

## Conferences and publications related to projects discussed in the Istat Advisory Committee on statistical methods

**February 18, 2025**

Year	Project name	Project members	Presentations at conferences	Publications
2017	Text mining and machine learning techniques for text classification	Gianpiero Bianchi; Francesco Scalfati; Fabiana Bianchi		<ul style="list-style-type: none"> <li>Gianpiero Bianchi, Renato Bruni, Francesco Scalfati (2018): Identifying e-Commerce in Enterprises by means of Text Mining and Classification Algorithms. <i>Mathematical Problems in Engineering</i>, Vol. 2018 Pp1-8 <a href="#">Link</a></li> </ul>
2017	Use of Internet data in Official Statistics a proposal for a methodological framework	Giulio Barcaroli; Paolo Righi	<ul style="list-style-type: none"> <li>Giulio Barcaroli, Natalia Golini, Paolo Righi (2018): Quality evaluation of experimental statistics produced by making use of Big Data. Q2018, 26-29 giugno 2018, Cracovia, Polonia</li> <li>Paolo Righi, Giulio Barcaroli, Mariagrazia Rinaldi, Gianpiero Bianchi (2019). Producing contingency table estimates integrating survey data and Big Data. ITACOSM Firenze, 5-7 giugno 2019 <a href="#">Link</a></li> </ul>	

2017	Census and Social Surveys Integrated System	Stefano Falorsi; Andrea Fasulo; Marco Fortini; Paolo Righi	<ul style="list-style-type: none"> <li>• D'Alò Michele, Falorsi Stefano, Fasulo Andrea, Solari Fabrizio (2017): Sample Design for the Integration of Population Census and Social Surveys Il Disegno Campionario per L'integrazione Del Censimento Della Popolazione e delle Indagini Sociali. In Petrucci A, Racioppi, Verde. (editors) New Statistical Developments in Data Science. SIS 2017, Florence, Italy, June 28-30, Pages 191-202 <a href="#">Link</a>:</li> <li>• Falorsi S. (2017). Census and social surveys integrated system. United Nations Economic Commission for Europe, Conference of European Statisticians Group of Experts on Population and Housing Censuses, Nineteenth Meeting, Geneva, Switzerland, 4–6 October 2017. <a href="#">Link</a></li> </ul>	<ul style="list-style-type: none"> <li>• D'Alò F., Falorsi S., Solari F. (2017). Space-Time Unit-Level EBLUP for Large Data Sets. <i>Journal of Official Statistics</i>, Vol. 33, N. 1, pp 61-77</li> </ul>
2017	On the design and implementation of a Generalized Process for Business Statistics	Mauro Bruno; Domenico Infante; Giuseppina Ruocco; Monica Scannapieco	<ul style="list-style-type: none"> <li>• Standardization of Business Statistics Processes in Istat (2018): Standardization of Business Statistics Processes in Istat. Q2018, 26-29 giugno 2018, Cracovia, Polonia <a href="#">Link</a></li> </ul>	
2017	Balancing methods for ensuring time and space consistency of demographic estimates in the Italian integrated system of statistical registers	Marco Di Zio; Marco Fortini; Diego Zardetto	<ul style="list-style-type: none"> <li>• Di Zio M., Fortini M. Zardetto D. (2018). Balancing methods for ensuring time and space consistency of demographic estimates in the Italian integrated system of statistical registers. Workshop of the Advisory Committee on Statistical Methods, 19 novembre 2018, Roma-Istat. <a href="#">Link</a></li> </ul>	

