

Overview

The Laboratory of Systems Reliability and Industrial Safety (SRISL) was founded in 1988 with initial objective the development of

This contribution has been achieved through the participation to over thirty R&D projects partially or totally funded by third parties.

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Objectives

Research and Development of methodology and associated software tools in the areas of:

- Reliability of large systems with complex stochastic behavior
- Quantitative Risk Assessment of complex technological systems
- Health and Environmental Consequence Assessment of alternative Electrical Power generating systems
- Assessment of human factors for plant safety enhancement
- Natural Hazard assessment
- Quantitative Occupational Risk Assessment

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Recently research and development has been focused on the:

- Development of quantified risk models for occupational risks from accidents and tools for multicriteria optimization of occupational risk management strategies
 - Decision Support System development for risk management as well as emergency response policy selection in major hazard accidents in nuclear and chemical installations.
 - Safety enhancement in the process industry through the use of virtual reality tools.
 - Design of dynamic exercises for the assessment of human reliability in industrial context with virtual reality tools
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- Development of a simulator to assess the success ratio in operations where multiple teams undertake the mitigation of the consequences of a natural disaster.
 - Integrated framework for the optimal design and routing of pipeline systems
 - Bayesian models for the prediction of occupational accident statistics and work time loss distributions

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Links

[Laboratory evaluation report 2012-2014](#)

[Laboratory website](#) (last update 2012)

[Greek Technology Platform on Industrial Safety](#) (SRISL is Co-coordinator together with the National Technical University of Athens and the University of Crete)

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