European Safety, Reliability & Data Association

Newsletter

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Forthcoming ESReDA SEMINARS

The 52nd ESReDA Seminar

30-31 May, 2017 Kaunas, Lithuania The 52nd ESReDA Seminar on Critical Infrastructures: Enhancing Preparedness & Resilience for the Security of Citizens and Services Supply Continuity

will be held on the 30th-31st May, 2017 and hosted by the <u>Lithuanian Energy Institute</u> and <u>Vytautas Magnus University</u>. It is the 2nd seminar organised by ESReDA Project Group CI-PR/MS&A-Data on the "Critical Infrastructure/Modelling, Simulation and Analysis – Data". The main focus of the project group is to report on the state of progress in MS&A of the CIs preparedness & resilience with a specific focus on the corresponding data availability and relevance. More information about the Project Group goals is available on ESReDA website.

Critical Infrastructures Preparedness and Resilience is a major societal security issue in modern society. Critical Infrastructures (CIs) provide vital services to modern societies. Some CIs' disruptions may endanger the security of the citizen, the safety of the strategic assets and even the governance continuity. The critical role that CIs play in the security of modern societies is a direct effect of the ever-increasing spread out of the information technology (IT) in every smallest task in man's daily-life. The continuous progress in the IT fields pushes modern systems and infrastructures to be more and more: intelligent, distributed and proactive. That increases the productivity, the prosperity and the living standards of the modern societies. But, it increases the complexity of the systems and the infrastructures, as well. The more complex a system is, the more vulnerable it will be and the more numerous the threats that can impact on its operability. The loss of operability of critical infrastructures may result in major crises in modern societies. To counterbalance the increasing vulnerability of the systems, engineers, designers and operators should enhance the system preparedness and resilience facing different threats. Much interest is currently paid to the Modelling, Simulation & Analysis (MS&A) of the CI in order to enhance the CIs' preparedness & resilience.

The 52nd ESReDA Seminar covers the following topics: threats identifications & specifications, CIs disruptions MS&A, CI's vulnerability MS&A, CIs' dependencies and interdependency MS&A, Data and Databases, Emergency and crises management models & tools, IT inferences on CIs preparedness & resilience, Standards & Ontology in the domain of CI protection for various CIs sectors.

Three distinguished speakers are invited to share their experiences in the field with ESReDA and CIP Communities:

- Dalius Labanauskas, Head of National Security and Crisis Management Unit, Government of the Republic of Lithuania, Lithuania;
- Dr. Artūras Petkus, Head of Strategic Analysis Division, NATO Energy Security Centre of Excellence, Lithuania;
- Dr. Jolanta Čyžienė, Deputy Director, Lithuanian Geological Survey, under the Ministry of Environmental, Lithuania.

A draft of programme will be available before the middle of April on <u>ESReDA website</u>. Registration is opened, registration form is available: <u>click to download</u>. Other practical details on the 52nd ESReDA Seminar are on the following link.



Forthcoming ESReDA SEMINARS

The 53rd ESReDA Seminar

14-15 November, 2017 Ispra, Italy

The 53rd ESReDA Seminar on Enhancing Safety: the Challenge of Foresight

be held on the 14th-15th November, 2017 and will be hosted by Joint Research Centre Institute for the Protection and Security of the Citizen, Ispra (Italy) with the support of JRC Institute for Energy and Transport (Petten, The Netherlands). This seminar is organised with the support of the ESReDA Project Group "Foresight in Safety" that was launched in 2015. More information about the Project Group goals is available on ESReDA website.















The analysis of the major accidents and crises has shown that there were always early warning signs that could have been heeded and used as valuable information to design "relevant tools" and proactive strategies for preventing major events. Such missed opportunities point towards the need to improve foresight methods for enhancing safety & crises management. The shift from safety management approaches in which improvement is predominantly based on hindsight to include more foresight approaches has many hurdles to overcome, in theory as well as in practice. The seminar will address the question: How can foresight improve systems' resilience and accident prevention? This rises several topics such as: safety imagination with scenario approaches, foresight methods for short and long term, anticipation of new risks induced by new technology, the digital revolution, industry 4.0, the management of emerging risks, the detection and treatment of early warning signs (EWS), weak signals, accident precursors, the role of whistle blowers and of data mining with big data and linguistic tools, the social climate and reporting culture, the use of the past experiences and organizational learning... We aim to discuss theories, concepts, and experiences (successes and failures) of enhancing foresight in safety. All industrial sectors are concerned (energy, process, transport, space, health critical infrastructure, public sector, government ...).

