INITIAL PROGRAMME OUTLINE - JOINT MEETING
15TH CONFERENCE ON NATURALISTIC DECISION MAKING AND
9TH SYMPOSIUM ON RESILIENCE ENGINEERING

21-24th June 2021, France

Bouncing forward from global crises and challenges
Rethinking and guiding adaptations based on Resilience Engineering and Naturalistic Decision Making

Vision - An organic programme that evolves with participants' contributions

A programme that could be picked up by managers or operational personnel from diverse businesses, government and communities to look at the agenda and see benefit to their organisation. The academics to see benefit to their research in attending. This version presents a preliminary programme around key themes. So potential speakers and contributors could offer presentations and interactive sessions. We actively seek speakers and contributors from industry, governments, communities and academia for successful and less successful case studies.

Themes

Global crises and their reverberations, challenges and increased digital transformation are calls for society to adapt and bounce forward. Adaptation needs are everywhere, at systemic, organisational, and societal levels, as well as at individual and community levels. It is urgent to rethink and guide innovative forms of adaptation. Overall the event explores how RE and NDM are distinct and can complement each other as rich source of inspiration for such adaptations. Based on current inputs, the event covers the following themes:

- New thinking and ideas e.g. is bet hedging necessary as a coping strategy with a surprise event; exploring overlap and complementarities between NDM and RE, Safety II and Safety Differently

- Societal resilience: contributions from RE and NDM, is there a need for other disciplines? Investigate how to support better expert behavior and team performance, integration of RE and NDM with existing practices

- Organisational resilience: how can organisations strenghten their resilient performance? NDM, RE and other perspectives methods, tools and practices

- Challenges and opportunities associated to development, introduction, management and operation of emergent technologies (machine learning, artificial intelligence, data spaces, UAV, cybersecurity) e.g. how to deal with unexpected situations, managing of trade-offs

- Gap between theory and practice: how methods and tools are introduced, adapted and adopted in practice, e.g. experiments and experiences around Funtional Resonance Analysis Method (FRAM), Resilience Analysis Grid, Training for Operational Resilience Capabilities, Cognitive Task Analysis

- Everyday practices e.g. coordination among experts combining skills and technologies; decision making and performance improvements

Naturalistic Decision Making
Resilience Engineering Association
Fondation pour une Culture de Sécurité Industrielle
Institut pour une Culture de Sécurité Industrielle

NDM, REA, FONCSI, ICSI

- Training and learning, e.g. training for resilience and fast paced decision making across individuals, teams and organisations; learning effectively from experts and spread the expertise to more people (how can I learn more effectively from my collagues – tacit knowledge)

- COVID, remote work and other forms of change: look at challenging situations combining science and practical experience, what can we learn to move forward? COVID-19 has forced organisations to adapt. New capabilities have been discovered and enabled. How can institutions leverage this crisis to sustain key adaptive capabilities beyond this pandemic?

- COVID across contexts: case studies e.g. use of resilience potentials. Was the difference in anticipation (preparedness for a major disruption)? Monitoring (saw the problem coming and reacted quickly)? Response (simply better organised to respond)? Learning (previous experience of SARS led to learning)

- Cases studies where systems are challenged to deliver services examples from diverse context (extreme weather) and domains domains e.g. software services, energy, mobility, communications, finance government

Interactions

- Workshops where the audience can offer challenges and solutions discovering benefits together practitioners and academics

- Industry needs and challenges regarding safety management : is industry ready to adopt new perspectives? Day 2 workshop organized by FONCSI

- "Speed dating" for different RE and NDM topics – we have a number of "tables" on different topics where academics and industry people can mingle

- Networking - Members to have a chance to shine a balance contribution promoting diversity and inclusion

- Emerging Talents contribute to explore overlaps across perspectives beyond their core research

Not covered – out of the scope

- Solely Safety I or Risk management in isolation

- Loads of academic presentations with niche ideas that interest one community only. All speakers are challenged to be open to explore diverse perspectives.

- Analyses of big accidents and critical incidents without any insights on everyday challenges and adaptation

After the event

Results are co-created and documented to help attendees to bounce-forward. Each speaker would be invited to contribute with their thoughts based on their presentation/ panel after the conclusion of the Symposium.