Program of the session presentations

Thu2 THURSDAY NOVEMBER 2, 11.00 – 12.30

Thu2.1 Risk analysis and assessment, modelling and scenarios

Hall: STAGE

Chair Jan-Erik Holmberg

Thu2.1.1 Adversarial risk analysis for simulation-based assessment of weapon (J. Roponen, A. Salo, D. Rios Insua)

Thu2.1.2 Practical modelling approach for assessing cascading effects of critical infrastructures (A. Helminen, T. Hakkarainen)

Thu2.1.3 Influence of risk scenarios in port operations on supply chain resilience (H. Thorisson, J. H. Lambert)

Thu2.1.4 Oil spill risks and coastal biota: a spatial risk assessment in the Gulf of Finland (I. Helle, A. Jolma, R. Venesjärvi)

Thu2.1.5 Creation of believable safety cases for safety-critical digital I&C (J-E. Holmberg, B. Wahlström)

Thu2.2 Risk and Crisis Management

Hall: STUDIO

Chair Igor Kozine

Thu2.2.1 Risk management practice in construction: Case study Landssimareitur, Reykjavik (M. Tegeltija, I. Kozine, B. J. Gunnarsson)

Thu2.2.2 The Challenges of Risk Management of the Critical Traffic Infrastructure (M. Turunen)

Thu2.2.3 Chaos and Complexity: Accepting the Challenges of 21st Century Crisis Management (D. Rubens)

Thu2.2.4 Vulnerability of critical infrastructures and operational capability of authorities (O. Heino, P. Verho, J. Kalalahti, P. Jukarainen, T. Kekki)

Thu2.2.5 The evolving role of science for risk analysis: a transatlantic study (F. Bouder)

Thu2.3   Ethical aspects and regulation of security risks

Hall: ENGINE ROOM

Chair Marja Ylönen

Thu2.3.1 Security at chemical facilities – overview of different regulatory approaches taken in EU Member States (F. Huess Hedlund)

Thu2.3.2 Biosecurity of Synthetic Biology and Genome Editing (M. Ahteensuu)

Thu2.3.3 Discourse analytic approach to the concepts of security and safety (K. Telaranta)

Thu2.3.4 The Customs - an important contributor to security? (R. S. Folgerø, L. K. Stene)

Thu2.3.5 Technology and Society at Automated Borders: Risk of Discrimination and Fundamental Rights (G. Sanchez Nieminen, V. Ikonen)

Thu4 THURSDAY NOVEMBER 2, 15.15 – 17.15

Thu4.1   Cyber security and security intelligence (A)

Hall: STAGE

Chair Jan-Erik Holmberg

Thu4.1.1 Active mitigation support against advanced persistent threat risk (I. Karanta, M. Rautila)

Thu4.1.2 Industrial Cyber Risk and assessing it in real world (Sectra Communications / CI) (L. Haapamäki)

Thu4.1.3 Managing cyber and physical risk of water entities (L. Poussa, H. Pentikäinen, S. Noponen, T. Välisalo, R. Molarius)

Thu4.1.4 Risk assessment of machinery system with respect to safety and cyber security (T. Malm, T. Ahonen, T. Välisalo)

Thu4.1.5 Systematic Security Intelligence Approach – A method developing to prevent loss of knowledge (P. Gustafson)

Thu4.2   Mapping and communicating risks and threats

Hall: ENGINE ROOM

Chair Susanna Öhman

Thu4.2.1 Methods for National Level Risk Mapping (K. Giritli Nygren, S. Öhman and A. Olofsson)

Thu4.2.2 Internet of Things – Threats and opportunities for Finnish society and companies (H. Kortelainen, T. Uusitalo, J. Hanski)

Thu4.2.3 Agency Risk communication: the Swedish case of radon (R. Löfstedt)

Thu4.2.4 Managing novel technology induced risks via stakeholder cooperation (R. Molarius)

Thu4.2.5 Best practices to improve maritime safety in the Gulf of Finland: a risk

Thu4.2.6 governance approach (P. Haapasaari, I. Helle, A. Lehikoinen, J. Lappalainen, S. Kuikka)

Anxiety as a Psychological Background of the Fear of Crime (J. Burianek)

