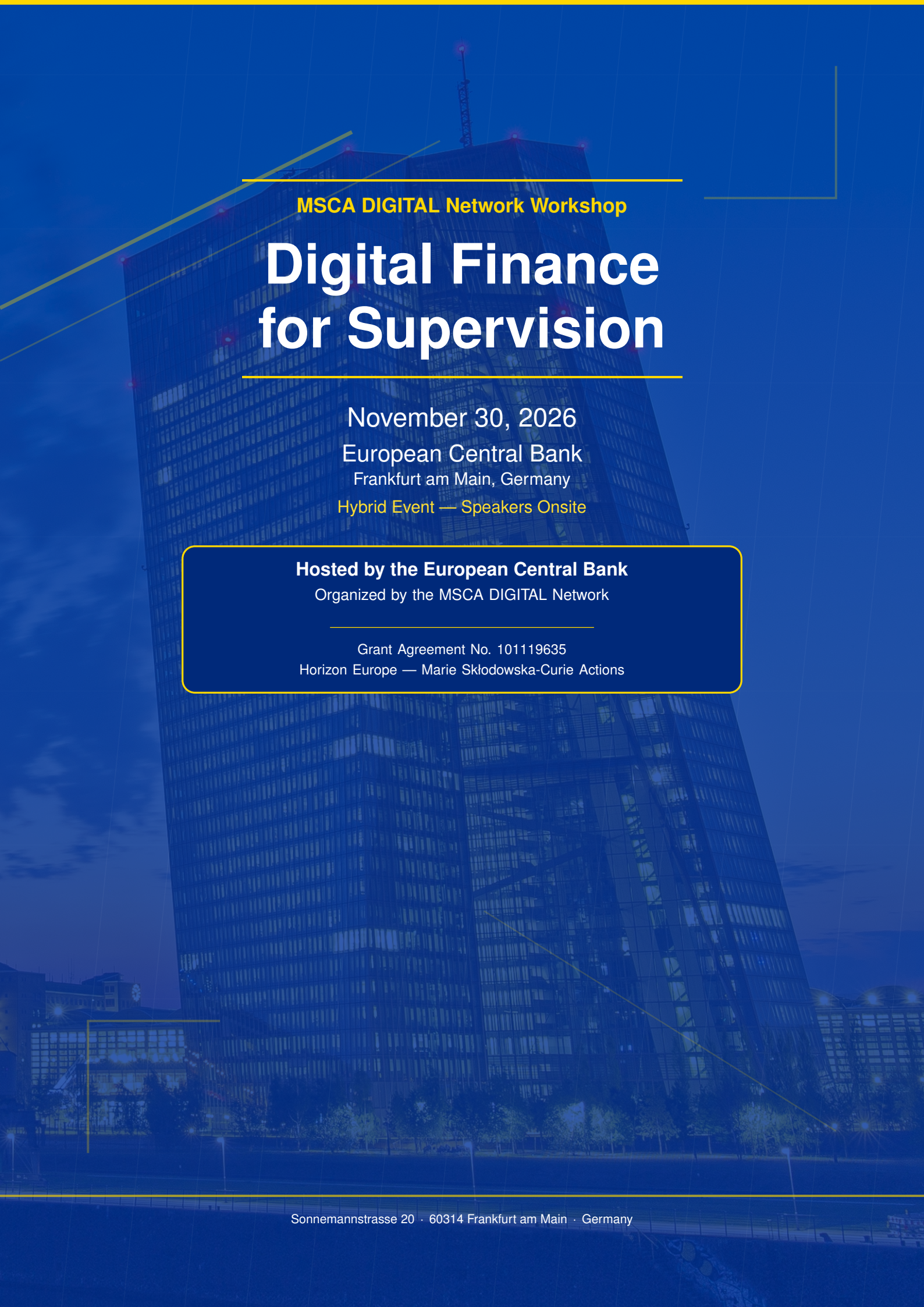

MSCA DIGITAL Network Workshop

Digital Finance for Supervision

November 30, 2026

European Central Bank

Frankfurt am Main, Germany

Hybrid Event — Speakers Onsite

Hosted by the European Central Bank

Organized by the MSCA DIGITAL Network

Grant Agreement No. 101119635

Horizon Europe — Marie Skłodowska-Curie Actions

Sonnemannstrasse 20 · 60314 Frankfurt am Main · Germany

Welcome

A letter from the co-chairs

Dear colleagues and friends,

It is our great pleasure to welcome you to the **Digital Finance for Supervision** workshop, hosted at the **European Central Bank** in Frankfurt am Main on November 30, 2026. This hybrid event — with all speakers presenting onsite and remote participation available via live stream — brings together ECB supervision experts with researchers from the MSCA DIGITAL network to explore how artificial intelligence, machine learning, and natural language processing are transforming the landscape of banking supervision.

