

Korea-EU Horizon Europe Researchers Networking Forum on Energy & Advanced Mobility

- **Mathieu Saraiva, EU Funding Expert, MSPAC (BE)**
- **Dr. Zhengmao Li, Aalto University, Multi-energy System Planning and Operation Research Group (FI)**



1. Our Co-Coordination Setup

MS Public Affairs Consulting SRL

MS Public Affairs Consulting SRL (MSPAC) is a Brussels-based EU funding consultancy specialised in proposal preparation and financial / admin coordination of projects under Horizon Europe and related EI programmes.

MSPAC acts as administrative co-coordinator for consortia.



Aalto University

Multi-Energy System Planning & Operation (MESPO) Group

The MESPO group focused on integrated energy system planning & operations. Research themes include multi-energy systems (electric, thermal, gas networks), uncertainty modelling, resilience, algorithm development (stochastic/robust optimisation, reinforcement learning).

In the 2026 QS World University Rankings, Aalto is ranked #114 globally





2. Two Complementary Expertises

Mathieu SARAIVA
Admin Coordinator



- Consortium building
- Administrative coordination
- Budget preparation
- Part B writing
- Impact and D & E & C strategy

+5 years experience in Horizon Europe proposal preparation & funded projects implementation

Dr. Zhengmao LI
Scientific Lead



- Technical lead and methodological design
- System modelling, simulation, real world validation
- Integration of optimisation algorithms into digital twins or decision-support tools
- Supervision of R&I tasks and peer-review of outputs.

58 papers, 2 books, and 2 patents. 10 highly cited papers (7 first-authored, Top 1%) and 2 hot papers (Top 0.1%)



3. Our Project Ideas: Two Distinct Proposals

PROPOSAL 1

HORIZON-CL5-2026-02-D3-18 Next generation distribution substation for increasing the system resilience. Develop / pilot an AI-enabled multi-energy distribution substation integrating electricity, heat, and H2 networks. It will coordinate distributed assets (e.g. storage, renewables, H2) to sustain resilient operation under grid disturbances or climate-induced shocks. Build on MESPO expertise in robust optimisation, safe AI control, and digital-twin-based operation to enable adaptive, secure substations supporting future-proof distribution networks.

PROPOSAL 2

HORIZON-CL5-2026-02-D3-19 Innovative solutions for a generative AI-powered digital spine of the EU energy system. Develop / pilot a GenAI digital twin that learns the behaviour of integrated electricity-heat-hydrogen systems and autonomously proposes optimal operational strategies. Build on MESPO expertise in multi-energy modelling, safe deep reinforcement learning, and robust stochastic programming ensures that the “digital spine” achieves resilient, explainable, and secure system-wide optimisation under uncertainty.

Deadline date: 17 Feb 2026 (both proposals)



4. Profile We are Seeking

- **Academic groups in power systems and AI** => bring co-design methods
- **System operators and utilities** => real data and pilots, operational realism, pathways to replication
- **Technology providers and OEMs** => solutions integration, validation at scale, advance TRL from 4-5 to 6-7
- **Digital and data experts** => architecture backbone, interoperability, data quality and governance
- **Cyber and safety experts** => trust, resilience, safety-by-design approaches
- **SSH, market and policy researchers** => viable business models, regulation fit, credible impact
- **Pilot hosts (cities, campuses, industrial sites)** => real world diverse contexts, KPIs, validity
- **Standards and ecosystem actors (clusters, associations)** => dissemination, impact



5. Contact Details

FOR ALL PRESENTERS

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