Thu4.3   Bayesian approach: applications and experiences from different fields

Hall: STUDIO

Chair Sakari Kuikka

Thu4.3.1 Generalized Bayesian Analysis to quantify quality in evidence by imprecision (I. Raices Cruz, U. Sahlin, M. Troffaes, J. Lindström, N.-E. Sahlin)

Thu4.3.2 On Practical Applicability of Ranked Nodes Method for Constructing Conditional Probability Tables of Bayesian Networks (P. Laitila)

Thu4.3.3 Bayesian networks for scenario analysis of nuclear waste repositories (E. Tosoni, A. Salo, E. Zio)

Thu4.3.4 Practical experiences in applying Bayesian decision models to fisheries and environmental problems: lessons learned (S. Kuikka)

Thu4.3.5 A Bayesian approach for dynamics portfolio optimization of safety barriers (A. Mancuso, M. Compare, A. Salo, E. Zio)

Thu4.4   Analysing and mitigating environmental and climate risks

Hall: **URBAN MILL,** Building behind the Design Factory

Chair Igor Kozine

Thu4.4.1 Extreme climate events in a Hydropower station studied with a Bayesian Network approach (H. D. Estrada-Lugo)

Thu4.4.2 Risk management and political influence in the face of future climate change (A. Beijer Lundberg)

Thu4.4.3 Mitigating the risk and assessing the impact of extreme weather on critical infrastructure (M. Räikkönen, R. Molarius, K. Mäki, K. Forssén, A. Tagg, P.J Petiet.)

Thu4.4.4 Cost-effective greenhouse gas abatement measures on dairy farms analysed with Bayesian decision support tools (S. Nisonen)

Thu4.4.5 Combining exploratory scenarios and Bayesian belief network to analyse the sustainability of Baltic herring and salmon fisheries (M. Pihlajamäki, A. Lehikoinen, P. Haapasaari, S. Sarkki)

Fri2 FRIDAY NOVEMBER 3, 13.10 – 14.40

Fri2.1   Analysing and managing environmental and climate risks

Hall: **STAGE**

Chair Sakari Kuikka

Fri2.1.1 The signal crayfish and the Swedes – the story of a risk management that went wrong (U. Sahlin)

Fri2.1.2 To eat or not to eat? A systems analytic approach to evaluate the sustainable use of the dioxin-rich Baltic herring and salmon (A. Lehikoinen, L. Ronkainen, P. Haapasaari)

Fri2.1.3 The role of recorded, quantitative impact data in national risk assessments (K. Pilli-Sihvola)

Fri2.1.4 Political conflicts and errors in databases on protected areas (M. Blasi, C. Danelutti, M. Valderrabano)

Fri2.1.5 Climate change mitigation strategy under uncertainty and learning on climate sensitivity and damages (T. Ekholm)

Fri2.2   Risk perceptions and societal aspects

Hall: STUDIO

Chair Marja Ylönen

Fri2.2.1 Environmental risks in urban infrastructure projects: stakeholders' perceptions and public participation in environmental compensation planning in Lithuania (A. Balžekienė)

Fri2.2.2 Riskisation as a driver of regionalisation in the Asian-Arctic - Case - Chinese Multi-Level Actors (L. Kauppila, S. Kopra)

Fri2.2.3 Unlocking the Potentials of Youth Social Movements to Foster Societal Resilience (Z. N. Tag Eldeen)

Fri2.2.4 Enhancing Risk Perception by Seafarers and Cruise Ship Passengers in the Arctic Ocean (S. Kirchner)

Fri2.2.5 Social Indicators of Security and Risk Perceptions (R. Kachef)

Fri2.2.6 Findings of safety assurance of fuel cell and other hydrogen based applications - legislation and safety analysis (J. Sarsama, M. Nissilä)

Fri2.3   Emotions, risk perceptions and thought errors

Hall: ENGINE ROOM

Chair Tapio Litmanen

Fri2.3.1 The security trap: when feeling safe isn't being safe (C. Bennett)

Fri2.3.2 Emotional Reactions to Climate Change: A Comparison Across Norway, Great Britain, Germany, and France (G. Böhm, C. Mays, K. Steentjes, E. Tvinnereim, H.-R. Pfister)

Fri2.3.3 Risk assessment, disabled people and self-experiences of falling in residential areas in Sweden – learnings from qualitative interviews (J. Lundälv)

Fri2.3.4 Human thought errors – the ultimate risk factor (P. Saariluoma)