2017	Integration of administrative sources and survey data through Hidden Markov Models for the production of labour statistics	Danila Filipponi; Ugo Guarnera; Roberta Varriale	<ul style="list-style-type: none"> <li>Filipponi, Danila, Ugo Guarnera, and Roberta Varriale (2021). Latent Mixed Markov Models for the Production of Population Census Data on Employment. Book of short papers, SIS2021, Pisa, 21-25 giugno 2021, pp. 112-117 <a href="#">Link</a></li> </ul>	<ul style="list-style-type: none"> <li>Laura Boeschoten, Danila Filipponi, Roberta Varriale (2020). Combining Multiple Imputation and Hidden Markov Modelling to Obtain Consistent Estimates of Employment Status. <i>Journal of Survey Statistics and Methodology</i>, Volume 9, Issue 3, June 2021, Pp. 549–573 <a href="#">Link</a></li> </ul>
2017	The anticipated variance as a measure for the accuracy of complex multisource statistics	Piero Demetrio Falorsi; Paolo Righi	<ul style="list-style-type: none"> <li>Piero Demetrio Falorsi, Giorgio Alleva, Francesca Petrarca, Paolo Righi (2019): Estimates of accuracy of statistical registers based on Anticipated Variance. ITSEW 2019 – International Total Survey Error Workshop, Bergamo, 12 June 2019</li> <li>Piero Demetrio Falorsi, Giorgio Alleva, Francesca Petrarca, Paolo Righi (2019): The accuracy of aggregates computed from a statistical registers. ESS Workshop on the use of Administrative and Social Statistics, Valencia 4-5 June-2019</li> </ul>	<ul style="list-style-type: none"> <li>Giorgio Alleva, Francesca Petrarca, Piero D. Falorsi, Paolo Righi (2021): Measuring the Accuracy of Aggregates Computed from a Statistical Register. <i>Journal of Official Statistics</i>, 2021, vol. 37, issue 2, pp. 481-503. <a href="#">Link</a></li> </ul>
2017	The Italian Integrated System of Statistical Registers_Design and Implementation of an Ontology_based Data Integration Architecture	Roberta Radini; Monica Scannapieco; Laura Tosco	<ul style="list-style-type: none"> <li>Raffaella Aracri, Adele Bianco, Roberta Radini, Monica Scannapieco, Laura Tosco, Federico Croce, Maurizio Lenzerini, Domenico Fabio Savo (2018): On the Experimental Usage of Ontology-based data access for the Italian Integrated System of Statistical Registers: Quality Issues. Q2018, 26-29 giugno 2018, Cracovia, Polonia <a href="#">Link</a></li> </ul>	

2017	Methods for treating bias deriving from different sources of nonsampling errors in mixed mode social surveys	Claudia De Vitiis; Alessio Guandalini; Francesca Inglese; Marco Dionisio Terribili	<ul style="list-style-type: none"> <li>• C De Vitiis, A Guandalini, F Inglese, M Terribili (2018): Assessing and adjusting bias deriving from mode effect in mixed mode social surveys. European Conference on Quality in Official Statistics (Q2018), Kraków, Polonia <a href="#">Link</a></li> <li>• C De Vitiis, A Guandalini, F Inglese, MD Terribili (2019): Evaluation of the impact of mixed mode design on the quality of the estimates of the Aspects of Daily Life social survey. ITACOSM 2019-Survey and Data Science</li> </ul>	<ul style="list-style-type: none"> <li>• ISTAT (2017). L'effetto tecnica nelle indagini mixed mode. <i>Collana Metodi - Letture statistiche</i>, Istat, Roma. <a href="#">Link</a></li> <li>• C De Vitiis, A Guandalini, F Inglese, Marco D. Terribili (2019). The Transition from Single to Mixed-Mode of the Aspects of Daily Life Household Survey: An Evaluation on the Quality of the Estimates. <i>Statistica &amp; Applicazioni</i> 17 (2), 175-199 <a href="#">Link</a></li> <li>• C De Vitiis, A Guandalini, F Inglese, MD Terribili (2021). Assessing and Adjusting Bias Due to Mixed-Mode in Aspect of Daily Life Survey. <i>Journal of Official Statistics (JOS)</i> 37 (2) <a href="#">Link</a></li> </ul>
2018	Forecasting Tourism Demand through Social Network and Semantic Analysis of Online Big Data	Barbara Guardabascio	<ul style="list-style-type: none"> <li>• Fronzetti Colladon, Andrea &amp; Guardabascio, Barbara &amp; Innarella, Rosy. (2019). Forecasting Tourism Demand: A Social Network Analysis and Text Mining Approach. XXXIX Sunbelt Conference of the International Network for Social Network Analysis, 18-23 giugno 2019, Montréal, Québec, Canada</li> </ul>	<ul style="list-style-type: none"> <li>• Andrea Fronzetti Colladon, Barbara Guardabascio, Rosy Innarella (2019): Using social network and semantic analysis to analyze online travel forums and forecast tourism demand. <i>Decision Support Systems</i>, Vol 123, pp113-175 <a href="#">Link</a></li> </ul>
2018	Multiscale Decomposition of Big Data Time Series for analysis and prediction of macroeconomic data	Livio Fenga		

