods in concrete statistical surveys.

Webinar content	• Statistical data editing and its role in the implementation of statistical surveys. • Manual vs. automated editing. • Over-editing and selective editing. • Imputation methods. • Data editing and quality dimensions. • Practical implementations of data editing.

Difficulty level	Introductory

Prerequisites for the webinar	Basic knowledge of implementation of statistical surveys.

Further readings and resources	De Waal, T., J. Pannekoek, & S. Scholtus (2011). Handbook of statistical data editing and imputation. New Jersey: John Wiley & Sons Granquist L. (1995). Improving the traditional editing process. In Business Survey Methods, pp. 385–401, John Wiley and Sons
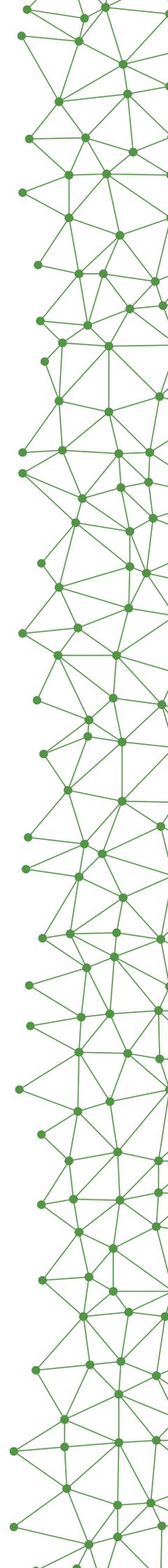
FROM BOOKS TO SOCIAL MEDIA, FROM GENERAL PUBLIC TO SPECIFIC USER GROUPS

Presenter(s):	Maja Pekeč, Croatian Bureau of Statistics, Ewelina Konarska – Michalczyk, Statistics Poland
e-mail(s):	pekecm@dzs.hr e.konarska-michalczyk@stat.gov.pl
Date:	**18 April 2018**

EMOS learning outcome addressed	Dissemination of Official Statistics

Webinar aims	To provide participants with an overview how the modern technologies changed the way statistical institutions are disseminating official statistical data and communicating with the current and potential statistical users. Since different user groups have different needs, capabilities and expectations, spreading out official statistics became more complex than ever and demands completely different approaches. Therefore, the webinar will put emphasis on diversity of existing activities with the aim of increasing user satisfaction.

Webinar learning outcomes	To be aware that institutions should have clear dissemination and communication strategies that are compatible one with another but also with the mission, vision and strategic goals of the institution. To be familiar with the scope and the usage of social media in the European statistical system (ESS). To evaluate the willingness and preparedness of statistical institutions to change according to the feedback gathered from different user groups.

Webinar content	Part 1 – Social media • Understanding social media • Plan goals, create a vision, set a strategy • Why content is the king? • Analytics • Best practices used in European NSIs Part 2 – Specific user groups

Difficulty level	Intermediate

| **Prerequisites for the webinar**	Familiarity with basic concepts of writing statistical stories and the KISS principle (Keep it Short and Simple) and basic ways of presenting statistics in an appealing way (see UNECE (2009). Making data meaningful. Part 1: A guide to writing stories about numbers. & Part 2: A guide to presenting statistics. Retrieved from http://www.unece.org/stats/documents/writing/)
Further readings and resources	An introduction to Social Media for Small Business. Blue Beetle Books (2012). Retrieved from https://betterbusinesscontent.com/_ebooks/prince_albert/pdfs/eBook-Social-Media-for-Small-Business.pdf The Complete Guide to Global Social Media Marketing. HubSpot. Retrieved from http://www.ciccorporate.com/download/the-complete-guide-to-global-social-media-marketing.pdf The Definitive Guide to Social Media Marketing. Retrieved from https://www.marketo.com/definitive-guides/the-definitive-guide-to-social-media-marketing/ 25 Actionable Social Media Strategies You Can Implement Today. Buffer. Retrieved from https://blog.bufferapp.com/social-media-strategies-ebook