The **DIGITAL network** — funded by the European Union's Horizon Europe programme under the Marie Skłodowska-Curie Actions — unites 22 partner institutions from across Europe, including universities, central banks, financial institutions, and technology companies. Our shared mission is to advance the frontiers of digital finance research while training the next generation of researchers who can navigate both the technical and regulatory dimensions of financial innovation.

Today's workshop focuses on three interconnected research themes: AI/ML applications for bank supervision, NLP for regulatory reporting, and the emerging role of large language models in supervisory processes. We have assembled a programme featuring two 30-minute keynote addresses, eight contributed research presentations, and panel discussions designed to bridge the gap between cutting-edge academic research and real-world supervisory practice. We particularly welcome contributions from PhD students and early-career researchers.

We are particularly grateful to the ECB for hosting this event and for the active engagement of ECB staff in both the organization and the intellectual programme. We encourage you to engage actively in the discussions, connect with fellow researchers and practitioners, and explore opportunities for collaboration.

Theodoros Mastrokostopoulos

ECB Lead Organizer

European Central Bank

Joerg Osterrieder

DIGITAL Network Coordinator

University of Twente

Workshop Themes

1. AI/ML for Bank Supervision — Predictive models, anomaly detection, and automated risk scoring for supervisory oversight.
2. NLP for Regulatory Reporting — Automated analysis of filings, sentiment analysis, and compliance monitoring through text.
3. LLMs in Supervision — LLM-assisted review, generative AI for assessments, and question-answering for regulatory frameworks.

About the Workshop

The **Digital Finance for Supervision** workshop brings together researchers from the MSCA DIGITAL network and supervision practitioners from the European Central Bank to explore how artificial intelligence, natural language processing, and large language models are reshaping financial supervision across Europe. This hybrid half-day event — with speakers presenting onsite and remote participation via live stream — features keynote presentations, research sessions, and panel discussions designed to foster meaningful dialogue between academia and supervisory practice. PhD students and early-career researchers are especially encouraged to participate and contribute.

30+	8	2	19+
PARTICIPANTS	RESEARCH TALKS	KEYNOTES	PARTNER INSTITUTIONS

Important Dates

Call for Papers Deadline	**September 15, 2026**
Notification of Acceptance	**October 1, 2026**
Registration Deadline	**November 1, 2026**
Workshop	**November 30, 2026**

https://digital-ai-finance.github.io/digital-finance-supervision/

Who Should Attend?

- Central bank supervisors and SupTech specialists
- Researchers in supervisory technology and digital finance
- Digital finance academics and PhD students
- Data scientists working in financial regulation
- Policy makers in banking supervision and fintech

Registration is free of charge — funded by the MSCA DIGITAL Network (GA 101119635).

Program at a Glance

Monday, November 30, 2026 · Hybrid (speakers onsite)

10:00	*Registration & Welcome Coffee*
10:15	**Opening Remarks** — Welcome by ECB and DIGITAL Network representatives
10:30	**Keynote 1** — Invited keynote on AI/ML in bank supervision (30 min, Speaker TBA)
11:00	**Research Session 1: AI/ML for Bank Supervision** 11:00 – Talk 1 · 11:15 – Talk 2 · 11:30 – Talk 3 · 11:45 – Talk 4
12:00	*Lunch Break & Networking*
13:00	**Keynote 2 / Panel: LLMs in Supervision** (30 min, Speaker TBA)
13:30	**Research Session 2: NLP & SupTech Applications** 13:30 – Talk 5 · 13:45 – Talk 6 · 14:00 – Talk 7 · 14:15 – Talk 8
14:30	**Panel Discussion: The Future of Digital Supervision** Moderated discussion with ECB experts and network researchers
14:50	**Closing Remarks** — Summary and outlook by workshop co-chairs

Session Format

Each research session features 4 presentations of 15 minutes each (8 talks total). Speakers and titles will be confirmed after the call-for-papers review process. Submissions are welcome on all three workshop themes. PhD students and early-career researchers are especially encouraged to submit.

Networking Opportunities

The one-hour lunch break provides an excellent opportunity for informal discussions between ECB supervisors, academic researchers, and industry partners. Take advantage of this unique setting at the European Central Bank to build connections across the supervisory technology community.

Organizing Committee

Co-Chairs

Theodoros Mastrokostopoulos
ECB Lead Organizer
European Central Bank
Senior expert at the ECB working on supervisory technology and digital finance innovation.

Joerg Osterrieder
DIGITAL Network Coordinator
University of Twente
Professor and Coordinator of the MSCA Doctoral Network on Digital Finance. Expert in quantitative finance, ML, and digital finance.

Committee Members

TM

Theodoros Mastrokostopoulos
European Central Bank

EM

Eva Morin
European Central Bank



Joerg Osterrieder
DIGITAL Coordinator
University of Twente



Daniel Pele
Committee Member
ASE Bucharest



Wolfgang Haerdle
Committee Member
HU Berlin / WU Wien



Maria Iannario
Committee Member
University of Naples Federico II



Codruta Mare
Committee Member
Babes-Bolyai University



Claudia Tarantola
Committee Member
University of Milan



Alessandra Tanda
Committee Member
University of Insubria

About the MSCA DIGITAL Network

The DIGITAL network (Digital Finance — Reaching New Frontiers) is a Marie Skłodowska-Curie Actions Industrial Doctoral Network funded by Horizon Europe. It unites 19 partner institutions across Europe — universities, central banks, financial institutions, and technology companies — to advance digital finance research and train the next generation of researchers at the intersection of finance and technology.