2018	A new framework for quality assessment of processes based on integrated administrative data	Orietta Luzi; Fabiana Rocci; Roberta Varriale	<ul style="list-style-type: none"> <li>• Orietta Luzi, Fabiana Rocci, Roberta Varriale (2018): Quality evaluation of statistical processes based on administrative data: a new version of the TSE approach. Q2018, 26-29 giugno 2018, Cracovia, Polonia <a href="#">Link</a></li> <li>• Orietta Luzi, Fabiana Rocci, Roberta Varriale (2018): Quality evaluation of statistical processes based on administrative data. Computational and Methodological Statistics - ERCIM 2018. Pisa, 16 December 2018</li> </ul>	<ul style="list-style-type: none"> <li>• Orietta Luzi, Fabiana Rocci, Roberta Varriale (2022): Total Process Error: An Approach for Assessing and Monitoring the Quality of Multisource Processes. <i>Journal of Official Statistics</i>, Volume 38, Issue 2, pp. 533-556. <a href="#">Link</a></li> </ul>
2018	Estimation of criminal populations from administrative registers in the presence of linkage errors	Tiziana Tuoto; Valentina VC. Chiariello	<ul style="list-style-type: none"> <li>• Tiziana Tuoto, Antonella Baldassarini, Valentina Chiariello (2018). Enhancing the quality of National Accounts in the estimation of proceeds from illegal markets. Q2018, 26-29 giugno 2018, Cracovia, Polonia <a href="#">Link</a></li> </ul>	<ul style="list-style-type: none"> <li>• Baldassarini, Antonella; Chiariello, Valentina; Tuoto, Tiziana (2019). Estimating Criminal Populations from Administrative Registers. <i>Statistika</i>, vol. 99, 3, 287-300 <a href="#">Link</a></li> </ul>
2018	The statistical matching of EU-SILC and HBS at ISTAT: where do we stand for the production of official statistics	Gabriella Donatiello; Mauro Scanu; Marcello D'Orazio; Doriana Frattarola; Mattia Spaziani	<ul style="list-style-type: none"> <li>• Donatiello G., D'Orazio M., Frattarola D., Rizzi A., Scanu M, Spaziani M. (2016): The statistical matching of EU-SILC and HBS at ISTAT: where do we stand for the production of official statistics, DGINS - Conference of the Directors General of the National Statistical Institutes, 26-27 September 2016, Vienna</li> </ul>	<ul style="list-style-type: none"> <li>• Donatiello G., D'Orazio M., Frattarola D., Rizzi A., Scanu M., Spaziani M. (2016): The role of the conditional independence assumption in statistically matching income and consumption". <i>Statistical Journal of the IAOS</i>, 32, pp. 667-675. <a href="#">Link</a></li> </ul>
2020	A Deep Learning Approach to Land Cover Estimation from Satellite Imagery	Fabrizio De Fausti; Francesco Pugliese; Diego Zardetto	<ul style="list-style-type: none"> <li>• Zardetto D., De Fausti F., Cerasti E., Pappagallo A., Pugliese F. Deep Learning Segmentation for Improved Land Cover Maps and Estimates. NTTS2021 <a href="#">Link</a></li> </ul>	<ul style="list-style-type: none"> <li>• Bernasconi E., De Fausti F., Pugliese F., Scannapieco M., Zardetto D. (2022): Deep Learning Segmentation for Improved Land Cover Maps and Estimates, <i>Statistical Journal of the IAOS</i>, vol. 38, no. 1, pp. 183-199, 2022 <a href="#">Link</a></li> </ul>