EXPERIMENTAL STATISTICS: NEW METHODS FOR NEW DATA

Presenter(s): **e-mail(s):**	Martin Karlberg & Pierre Lamarche, Eurostat martin.karlberg@ec.europa.eu pierre.lamarche@ec.europa.eu
Date:	**16 May 2018**

EMOS learning outcome addressed	Statistical methods

Webinar aims	The webinar aims to introduce experimental statistics, that is statistics which are in the research and development phase, thus of a lower level of maturity even if produced in a robust statistical quality context. The practice to start publishing these statistics is rather recent, but there is a growing trend among statistical institutes to do so. The focus will be on presenting the purposes and drivers of experimental statistics. Eurostat experimental statistics on income, consumption and wealth will be used as a case study.

Webinar learning outcomes	To understand advantages and risks of experimental statistics. To be aware of Eurostat work and achievements in experimental statistics. To become familiar with methodological and other considerations in the case of income, consumption and wealth statistics

Webinar content	• Introduction to experimental statistics • Experience from the Eurostat dedicated section on experimental statistics • Case study: Eurostat experimental statistics on the joint distribution of income, consumption and wealth (ICW)

Difficulty level	Intermediate

Prerequisites for the webinar	Participants are invited to browse the Eurostat dedicated section on experimental statistics: http://ec.europa.eu/eurostat/web/experimental-statistics/ in particular the experimental statistics on income, consumption and wealth: http://ec.europa.eu/eurostat/web/experimental-statistics/income-consumption-and-wealth

Further readings and resources

The beta products of the innovation site of Statistics: Netherlands: https://www.cbs.nl/en-gb/our-services/innovation

The experimental products of the initiatives site of Stats NZ: http://innovation.stats.govt.nz/initiatives/

The European Statistics Code of Practice: http://ec.europa.eu/eurostat/web/quality/european-statistics-code-of-practice

The DGINS 2016 memorandum: http://ec.europa.eu/eurostat/documents/7330775/7339365/DGINS+Memorandum+2016/4ebdf162-1b20-4d9e-a8c7-ae880eca9afd

Eurostat Statistics Explained article on the methodological issues for the interaction of household income, consumption and wealth: http://ec.europa.eu/eurostat/statistics-explained/index.php/Interaction_of_household_income,_consumption_and_wealth_-_methodological_issues

OECD Framework for Statistics on the Distribution of Household Income, Consumption and Wealth: www.oecd.org/statistics/302013041e.pdf
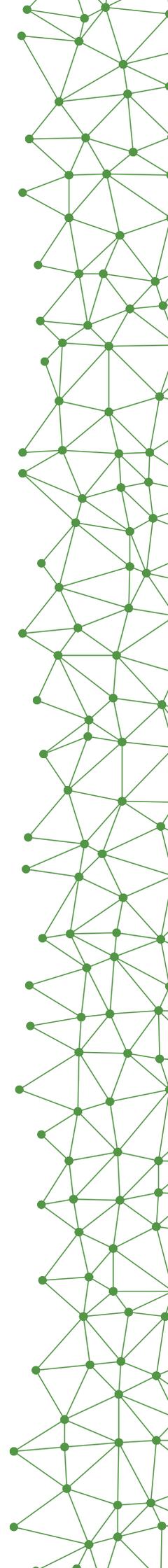
STATISTICAL ANALYSIS OF INCOMPLETE DATA

