

Seminar Labex MS2T
“Control of Technological Systems of Systems”

<http://www.utc.fr/labexms2t/>

Roberto Sacile - Director of DELAB,
the joint laboratory between University of Genova (Italy) and
Eni S.p.A., on safety and security in logistics.

25 June 2013 – 02:00 p.m

Université de Technologie de Compiègne
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**System of systems views of safety and vulnerability in
dangerous goods transportation by road.**

Abstract:

Dangerous goods transportation represents an important problem and, from a scientific viewpoint, a good example of system of systems. In fact, specific values of the states of the different systems in which dangerous goods transportation may be modeled, can lead to unexpected behaviors with low probabilities but with high consequences. In the seminar, different technological and methodological views of the problem will be given. The seminar will include: an introduction to the problem, a technological view of the monitoring of dangerous goods transport as developed at University of Genova in collaboration with Eni, methodologies to control risk in the transport, a system of system view of the vulnerability of a road infrastructure.

Short Bio:



Since 2009, he has been the head of DELAB. Since 2006, he is the Director of the PhD School in System Monitoring and Environmental Risk Management of the University of Genova. Since 2000, he is a researcher at the University of Genova, and professor at the Environmental Engineering Master Degree of “Models and methods for the management of environmental systems”. Since 2010, he has also the professorship of the course “Models and methods for logistics” (in 2012-13 renamed in “Dangerous goods transport and logistics”) at the Transport Engineering Master Degree.

His research specialization is systems science applied to environment, energy, logistics and transportation, with special emphasis to the quantification of their safety, security and sustainability. He is author of more than 50 papers published in refereed journals, co-author of 2 books, co-editor of 2 books. In 2006-2011, he has been member of the NATO scientific panel on environmental security.

The overall funding in the last ten years - with Roberto Sacile as scientific leader - is about 4M€, (about 600 k€ both in 2010 and in 2011, coming from Eni and EU funded projects such as the VIFP DAGOT project, Interreg-ALCOTRA SECTRAM, the last one in collaboration with CRC at Mines ParisTech). The 80% of these funds has been invested in the work and in the training of young researchers. In July 2012, he has organized the IEEE SoSE2012 congress, joining the most important international activities in System of Systems Engineering research.

Short profile of DELAB

Since 2009, the Faculty of Engineering of the University of Genova and Eni (one of the most important petrochemical industries) are sponsoring DELAB, a joint laboratory in the field of logistics and safety with special reference to DAGOT. The activities of the laboratory, which are developed both at Eni and at the University of Genova, are threefold: training, service, and research activities. A DAGOT platform has been developed and currently maintained, including telegeomonitoring of vehicles (700 at the moment) on the European territory, tracking of vehicle maintenance, workflow of quality assurance procedures. In collaboration with the Italian Ministry of Infrastructure and Transport, DELAB is defining the methodology to assess the risk due to DAGOT by road. DELAB has also a DAGOT simulator in virtual reality to monitor all the main activities of the driver and of the vehicle