2018	Sampling schemes using scanner data for the consumer price index	Claudia De Vitiis; Francesca Inglese; Marco Dionisio Terribili; Alessio Guandalini	<ul style="list-style-type: none"> <li>• Claudia De Vitiis, Alessio Guandalini, Francesca Inglese, Marco Dionisio Terribili (2017). Sampling Schemes Using Scanner Data for the Consumer Price Index. In Petrucci A, Racioppi, Verde. (editors) New Statistical Developments in Data Science. SIS 2017, Florence, Italy, June 28-30, Pages 203-217 <a href="#">Link</a></li> </ul>	<ul style="list-style-type: none"> <li>• Tiero F., Bernardini A., Casciano M.C., De Vitiis C., Guandalini A., Inglese F., Seri G., Terribili M.D. (2019): Re-design project of the Istat consumer price survey: use of probability samples of scanner data for the calculus of price indices. <i>Rivista di statistica ufficiale</i>, vol. 2-3, pp. 64-140 <a href="#">Link</a></li> </ul>
2019	On Designing Aggregated Data as Statistical Data Cubes	Monica Scannapieco; Mauro Scanu; Laura Tosco; Adele Maria Bianco; Michele Riccio	<ul style="list-style-type: none"> <li>• M.K. Riccio e M. Scanu (2024). Semantics and ontologies of data sets along a data production process. Q2024, Lisbona <a href="#">Link</a></li> </ul>	<ul style="list-style-type: none"> <li>• Scanu M., Scannapieco M., Tosco L, Bianco A., Riccio M. (2022). Metadata for statistical processes on registers: how to organise facts with GSIM. <i>Proceedings of the Workshop on methodologies for official statistics</i>. Roma, Italy: Istat. <a href="#">Link</a></li> </ul>
2019	A Hierarchical Bayesian model for quality check of the Italian population count by Administrative Data	Simona Toti; Rosa Maria Lipsi; Sara Giavante; Stefano Daddi		

2019	Imputation of the “Attained Level of Education” in Base Register of Individuals: a comparison between Machine Learning and standard techniques	Fabrizio De Fausti; Romina Filippini; Marco Di Zio; Simona Toti; Diego Zardetto	<ul style="list-style-type: none"> <li>• Di Zio M., Filippini R., Rocchetti G (2020). An imputation procedure for the Italian attained level of education in the register of individuals based on administrative and survey data. United Nations - Economic Commission for Europe, Conference of European Statisticians, Workshop on Statistical Data Editing, Geneva, Switzerland, 15-17 April 2020. <a href="#">Link</a></li> <li>• De Fausti F., Di Zio M., Filippini R., Toti S., Zardetto D. (2020). The imputation of the “Attained Level of Education” in the base register of individuals: an experimentation using Machine Learning techniques. United Nations - Economic Commission for Europe, Conference of European Statisticians, Workshop on Statistical Data Editing, Geneva, Switzerland, 15-17 April 2020.</li> </ul>	<ul style="list-style-type: none"> <li>• Marco Di Zio, Romina Filippini, Gaia Rocchetti (2019). An imputation procedure for the Italian attained level of education in the register of individuals based on administrative and survey data. <i>Rivista di Statistica Ufficiale</i>, 2-3/2019, pp. 143-177 <a href="#">Link</a></li> </ul>
2019	Joint distribution of income based and consumption based absolute poverty	Andrea Cutillo; Mauro Scanu		<ul style="list-style-type: none"> <li>• Andrea Cutillo e Mauro Scanu (2020): A mixed approach for data fusion of HBS and SILC. <i>Social Indicators Research</i>, 150, pp. 411–437 <a href="#">Link</a></li> </ul>
2019	Machine Learning methods for estimating occupational status in Italy	Roberta Varriale		
2019	Quality Reviews at Istat: the way to certification	Giovanna Brancato	<ul style="list-style-type: none"> <li>• Giovanna Brancato, Giorgia Simeoni, Andrea Bruni, Gabriele Ascari (2018): The new quality strategy in the modernised Italian National Statistical Institute. Q2018, 26-29 giugno 2018, Cracovia, Polonia <a href="#">Link</a></li> </ul>	
2019	Inference for the Consumer Confidence Index	Alessio Guandalini		

