Irving Fisher Committee on Central Bank Statistics | BIS | BANCO DE PORTUGAL EUROSYSTEM

Workshop on data security and privacy

Banco de Portugal and Irving Fisher Committee

14 and 15 September 2026, Lisbon

The workshop will be held in the Money Museum of Banco de Portugal
Address: Largo de S. Julião, 1100-150 Lisbon

Final programme[1]

7 September 2026
All times are in Lisbon local time (WEST)

Monday, 14 September 2026

09:00 Registration and welcome coffee

09:30 Welcoming remarks

Francisca Guedes de Oliveira – Board of Directors of the Banco de Portugal

Luís Teles Dias – Irving Fisher Committee Executive Member / Banco de Portugal

09:45 Keynote speech

Yasser Alhelaly – Cybersecurity Professor and Researcher, NOVA IMS - School of Information Management and Data Science at NOVA University Lisbon

10:45 Coffee break

11:15 **Session 1: Foundations of data privacy: concepts, trade-offs and governance frameworks**

This session examines the foundations of data privacy at a time when central banks are making ever greater use of granular data to support their policy, analytical and operational functions. It explores the trade-offs between privacy protection and data utility, covering anonymisation and pseudonymisation techniques, privacy-by-design principles and evolving governance frameworks. By combining conceptual perspectives with practical implementation experiences, the session highlights how institutions can develop robust and adaptable privacy models that support innovation while safeguarding trust and accountability.

Chair: Giuseppe Bruno – Head of Division in the Economics and Statistics Department, Banca d'Italia

[1] Presenters' names are underlined. Presenters marked with an asterisk (*) will deliver their presentation online.

- ***Balancing privacy and utility: anonymisation and pseudonymisation*** (Sofie Covemaeker, Noëmi Debacker, Ine Steyls – National Bank of Belgium)
- ***Protecting data and its value: preserving analytical utility*** (Mário Lourenço, Francisco Fonseca – Banco de Portugal)
- ***Privacy by design in data governance*** (Rita Choudhury, Rosemarie Dember, Gianluca Damiani – European Central Bank)
- ***A practical three-tier framework for data privacy*** (Fatih Yalçın Mete, Mehmet Doğukan Deniz – Central Bank of the Republic of Türkiye)

12:45 Family photo and lunch break

14:00 **Session 2: Data management: secure data architectures and access control**

This session explores how central banks are adapting their data management practices to meet growing demands for data access while maintaining high standards of security and confidentiality. It examines the evolving role of access control models, governance frameworks, metadata management and secure data architectures in supporting trusted data sharing and use. By combining conceptual approaches with practical institutional experiences, the session highlights how modern data ecosystems can balance security, accessibility and operational efficiency in an increasingly data-driven environment.

Chair: Homero Gonçalves – Director of the Statistics Department, Banco de Portugal

- ***Fine-grained vs coarse-grained access control*** (Bernadette Lauro – European Central Bank)
- ***Safeguarding data confidentiality in Banca d'Italia: current practices and future challenges*** (Emiliano Svezia, Alissa Pelino, Antonio Bovenzi – Banca d'Italia)
- ***The implications of adopting a data governance framework in data security and reference and master data*** (Salvador Gómez García – Banco de México)
- ***Implementing the five safes framework at the Bundesbank RDSC through automation*** (Sebastian Seltmann, Pol van Rijn, Christian Hirsch – Deutsche Bundesbank)

15:30 Coffee break

15:45 **Session 3: Securing data privacy in practice: microdata labs and federated analytics**

This session explores how advances in privacy-preserving technologies are reshaping the way sensitive microdata can be accessed and analysed. It highlights innovative approaches, including secure microdata laboratories, federated analytics and other privacy-enhancing technologies, that enable institutions to unlock the value of granular data without exposing the underlying information. Looking ahead, the session considers how these solutions can support new forms of collaboration, research and policy analysis while maintaining robust safeguards for confidentiality and trust.