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Presenter(s): **e-mail(s):** **Date:**	Susanne Rässler, University of Bamberg susanne.raessler@uni-bamberg.de **23 May 2018**
EMOS learning outcome addressed	Statistical methods
Webinar aims	The course aims to give a fundamental understanding of methods and techniques to handle missing data in general. This course addresses missing data mechanisms such as MCAR, MAR, and NMAR as well as missingness patterns like monotone, non-monotone or missing-by-design ones. Likelihood-based inference with missing data are shortly introduced, available case analysis as well as single and multiple imputation approaches. Finally the course focusses on multiple imputation (Rubin 1987) as a general method to analyze incomplete data sets.
Webinar learning outcomes	To understand fundamental problem of data that are missing, and its mechanisms. To be aware of the crucial role of statistical analysis with missing data, including its aim and limitations. To gain insights into the assumptions made for multiple imputation and selected imputation methods to handle missing data.
Webinar content	• Are missing data a problem? Where do missing data occur? • Missing data mechanisms • Overview of statistical analysis with missing data • Multiple Imputation • Conclusions
Difficulty level	Intermediate
Prerequisites for the webinar	Literature recommended to be read in advance of the lecture: Rässler, S., Rubin, D.B., Schenker, N. (2008) Incomplete Data: Diagnosis, Imputation, and Estimation, International Handbook of Survey Methodology, de Leeuw, E.D., Hox, J.J., Dillman, D.A. (eds.), Lawrence Erlbaum Associates, New York, 370-386.

Further readings and resources

Little, R.J.A. and Rubin, D.B. (1987, 2002) Statistical Analysis with Missing Data. New York: Wiley.

Rässler, S., Rubin, D.B., Zell, E.R. (2008). Incomplete Data in Epidemiology and Medical Statistics, Handbook of Statistics 27: Epidemiology and Medical Statistics, Rao, C.R., Miller, J.P., Rao, D.C. (eds.) Elsiver, 569-601.

Raghunthan, T.E. (2015) Missing Data Analysis in Practice. London: Chapman & Hall.

Rubin, D.B. (1987, 2004) Multiple Imputation for Nonresponse in Surveys. New York: Wiley.

Rubin, D.B. (1976) Inference and Missing Data. Biometrika, 63, 581-592.

Schafer, J.L. (1997) Analysis of Incomplete Multivariate Data. London: Chapman & Hall.

Van Buuren, S. (2012) Flexible Multiple Imputation. London: Chapman & Hall.
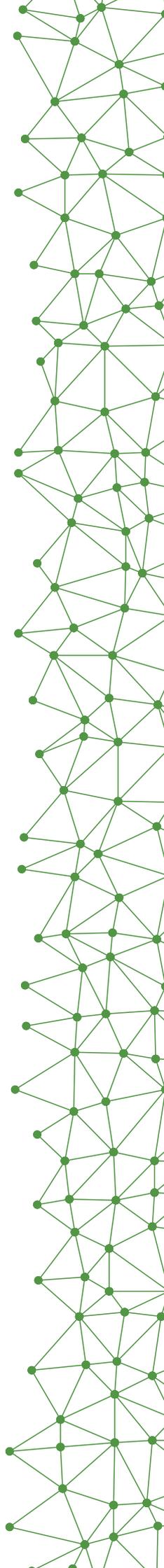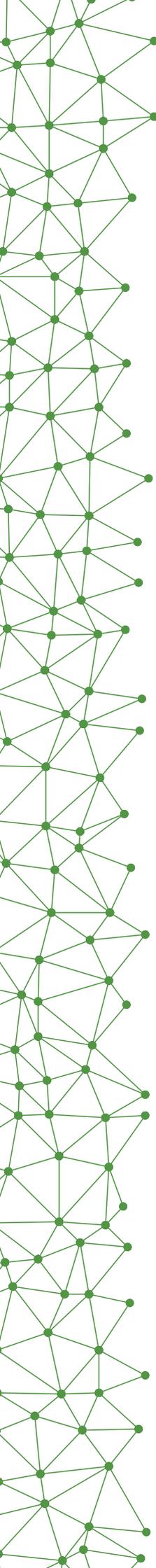
REFLECTIONS ABOUT THE ROLE OF OFFICIAL STATISTICS

Presenter(s):	Walter J. Radermacher, University La Sapienza, Rome
e-mail(s):	wjr@outlook.de
Date:	**6 June 2018**

EMOS learning outcome addressed	The system of official statistics

Webinar aims	To provide participants with a comprehensive description of official statistics in general and European Statistics in particular. Building upon earlier webinars it will go beyond statistical methodology and introduce viewpoints from social sciences (interaction between statistics and society), managerial aspects (statistical production as a factory) and legal considerations (informational governance), which altogether have to be taken into account, when trying to position official statistics successfully in the digital age and globalised world. Understanding the DNA of official statistics and the core values is a precondition for a successful strategy for the future.