2019	Optimal Spatial stratified sampling	Marco Ballin; Giulio Barcaroli		
2019	Private Set Intersection with Analytics	Massimo De Cubellis; Fabrizio De Fausti; Monica Scannapieco; Diego Zardetto	<ul style="list-style-type: none"> <li>Massimo De Cubellis, Mauro Bruno, Fabrizio De Fausti, Monica Scannapieco (2021): Input Privacy-Preservation Techniques Project: Privacy Set Intersection with Analytics. UNECE ModernStats <a href="#">Link</a></li> </ul>	
2020	Mobile phone data to support Disaster Risk Management	Antonio Laureti Palma; Angela Ferruzza; Giovanna Tagliacozzo		
2020	Violence against woman, stereotype and big data: a methodological approach to use different data sources	Claudia Villante; Maria Giuseppina Muratore		
2020	Current directions for research on record linkage in Istat	Tiziana Tuoto; Marco Fortini	<ul style="list-style-type: none"> <li>M Fortini, T Tuoto (2019). Use of record linkage in Official Statistics and feedbacks on research. ITACOSM 2019-Survey and Data Science <a href="#">Link</a></li> </ul>	
2020	Survey on Siero-prevalence of Covid-19, planned sampling design	Stefano Falorsi	<ul style="list-style-type: none"> <li>Falorsi S., D'Alò M., De Vitiis C., Fasulo A., Filippini D., Guandalini A., Inglese F., Luzi O., Orsini E., Radini R. (2021) Survey aimed to estimate the seroprevalence of SARS-CoV-2 infection in Italian population at national and regional level. Book of short papers, SIS2021, Pisa, 21-25 giugno 2021, pp. 279-284 <a href="#">Link</a></li> </ul>	
2020	Spatially balanced sampling design of an area frame survey to estimate the	Federica Piersimoni		



	coverage of the agricultural census			
<b>2020</b>	The problem of classifying smart enterprises and its joint use with other sources	Stefania Della Queva; Massimo Armenise; Sergio Salamone		
<b>2021</b>	Census count estimates geocoded at sub-domain levels	Stefano Daddi; Marco Di Zio; Michele D'Alo'; Stefano Falorsi; Danila Filippini		
<b>2021</b>	Planning the Post-21 Permanent Census of Population and Housing according to a Responsive-Adaptive Survey Design approach	Claudia De Vitiis; Stefano Falorsi; Alessio Guandalini; Francesca Inglese; Paolo Righi; Marco Dionisio Terribili		
<b>2021</b>	A pseudo-population bootstrap approach for variance estimation of population counts with under/over coverage	Simona Toti; Marco Di Zio; Alessandra Ronconi		

2021	LFS non response indicators for register overcoverage estimation	Silvia Loriga; Loredana Di Consiglio; Stefano Falorsi	<ul style="list-style-type: none"> <li>Loredana Di Consiglio, Stefano Falorsi (2021). LFS non response indicators for population register overcoverage estimation. Book of short papers, SIS2021, Pisa, 21-25 giugno 2021, pp. 279-284 <a href="#">Link</a></li> </ul>	
2021	Longitudinal and cross-sectional analyses of data in the Integrated System of Statistical Registers	Raffaella Maria Aracri; Francesco Altarocca; Roberta Benedetti; Roberta Radini; Giulia Vaste		
2021	A proposal for a concentration spatial index	Marco Ballin		
2021	A theoretical framework for estimating population mean in non probability samples	Simona Rosati		
2022	A Statistical Framework for Register Based Population Size Estimation	Antonella Bernardini; Nicoletta Cibella; Fabrizio Solari	<ul style="list-style-type: none"> <li>Solari, F., Bernardini, A. &amp; Cibella, N. (2023) Statistical framework for fully register based population counts. <i>METRON</i>, vol. 81, pp. 109–129 <a href="#">Link</a></li> </ul>	

