TRACK: Infrastructure, Utilities and Economic Systems

International Conference on Resilient Systems

ICRS 2026 Delft, the Netherlands, 23-25 March, 2026

INTRODUCTION TO THE TRACK

This track focuses on the disaster resilience of infrastructure, utilities, businesses and macroeconomic sectors, emphasizing the interconnected nature of services and their critical role in modern society. Recent natural hazards have highlighted the profound indirect impacts of disasters, including service interruptions affecting citizens and severe disruptions to businesses. These cascading effects underscore the importance of understanding and enhancing resilience at the intersection of infrastructure, services, and economic actors.

Current research in this domain is often siloed, with a predominant focus on direct impacts to physical infrastructure rather than broader impacts, including for example service continuity or the wider implications of supply chain disruptions. Additionally, existing data collection methods such as post-event surveys, earth observation-based risk assessments are not designed to capture the nuanced relationships between service providers, end-users, and businesses, nor the duration and impact of service interruptions. This gap in knowledge and data calls for a more integrated approach to disaster resilience that bridges utilities, business processes, and exposure databases.

By running this track, we aim to foster dialogue and innovation in addressing these challenges. We invite researchers and practitioners to present insights and solutions that support the development of resilient service systems, addressing both immediate disaster responses and long-term strategies towards climate resilient systems. The track aligns closely with the conference's mission of exploring resilient systems, contributing unique perspectives on service and economic interdependencies.

TRACK TOPICS

This track call for extended abstracts (1.000 words) across themes divided in four topics:

1. Resilience of utilities (presentations): research focused on ensuring the continuity of service delivery, with an emphasis on the structural resilience of infrastructure and its operational implications during disasters.

2. Economic resilience (presentations): studies addressing the economic impacts of disasters on Businesses Interruption (BI) and Contingent Business Interruption (CBI), including disruptions to supply chains and balance sheets, and exploring strategies to enhance continuity.

3. Climate adaptation (presentations): research focused on developing climate adaptation to improve the resilience of supply chains and critical infrastructure systems. This may range from technical innovations to operational measures to improve the overall system resilience.

4. Real-world case studies (round table): explore real-world case studies that demonstrate innovative approaches that exploit systems thinking to improve exposure datasets, incorporating service connections, actor relationships, and interruption durations to better support resilience analysis and planning.

In addition to these sessions, the track will explore methods, case studies, and tools that address the intersection of utilities and business systems under natural hazard scenarios.

TYPE OF CONTRIBUTIONS:

1. **Call for Extended Abstracts** (1.000 words) - see website for the template.

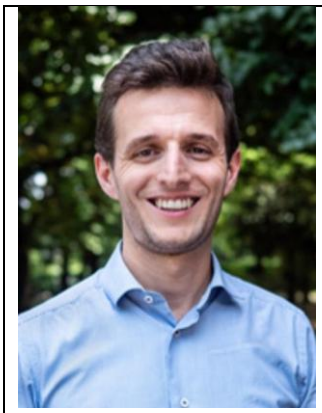
    Including the possibility of submitting a Case Study - in this same template

3. **Call for Pitches** (500 words) - see website for the template

    The pitches (5 min.) will serve as the starting point for round table discussions among stakeholders, policy makers, and researchers."

TRACK CHAIR AND CO-CHAIR

This track will engage a diverse network of researchers and practitioners, including experts in disaster resilience, infrastructure management, supply chain economics, and data systems. Potential authors will be attracted through targeted outreach leveraging the professional networks of the co-chairs and reviewers. Contacts with utility providers (e.g., energy, communication, road), business organizations (e.g., insurance/re-insurance), and knowledge institute (e.g., GEM foundation, Deltares) will be encouraged to ensure a wide array of contributions.



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