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Satellite meeting of the Joint Meeting SIS-FENStatS 2026
100 YEARS OF METHODOLOGICAL EVOLUTION: OFFICIAL STATISTICS
BETWEEN SCIENTIFIC RIGOR AND DIGITAL INNOVATION

The scientific development of Istat via its Advisory Committee on Statistical Methodologies

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1. A Gradual Development Over the Years

Several key steps characterized ISTAT's scientific evolution

- Building a reliable and coherent modernization strategy
- Investing seriously in the Information Technology component, leading to the current central role of Artificial Intelligence and Machine Learning
- Recognizing that probabilistic and non-probabilistic data sources must coexist
- Understanding that model-based estimation represents the long-term methodological objective

2. The Advisory Committee on Statistical Methodologies

Officially appointed on the second half of 2016

- Development closely linked to the modernization process
- International composition: academics from several countries and experts from other National Statistical Institutes
- Members appointed for three-year terms (some renewed and some new entries)
- Highly efficient secretariat, ensuring continuity through staff renewal and new appointments
- Acknowledgement of a tragic loss among the Board's members

ISTAT has in itself experienced substantial scientific progress also supported by the contribution of the Advisory Committee

3. Presentations to the Advisory Committee

Work in progress is being regularly presented to the Advisory Board by ISTAT staff members

Website: <https://www.istat.it/listituto/attivita/ricerca/organizzazione/comitato-per-le-metodologie-statistiche/>

- They generously accepted the challenge of discussing ongoing research and methodological developments
- They demonstrated a constructive attitude toward scientific debate and critical evaluation
- Their contributions fostered a culture of openness, innovation, and continuous improvement

4. Activities performed (2 meetings per year)

Year	Activities	
	Project	Consulting
2017	9	-
2018	6	-
2019	9	-
2020	7	-
2021	7	-
2022	5	5
2023	7	1
2024	6	-
2025	6	3
2026 (1 meeting)	3	1

5. Launch of Master Classes

Master Classes were introduced as an additional instrument for scientific growth.

They have been either independently held or inserted in the program of the Annual workshops. Some relevant topics (*the list is continuously increasing*) are

- Advanced survey methodology
- Big Data and Official Statistics
- Small Area Estimation
- Data Integration and Multisource Process
- Machine Learning and Artificial Intelligence
- Statistical Quality and Data Governance

All can be downloaded [here](#) from the page above (dedicated section of the webpage)

6. Annual Workshops (Methods for Official Statistics)

Since 2022, ISTAT has organized Annual Workshops on Methodologies for Official Statistics

- Organized by ISTAT with strong support from the Advisory Committee
- The Committee actively contributed by inviting speakers and integrating sessions with Master Classes
- Presentations combine contributions from ISTAT staff and external experts
- Workshop themes are evolving rapidly to address emerging societal needs and methodological challenges

7. The Initial Focus of the Annual Workshops

The first editions mainly concentrated on

- Methodologies for the new censuses
- Multisource statistical processes
- Methods for handling Big Data
- Strengthening and standardization proposals
- Managing and integrating new data sources

8. The Current Focus

More recent editions have increasingly emphasized

- Quality issues in non-standard surveys
- Artificial Intelligence and Machine Learning methods
- Addressing the persistent problem of nonresponse
- Developing estimation methods for small areas
- Promoting the use and development of open-source software

Discussions with participants have consistently been lively and engaging

Next workshop: December 10-11, 2026

9. Relevance of the annual workshops

The workshops play a strategic role because they

- Contribute to the continuous growth of ISTAT's scientific authority
- Strengthen ISTAT's standing among National Statistical Institutes
- Support ISTAT's ambition to maintain and reinforce a leading role within the European Statistical System

10. Relationship with the editorial activity of ISTAT

The visibility of the Committee's activities can be enhanced by the editorial activity of the Institute. The proceedings of the most recent workshops are however freely downloadable

- Proceedings 2025

https://www.istat.it/wp-content/uploads/2025/11/3rd-Workshop-on-Methodologies-Proceedings_Ebook.pdf

- Proceedings 2024

<https://www.istat.it/wp-content/uploads/2024/11/2nd-Workshop-on-methodologies-for-official-statistics-Proceedings.pdf>

- Proceedings 2023

https://www.istat.it/wp-content/uploads/2023/11/Workshop-on-Methodologies-for-Official-Statistics_Proceedings_Ebook.pdf

Key role of the Advisory Committee

Scientific Excellence, Innovation, and
International Leadership

Thanks for the attention!

grazie

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