Research Topics

The workshop focuses on three interconnected research themes at the frontier of supervisory technology.

1. AI/ML for Bank Supervision

Application of artificial intelligence and machine learning techniques to enhance banking supervision and regulatory oversight.

- Predictive models for identifying risks in supervised entities
- Anomaly detection in financial reporting data
- Automated risk scoring and early warning systems
- Machine learning for stress testing and scenario analysis
- AI-driven assessment of bank business models

2. NLP for Regulatory Reporting

Natural language processing applied to regulatory documents, compliance monitoring, and supervisory communication.

- Automated analysis of regulatory filings and disclosures
- Text mining of supervisory reports and assessments
- Sentiment analysis of central bank communications
- Information extraction from annual reports and prospectuses
- Compliance monitoring through textual analysis

3. LLMs in Supervision

Large language models and generative AI for supervisory processes and regulatory technology.

- LLM-assisted review of regulatory documentation
- Generative AI for drafting supervisory assessments
- Question-answering systems for regulatory frameworks
- Summarization of complex financial documents
- Ethical considerations and hallucination risks in supervisory AI

Submit Your Research

Extended abstracts (2–4 pages) due **September 15, 2026**

PhD students and early-career researchers especially welcome. Submit via email to joerg.osterrieder@utwente.nl

Venue & Practical Information

European Central Bank

The workshop takes place at the European Central Bank's main building in Frankfurt am Main. The ECB's striking modernist architecture, designed by Coop Himmelb(l)au, rises above the former Grossmarkthalle on the banks of the River Main. The building serves as the headquarters for euro area banking supervision and monetary policy.

Address: Sonnemannstrasse 20, 60314 Frankfurt am Main, Germany

Website: https://www.ecb.europa.eu

Getting There

- **Frankfurt Airport (FRA):** 15 km from the ECB. Direct S-Bahn connection (S8/S9) to Ostendstrasse station, approx. 25 minutes.
- **Frankfurt Hauptbahnhof:** Central train station, well connected by ICE/IC. Take U4 (Enkheim) or tram 11 to Ostendstrasse.
- **Public Transport:** Nearest stations: Ostendstrasse (S-Bahn, U-Bahn, Tram) and Osthafenbrücke (Tram). Walking distance approx. 5–10 minutes.

Accommodation

Several hotels are conveniently located near the ECB and in Frankfurt's city center. We recommend booking early as Frankfurt is a busy business destination. Hotels in the Ostend district and along the Main riverfront offer the closest proximity to the venue.

Practical Details

Language:	English
Registration:	Free of charge (grant-funded)
Lunch:	Provided for all registered participants
WiFi:	Available on-site (details at registration desk)
Security:	Valid ID/passport required for ECB building access
Time:	10:00 – 15:00 CET

Contact: joerg.osterrieder@utwente.nl

Please register in advance — ECB security requires a pre-approved visitor list.

Partner Institutions

Beneficiary Partners

Institution	Country
University of Twente (Coordinator)	Netherlands
WU Vienna University of Economics and Business	Austria
University of Naples Federico II	Italy
Kaunas University of Technology	Lithuania
Bucharest University of Economic Studies	Romania
Babes-Bolyai University	Romania
Cardo AI	Italy
Poznan University of Economics and Business	Poland
University of Pavia	Italy
University of Milan	Italy
Bern University of Applied Sciences	Switzerland

Associated Partners

Institution	Country
European Central Bank	Germany
Deutsche Bank	Germany
Raiffeisen Bank International	Austria
Swedbank	Lithuania
Fraunhofer Institute for Industrial Mathematics	Germany
EIT Digital	Belgium
Athena Research Centre	Greece
Royalton Partners	Luxembourg

Funding Acknowledgment

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Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Research Executive Agency. Neither the European Union nor the granting authority can be held responsible for them.

Why Attend?

Gain first-hand insight into how the ECB applies digital tools to banking supervision. Network with leading researchers and practitioners. Explore collaboration opportunities across the DIGITAL network's 19 partner institutions spanning 12 European countries. Remote participation available via live stream.

Digital Finance for Supervision

MSCA DIGITAL Network Workshop
European Central Bank
November 30, 2026

Scan to Visit the Workshop Website
https://digital-ai-finance.github.io/digital-finance-supervision/

Sonnemannstrasse 20, 60314 Frankfurt am Main, Germany
Contact: joerg.osterrieder@utwente.nl
November 30, 2026 · 10:00 – 15:00 CET

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Horizon Europe · Marie Skłodowska-Curie Actions