The **first call for papers** is already available on <u>ESReDA website</u>.

Previous ESReDA SEMINARS

The 50th ESReDA Seminar

18-19 May, 2016 Seville, Spain

The 50th ESReDA Seminar on 25th years of ESReDA Seminars Safety and reliability enhancement throughout Europe: Looking back, looking ahead

The proceedings of the 50^{th} ESReDA Seminar are already available on ESReDA website for ESReDA Members only (<u>www.esreda.org</u> \rightarrow Seminar Proceedings; authorization is required).

The 51st ESReDA Seminar

20-21 October, 2016 Clermont-Ferrand, France

The 51st ESReDA Seminar on Maintenance and Life Cycle Assessment of Structures and Industrial Systems

The submission of updated final papers is over already. The proceedings of the 51^{st} ESReDA Seminar will be available soon on ESReDA website for ESReDA Members (www.esreda.org \rightarrow Seminar Proceedings; authorization will be required).

Forthcoming Conferences and Seminars



André Lannoy ESReDA Honorary Member, IMdR, France

The 10th International Conference on Mathematical Methods in Reliability (MMR 2017)

Grenoble, France, on the 3rd-6th July 2017.

The MMR conference serves as a forum for presenting the latest advances of research in the mathematical theory of reliability and risk management (stochastic modelling, statistical inference, optimization, decision support,...), as well as their applications (aging, maintenance, degradation, prognostic and health management, monitoring, warranty, lifetime data analysis,...). The next conference MMR 2017 will take place in Grenoble (France) from July the 3rd to July the 6th (www.mmr2017.imag.fr). The list of the accepted invited sessions has been published. The final program will come soon. Registration is now open.

Les Entretiens du Risque 2017 (The talks of risk)

Paris, France, on the 14th-15th November 2017.

"Les Entretiens du Risque" is a seminar organized every two years by the IMdR (French Institute for risk management, dependability and safety) on the topics of risk management, safety, safety culture, human and organizational factors, cindynics (science of danger). The next conference will concern "the denial of risk: from individual attitudes to the governance of organizations". It will take place in Paris at the "Carré des Sciences" (Ministry of Higher Education and Research, 14th-15th November 2017). More information on the IMdR site (www.imdr.eu).

A scientific day "From methods to applications of the automatic processing of languages in the operation feedback"

Cachan, France, on the 16th May 2017.

The event will be organized by the IMdR on the 16th of May 2017 in the Engineer School of Public Work (ESTP, RER B, Arcueil-Cachan). Use of natural languages is effective in operation feedback for collecting raw data or for extracting, validating, analysing, clustering them,... The day has for objectives to perform a state of the art of knowledge and existing methods, to show industrial applications, their difficulties and benefits (applications in maintenance, railway and air transportation, hydropower, gas pipes, safety, pollution, fraud,...) and to point out some R&D subjects to be developed in the future. Program can be found on the IMdR site (www.imdr.eu).

Other Conferences

and Seminars

CYSENI 2017 – the 14th International Conference of Young Scientist on Energy Issues 25-26 May, Kaunas, Lithuania. http://cyseni.com/

SSARS 2017 – the 11th Summer Safety & Reliability Seminars

25 June - 1 July 2017, Gdańsk/Sopot, Poland. http://ssars.am.gdynia.pl/

ESREL 2017 - the 27th Annual European Safety and Reliability Conference

18-22 June 2017, Portorož, Slovenia. http://esrel2017.org/

Collaboration with other organizations

CIPRNet

The book "Managing the Complexity of Critical Infrastructures", published by and available on Springer website. It is a product of the CIPRNet project (www.ciprnet.eu). The book collects the tutorial material developed by the authors during the six editions of the Master Classes and Courses on Modelling, Simulation and Analysis of Critical Infrastructures. It reports on new research directions in the field of critical infrastructure protection, dependency, preparedness and security, and explains how to model and simulate scenarios composed of several critical infrastructure systems.

You can download your copy for free at SpringerLink website.