Chair: Stefan Bender – Head of the Research Data and Service Centre, Deutsche Bundesbank

- ***Exploring privacy preserving methods for large scale credit microdata at BELab*** (Eugenia Koblents, Ana Esteban – Banco de España)
- ***Secure access to sensitive microdata: the BPLIM approach*** (Paulo Guimarães, Gustavo Iglesias, Rita Sousa – Banco de Portugal)
- ***Insights without data disclosure: unlocking granular supervisory information with privacy-enhancing technologies*** (Jakub Demski – Bank for International Settlements)
- ***Measuring AI Adoption – Without Seeing Company Data*** (Jim Tebrake* – International Monetary Fund)

17:15 End of presentations

18:00 Social event: 3-hour cruise on the River Tagus, including a seated dinner service on board.

22:00 End of day 1

Tuesday, 15 September 2026

8:45 Welcome coffee

9:15 **Session 4: Privacy-enhancing technologies: from synthetic data to confidential computing and agentic AI**

This session explores the evolving frontier of privacy-enhancing technologies and their potential to transform the way sensitive data are accessed, analysed and shared. It examines innovative approaches ranging from synthetic data generation and confidential computing to the emerging use of agentic AI, highlighting how these technologies can expand analytical capabilities while reducing disclosure risks. By combining methodological advances with practical use cases, the session provides insights into how central banks can foster innovation, collaboration and data-driven decision-making without compromising privacy, security or trust.

Chair: António Antunes – Deputy Director of the Economics and Research Department, Banco de Portugal

- ***Generating and validating synthetic unbalanced panel data: evidence from Italian firm microdata*** (Marco Langiulli, Alessandro Moro, Mattia Orzincolo, Daniele Piras – Banca d'Italia)
- ***Advancing privacy-preserving statistical innovation: Bank Indonesia's pilot on synthetic data for secure microdata access*** (Anggraini Widjanarti, Akhmad Zacky Nugraha, Mohammad Khoyrul Hidayat, Dwi Cahyo Ardianto – Bank Indonesia)
- ***Producing shared digital asset indicators without exposing microdata: a confidential computing approach*** (Vincent Lee Wai Seng, Nur Aisyah Mohd Nasir, Chun Onn Pam – Bank Negara Malaysia)
- ***Securing data with agentic AI*** (Rafael Ferreira, André Leal – Banco de Portugal)

10:45 Coffee break

11:15 **Session 5: Governance beyond technology: risk-based data protection, sovereignty and statistical disclosure**

As data ecosystems become more interconnected and technologically sophisticated, ensuring privacy and security increasingly depends on effective governance rather than technology alone. This session examines how institutions can manage privacy risks, strengthen digital and decision sovereignty, and control disclosure risks through robust governance arrangements and methodological safeguards. The presentations highlight the growing importance of integrating legal, organisational and analytical perspectives to support trustworthy and resilient data ecosystems.

Chair: Maria João Zilhão – Member of the Board, Instituto Nacional de Estatística

- ***Quantitative risk assessment for data privacy: probabilistic modelling and governance thresholds*** (Ronald Rethabile Malamule Mahomane – University of KwaZulu-Natal (South Africa) / University of Namibia)
- ***The algorithmic watchtower: realizing "decision sovereignty" through active metadata governance in Indonesia's central banking ecosystem*** (Ihsan Aviangga Putra, Ringga Ardiansyah, Taufiq Ejaz Ahmad, Rahmat Reza Masri* – Bank Indonesia)
- ***The cell-key-method in a flexible user-facing environment*** (Matthias Rumpf – Cantabular)

12:30 Lunch break

14:00 **Panel discussion: Data regulation and technological innovation - can we keep up?**

This roundtable will reflect on whether current regulatory frameworks are keeping pace with rapid technological innovation in data use and analytics. It will explore the tensions between safeguarding privacy and enabling innovation, as well as the role of regulators, institutions and technology developers in shaping this balance. Looking ahead, the discussion aims to identify key priorities for ensuring that data regulation remains effective, adaptive and supportive of innovation in an increasingly complex digital landscape.

Chair: Pedro Rodrigues – Banco de Portugal

Panellists: Johannes Turner – Regnology

Luís Antunes – Competence Centre in Cybersecurity and Privacy at the University of Porto

Lino Santos – Portuguese National Cybersecurity Centre

15:30 Closing remarks

Álvaro Santos Pereira – Governor of the Banco de Portugal

15:45 End of the workshop