

Overview

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

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

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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

- 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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