

Tuesday, 20th January h 10:30

ENEA – conference room

Lungotevere Thaon Di Revel, 76 - Rome



Critical Infrastructure Preparedness and Resilience Research Network

Lecture

Dynamic Functional Modelling of vulnerability and interdependencies of Critical Infrastructures (DMCI)

Prof. Paolo Trucco, PhD

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Politecnico di Milano
Local co-ordinator of EDIM*

ABSTRACT:

The objective of the lecture is to present DMCI, proved to be suitable for the analysis of heterogeneous infrastructure systems, dynamic dependencies between energy and transport services. A web-based software tool has been developed to implement DMCI, where both the instantiation of CI nodes and the results of simulations are graphically supported by a GIS map. According to Ouyang's literature review on different approaches to modelling and simulation of interdependent critical infrastructure systems, DMCI belongs to the group of network based approaches, those with the best capabilities to support resilience analysis of interdependent CI. DMCI has been used to model the regional infrastructure system and support preparedness activities under the Lombardy Government's Programme on CIP.

Paolo Trucco is Full Professor of Operations Risk Management at the School of Management, Politecnico di Milano. He is Dean of the PhD Programme in Management, Economics and Industrial Engineering and local coordinator of EDIM (European Doctorate in Industrial management). His major area of research is Risk Analysis and Resilience Engineering of complex socio-technical systems and global supply chains, with expertise in the oil&gas, energy, transportation, healthcare and manufacturing sectors.

The participation is free, but registration is required for logistical reasons at the Event section of the ENEA website (www.enea.it).

For more information please contact Dr. Vittorio Rosato at vittorio.rosato@enea.it.

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