



21st
International
Conference on
Operational
Research

September 23-25, 2026,
Brela Croatia

CALL FOR PAPERS FOR SPECIAL SESSION

Quantitative Modelling of Resilience and Sustainability in Organizations and Socio-Economic Systems

CHAIRS

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SESSION SUBJECT

This special session focuses on quantitative approaches for understanding, measuring and improving resilience and sustainability of organizations and wider socio-economic and socio-technical systems in an era of increasing uncertainty, volatility and disruption. In recent years, organizations and societies have been exposed to multiple and often overlapping shocks – economic crises, pandemics, geopolitical instability, climate-related events and technological disruptions, which challenge their ability to withstand, adapt to and recover from adverse events while maintaining long-term sustainability.

Against this background, the session aims to bring together methodological and applied contributions that support evidence-based analysis and decision-making for resilient and sustainable systems. We welcome papers that develop decision-support models, resilience and sustainability metrics and indicators, predictive and early-warning analytics, insolvency, failure-risk and recovery models, quantitative modelling of resilience under disruptive events, as well as optimization and simulation frameworks for designing robust and adaptive strategies and policy and decision-support systems.

METHODS (NON-EXHAUSTIVE)

The session welcomes contributions using a broad range of quantitative methods, including:

- statistical and econometric modelling (including causal inference and panel data methods),
- machine learning and artificial intelligence (supervised and unsupervised learning, forecasting, natural language processing),
- operations research and optimization (stochastic, robust and multi-objective optimization),
- simulation and scenario analysis (e.g. discrete-event, agent-based and system dynamics),
- network and system modelling,
- structural equation modelling and latent variable approaches,
- multi-criteria decision analysis and decision-support methods for evaluating trade-offs between resilience, sustainability and performance.

APPLICATION DOMAINS (NON-EXHAUSTIVE)

Applications may span a wide range of domains, including:

- small and medium-sized enterprises and entrepreneurship,
- supply chains, operations and logistics,
- finance, risk management and financial stability,
- public services, public policy and governance,
- healthcare systems and services,
- energy systems and sustainability transitions,
- smart cities, urban systems and digital services,
- tourism and service industries.

IMPORTANT NOTES

DEADLINES

June 14, 2026 - submission of abstract

July 1, 2026 - notification of acceptance

August 25, 2026 - registration & fee payment

When submitting the paper, please, select: [Quantitative Modelling of Resilience and Sustainability in Organizations and Socio-Economic Systems](#).

We look forward to welcoming you from September 23-25, 2026 at Bluesun
Hotel Soline in Brela, Croatia.
You can find detailed information at: hdoi.hr/koi-2026/

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