2022	Defining the sample designs for small area estimation	Piero Demetrio Falorsi; Stefano Falorsi; Paolo Righi		
2022	On the use of social media to detect anomalous events: Social Mood on Economy Index	Mauro Bruno, Elena Catanese	<ul style="list-style-type: none"> <li>Catanese E., Scannapieco M., Bruno M., Valentino L. (2022). The Italian Social Mood on Economy Index: recent methodological developments, Proceedings of the 16th international conference on statistical analysis of textual data (JADT) 2022 - Volume 1 - Isbn : 9791280153302 - Pag. 213-220</li> </ul>	<ul style="list-style-type: none"> <li>Catanese, E., M. Scannapieco, M. Bruno, and L. Valentino. (2022). Natural language processing in official statistics: The social mood on economy index experience, <i>Statistical Journal of the IAOS</i>, Volume 38, Issue 4: 1451-1459. <a href="#">Link</a></li> </ul>
2022	A proposal for the problem of matching probabilities estimation in record linkage	Mauro Scanu, Tiziana Tuoto, Marco Fortini, Sara Piombo	<ul style="list-style-type: none"> <li>Scanu M., Tuoto T., Fortini M., Piombo S. (2022). A proposal for the problem of matching probabilities estimation in record linkage, Proceedings of Statistics Canada Symposium 2022 "Data Disaggregation: Building a more representative data portrait of society" <a href="#">Link</a></li> </ul>	
2022	Several data on labour status, a problem or a resource	Michele D'Alo' Stefano Falorsi Danila Filippini Silvia Loriga		
2023	A graph sampling approach for audit survey sampling design supporting register based population size estimation	Solari F.		

2023	Accuracy evaluation of register based estimates	Falorsi S., Chianella D., Filippini R., Toti S., Falorsi P.D., Deliu N., Alleva G., Liseo B.		<ul style="list-style-type: none"> <li>• In corso di pubblicazione su Falorsi S., Chianella D., Filippini R., Toti S., Falorsi P.D., Deliu N., Alleva G., Liseo B. (2025) Linearization approach for measuring the accuracy of multinomial outcomes from a statistical register . <i>Proceedings of the 3rd Workshop on methodologies for official statistics</i>, Istat.</li> <li>• Deliu, N, Falorsi, PD, Falorsi, S., Chianella, D, Alleva, G. Evaluating the Accuracy of Register-based Official Statistics with an Application to the Attained Level of Education. Submitted</li> </ul>
2023	Labour cost indices at Istat: criticisms and enhancement opportunities	Anna Ciammola, Eleonora Cimino and Donatella Tuzi	<ul style="list-style-type: none"> <li>• Anna Ciammola, Eleonora Cimino and Donatella Tuzi (2023) Dealing with index numbers of ratios. A case study with short-term unit labour cost indicators". Scientific ASA Conference on Statistics, Technology and Data Science for Economic and Social Development, Bologna, 7.9.2023 <a href="#">Link</a></li> </ul>	<ul style="list-style-type: none"> <li>• Ciammola, A., Cimino, E., Tuzi, D. (2023). Dealing with index numbers of ratios. A case study with short-term unit labour cost indicators. <i>Rivista Statistica Applicata</i>, Vol. 35, Number 3, Supplement, pp. 141-145 <a href="#">Link</a></li> </ul>
2023	Generation of Synthetic Data from actual data of Mobile Network Operators (MNO) through Generative Adversarial Networks (GANs): motivations, techniques and preliminary results	Pugliese F., De Cubellis M.		
2023	Multi-source data: New approaches for non-standard employment statistics. The Dutch and Italian experience	Danila Filippini, Mauricio Garnier-Villarreal, Silvia Loriga, Dimitris Pavlopoulos, Roberta Varriale		<ul style="list-style-type: none"> <li>• Filippini D., Loriga S., Garnier-Villarreal M., Pavlopoulos D., Varriale R. (2024). Measurement of contract type from multi-source data. Preliminary results from the Dutch and Italian experience. <i>Proceedings of the 2nd Workshop on methodologies for official statistics</i>. <a href="#">Link</a>.</li> </ul>