Webinar learning outcomes	To be aware of the role of official statistics as a trusted infrastructure of statistical information for (modern) societies. To be familiar with the main processes of statistical production, the concept of quality, the portfolio of statistical products and services, the methods of standard setting, the learning cycle (integrating deductive and inductive approaches), the quality profiles / cultures for different products. To understand the challenges of today's official statistics, which are faced with the paradox that societies are 'data-hungry' and 'post-fact'-oriented at the same time, that the willingness to pay for quality information is (too) limited, that the public sector (including official statistics) is under continuous financial stress and that competition arises from private data providers (however not delivering the same level of quality).

Webinar content	• Statistical information as a product and product portfolio. Official Statistics as a system, an infrastructure of information. • Official statistics as a brand. Who, What, How? • Official statistics and scientific frameworks. • Mutual co-construction of statistics and society. • DNA of official statistics, values and governance. • Official statistics in the digital age: learning from historical episodes for the challenges of today and tomorrow.

Difficulty level	Intermediate
Prerequisites for the webinar	Participants should make themselves familiar with the basic documents describing the European Statistics System, as provided in Webinar "The European Statistical System (ESS)" or on Eurostat's website http://ec.europa.eu/eurostat/statistics-explained/index.php/Eurostat_and_the_European_Statistical_System. In particular, the scope and structure of the multiannual work programme of European Statistics should be known (see http://ec.europa.eu/eurostat/documents/7330775/7339482/AWP2017-3A-Overall-Priorities.pdf/c2a86b81-91d9-470f-a5ae-27bc256eb528)
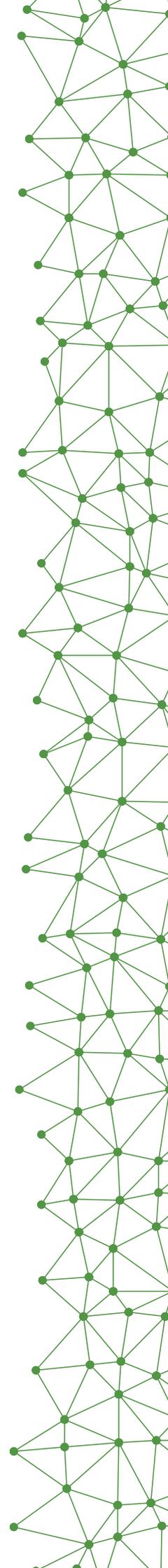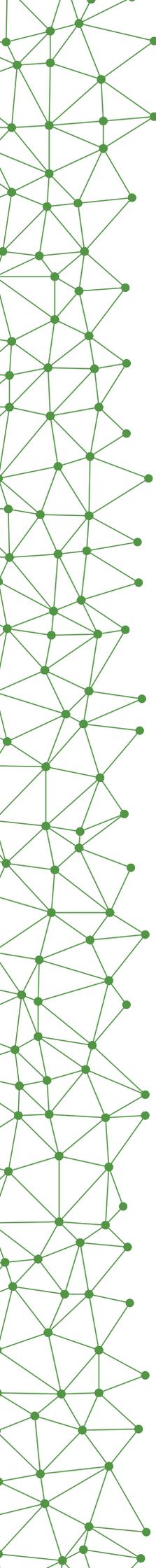
Further readings and resources

Benessia, A., S. Funtowicz, M. Giampietro, A. Guimaraes Pereira, J. Ravetz, A. Strand Saltelli, R., and J.P. van der Sluijs. 2016. The rightful place of science: science on the verge (Consortium for Science, Policy and Outcomes: Tempe, AZ).

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