2023	Quantification of urban green areas: An innovative remote sensing approach for official statistics	Mugnoli S., Sabbi A., De Fausti F., Lancioni G., Sisti F.		<ul style="list-style-type: none"> <li>Mugnoli S., Sabbi A., De Fausti F., Lancioni G., Sisti F. (2024). Quantification of urban green areas: An innovative remote sensing approach for Official Statistics. <i>Proceedings of the 2<sup>nd</sup> Workshop on methodologies for official statistics</i>. <a href="#">Link</a>.</li> </ul>
2023	Quality aspects using mobile network operators data for official statistics	Gabriele Ascari, Erika Cerasti, Cristina Faricelli, Paolo Mattera, Sara Piombo, Roberta Radini, Giorgia Simeoni and Tiziana Tuoto	<ul style="list-style-type: none"> <li>T. Tuoto, M. Offermans, R Herranz, M Tiru, F Carausu, E. Cerasti, R. Radini, C. Faricelli, P. Mattera, G Ascari, G. Simeoni, L. Valentino, E de Jonge, M. Picornell, V Tonnison, C. Escribano. (2024) Towards the usage of Mobile Network Operators' data for European official statistics production: improving quality through standardisation. Q2024, Lisbona. <a href="#">Link</a></li> </ul>	<ul style="list-style-type: none"> <li>Ascari G., Cerasti E., Faricelli C., Mattera P., Piombo S., Radini R., Simeoni G., Tuoto T. (2024). Quality aspects using mobile network operators data for official statistics. <i>Proceedings of the 2<sup>nd</sup> Workshop on methodologies for official statistics</i>. <a href="#">Link</a>.</li> </ul>
2024	A study on machine learning for longitudinal information in administrative data: the case of the Attained level of education	De Fausti F., Di Zio M., Filippini R., Toti S.	<ul style="list-style-type: none"> <li>De Fausti F., Di Zio M., Filippini R., Toti S. (2024) Applying Machine Learning to Longitudinal Administrative Data: A Case Study in Education. Q2024, Lisbona. <a href="#">Link</a></li> </ul>	
2024	Applying the extended Total Survey Error approach to statistics based on new data sources: the case of Mobile Network Operators data	Ascari G., Simeoni G.	<ul style="list-style-type: none"> <li>Ascari G. Simeoni G. (2024) Applying the extended Total Survey Error approach to statistics based on new data sources: the case of MNO data. Q2024, Lisbona</li> </ul>	

2024	Conflation for the Integration of Geospatial Data and Enhancement of Building Registry Quality	G. Salvucci, D. Abbatini, D. Ichim, J. Corradi, S. Lucchetti		
2024	Correcting for income-dependent unit non-response bias in IT-SILC using tax data	S. Gerosa		
2024	Optimization of Surveys: The 'Integrated Census and Social Surveys System' Project	C. De Vitiis, S. Falorsi, A. Guandalini, F. Inglese, S. Loriga, M. Mazziotta, F. Piersimoni, R. Ranaldi, M. Russo, M. D. Terribili, R. Benedetti		<ul style="list-style-type: none"> <li>In corso di pubblicazione su C. De Vitiis, S. Falorsi, A. Guandalini, F. Inglese, S. Loriga, M. Mazziotta, F. Piersimoni, R. Ranaldi, M. Russo, M. D. Terribili, R. Benedetti (2025). Optimization of Surveys: The "Integrated Census and Social Surveys System" Project. <i>Proceedings of the 3rd Workshop on methodologies for official statistics</i>. Roma, Italy: Istat. <a href="#">Link</a></li> </ul>
2024	Statistical use of AIS data	F.M. Arosio, M. Di Zio, A.E. Martino, G. Massacci, F. Ortame, A. Pappagallo, F. Pugliese, N. Salamone, F. Sisti, S. Talice, L. Valentino		<ul style="list-style-type: none"> <li>In corso di pubblicazione su F.M. Arosio, M. Di Zio, A.E. Martino, G. Massacci, F. Ortame, A. Pappagallo, F. Pugliese, N. Salamone, F. Sisti, S. Talice, L. Valentino (2025). Statistical use of Automatic Identification System (AIS) data. <i>Proceedings of the 3rd Workshop on methodologies for official statistics</i>. Roma, Italy: Istat. <a href="#">Link</a></li> </ul>

### Consulting activities of the Istat Advisory Committee on statistical methods:

These projects are at an early stage of production. They are discussed directly and informally with one or more committee members for consulting.

Year	Project title	Project members	Conferences where project results were presented	Project related publications
2022	Sentiment Analysis Techniques and outgrowing methods	Mauro Bruno, Elena Catanese	<ul style="list-style-type: none"><li>Bruno M., Scannapieco M., Catanese E., Valentino L., De Fausti F. (2022). Italian sentiment analysis on climate change: emerging patterns from 2016 to today, Proceedings Q 2022 Vilnius, 2022,6. <a href="#">Link</a></li><li>Catanese E., Scannapieco M., Bruno M., Valentino L. (2022). The Italian Social Mood on Economy Index: recent methodological developments, Proceedings of the 16th international conference on statistical analysis of textual data (JADT) 2022 - Volume 1 - Isbn : 9791280153302 - Pag. 213-220</li></ul>	<ul style="list-style-type: none"><li>Catanese, E., M. Scannapieco, M. Bruno, and L. Valentino. (2022). Natural language processing in official statistics: The social mood on economy index experience, <i>Statistical Journal of the IAOS</i>, Volume 38, Issue 4: 1451-1459. <a href="#">Link</a></li></ul>

2022	New System for the Social Surveys: Two-Stage for Two-Phase Sampling design	Alessio Guandalini, Silvia Loriga, Stefano Falorsi, Michele D'Alò	<ul style="list-style-type: none"> <li>De Vitiis C., Falorsi S., Guandalini A., Inglese F., Righi P., Terribili M.D. (2022). The Responsive-Adaptive Survey Design approach for planning the Permanent Census of Population and Housing. Balzanella A., Bini M., Cavicchia C., Verde R. (Eds.) Book of the Short Papers, SIS 2022 – 51st Scientific Meeting of the Italian Statistical Society <a href="#">Link</a></li> <li>Guandalini A., De Vitiis C., Falorsi S., Inglese F., Terribili M.D. (2022). Robustness to misspecification of non-response model in a responsive-adaptive survey design approach: an application on the Italian Census., 7th ITALian Conference on Survey Sampling (ITACOSM 2022). Perugia <a href="#">Link</a></li> </ul>	<ul style="list-style-type: none"> <li>De Vitiis C., Falorsi S., Guandalini A., Inglese F., Righi P., Terribili M. D. (2024). Adaptive sampling design for the Italian social sample surveys: an application on the population census. <i>METRON</i> 1-17. <a href="#">Link</a></li> </ul>
2022	A Locality Sensitive Hashing Approach For Efficient Time Series Clustering	Pierpaolo Massoli, Alessandro La Rocca		
2022	A non-ignorable response model for the estimation of the bias due to the link between survey participation and target variables	Marco Fortini		<ul style="list-style-type: none"> <li>Di Zio M., Fortini M., Zardetto D. (2022). Balancing population stocks and flows in the Italian demographic estimation system: a proposal, <i>Review of Official Statistics</i> N. 2/2022 <a href="#">Link</a></li> </ul>
2022	The Sampling Variance of the Consumer Confidence Index	Alessio Guandalini		



<b>2023</b>	Proposal of new methods of measuring Italian Public Administration Reform in the context of the NRPP	Cinquegrana, Bianchi, Cosco, Orecchini, Righi, Giungato, D'Autilia, Nazzaro, Verde		
-------------	--	--	--	--