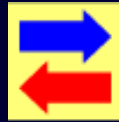




SCHOOL OF NAVAL  
ARCHITECTURE &  
MARINE ENGINEERING

LABORATORY FOR MARITIME TRANSPORT  
NEWSLETTER No 13  
April – June 2010



<http://www.martrans.org>



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*Dear Reader,*

The electronic newsletter of the Laboratory for Maritime Transport (LMT) of NTUA is issued regularly to inform you regarding our current and forthcoming activities. You are warmly encouraged to visit our website ([www.martrans.org](http://www.martrans.org)) for further information and to contact us about your enquiries. Your feedback will be highly valued. Kind regards.\_

*The LMT staff*

## 1st SuperGreen Workshop in Helsinki



Some 90 participants attended the first workshop of the SuperGreen project, held in Helsinki, Finland, on June 28, 2010.

It is reminded that the full name of the project is “Supporting EU’s Freight Transport Logistics Action Plan on Green Corridors Issues”, and its abbreviated name is “SuperGreen.” It is a Coordination and Support Action, co-funded by the European Commission in the context of the 7th Framework Programme. The project started last January and will last 3 years. It involves 22 partners from 13 European countries.

The Helsinki workshop was the first among a number of workshops associated with the project. The audience of the workshop consisted of logistics service providers, shippers, carriers in all surface modes, intermodal transport companies, policy makers, researchers and analysts, environmental organizations, and other stakeholders interested in green logistics.

Starting from an initial list of some 60 corridors, a pre-selection of 15 European corridors was first presented, based partly on the current TEN-T and the market and logistics needs of the project’s industrial partners. Two alternative sets of 9 corridors (among the 15 pre-selected ones), ensuring sufficient geographical and modal balance, were presented to the audience for final selection.

In addition to corridor selection, the Helsinki workshop also covered the work performed under the project on the Key Performance Indicators to be used for benchmarking the selected corridors. Presentations were also given on the related EU-funded e-Freight project, and a tool developed by the Swedish company Conlogic on the evaluation of transport’s environmental performance.



*The workshop auditorium*



*From the visit to the port of Helsinki*

A lively discussion took place among the stakeholders and the members of the project’s Advisory Committee who were also invited to the event. Based on the valuable input received, the Project’s Management Committee concluded at a selection of 9 corridors to be used for benchmarking and further analysis in the project.

All presentations of the Helsinki workshop and the 9 selected corridors have been uploaded at the project’s web site at [www.supergreenproject.eu](http://www.supergreenproject.eu).

The next workshop of the SuperGreen project is tentatively scheduled for October 19, 2010, in Naples, Italy. Please stay tuned for more details.



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### *Additional project-related activities*

Mr George Panagakos of LMT participated in the East West Transport Corridor II workshop in Malmoe, Sweden on May 19. The objective of the workshop was to obtain feedback from stakeholders on a manual on green corridors that is being prepared under this project. Mr Panagakos also participated in the SuperGreen technical meeting organized by IHS Fairplay in Gothenburg, Sweden on May 20-21 to select the Key Performance Indicators which will be used to benchmark the project's transport corridors. Finally, he participated in the TEN-T Days 2010 Conference in Zaragoza, Spain on June 8-9, where DG MOVE presented the proposed policy initiatives in relation to the Trans-European Transport Network, in preparation of the new White Paper on transport scheduled for next year.

Assist. Prof. Dimitrios V. Lyridis participated in the European Maritime Day held in Gijon, Spain on May 17-21, where he presented the SUPERGREEN project which caused a lot of interest from various stakeholders. He also presented the project in the EIRAC Workshop held in Wiesbaden, Germany on June 23-24 hosted by the European Business School and followed by a visit to the Frankfurt Airport Terminal.

### *Library section of SuperGreen web site*

Many corridor-related documents and links can be found at the library section of the project. For more details please go to <http://www.supergreenproject.eu/library.html>.

Info in library is by no means complete, so if you want to bring a document or a link to our attention, please let us know.

If you want to be kept posted, please send us an email at the SuperGreen friends email at [supergreen@martrans.org](mailto:supergreen@martrans.org).

### **Centre of Excellence in “Ship Total Energy-Emissions-Economy”**

The Lloyd's Register Educational Trust (The LRET) has established a Centre of Excellence in Ship Total Energy-Emissions-Economy. The Centre is housed at the School of Naval Architecture and Marine Engineering of NTUA.

The objective of this Centre of Excellence is to develop a holistic and interdisciplinary approach to the complex goal of increasing energy efficiency and reducing emissions, while not jeopardizing the economic viability of the shipping

industry. The general objectives of the Centre are the creation, consolidation and dissemination of know-how in the area of Total Energy and Emissions Economy aiming for the highest standards of achievement in this sphere of activity. It is intended that this academic Centre will maintain close links with the Shipping Industry and specifically with the Greek Shipping Community.

The Centre's approach is interdisciplinary, as two Laboratories of the School will be involved: the Laboratory of Marine Engineering (LME) and the Laboratory for Maritime Transport (LMT). LME will focus at technical aspects of the project and LMT will focus on managerial-economic aspects. The Director of the Centre will be Professor C. Frangopoulos, whereas the tracks led by LME and LMT will be supervised by Professors N. Kyrtatos and H. Psarftis, Directors of LME and LMT respectively.

More details on the activities of the Centre (with a specific focus on LMT's role) will be reported in future issues of our newsletter.

### **IMO business**



Even though no major event occurred within the period, LMT's involvement in IMO business continued in several fronts. Among other things, LMT continued work on FSA environmental risk evaluation criteria, a subject under discussion at MEPC. LMT staff is also involved in MSC's correspondence group on the revision of FSA guidelines, and provides advice to the Greek maritime administration on Green House Gases, both as regards the Energy Efficiency Design Index (EEDI) and Market Based Measures (MBMs). The next meeting of MEPC that will be held at the end of September 2010 will be very important with respect to developments on many of these issues.

### **Speech given for the Hellenic Joint Branch**

Dr. Nikolaos P. Ventikos (Lecturer of LMT) was invited by the Hellenic Joint Branch of the Institute of Marine Engineering, Science & Technology (IMAREST) and the Royal Institute of Naval Architects (RINA) to give a speech on issues of marine oil pollution and ways for confronting / mitigating it.



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The presentation took place at Tsakos Shipping & Trading Auditorium (Macedonia Bldg) on April 29, 2010 (at 19:00). The title of the speech of Dr. Ventikos was “The A-B of Oil Pollution from Ships: Elements of Risk” and it focused on topics such as oil spill statistics, risk analysis methodologies, oil spill response capabilities and oil spill cost. After the presentation an interesting discussion took place regarding the aforementioned issues and the event finally closed with a small reception.

**Dr. N.P. Ventikos elected/promoted to Assistant Professor**



On April 20, 2010, LMT Lecturer Dr. Nikolaos P. Ventikos was unanimously promoted by the appointed electoral body of the School of Naval Architecture and Marine Engineering of NTUA to the rank of Assistant Professor. Congrats to Nikos for a well-deserved promotion!

**LMT Thesis Receives Honorary Award from IMAREST**



In conjunction with the last Posidonia Exhibition that took place in Athens (June 7 to 11, 2010) the Institute of Marine Engineering, Science and Technology (IMAREST) organized on Tuesday June 8

a small ceremony for the awarding of prizes for the best Diploma Theses that were submitted in the School of Naval Architecture and Marine Engineering of the National Technical University of Athens in 2009. In this context, the thesis of Mr. Ioannis Asimomitis with title “Methodologies of Recording, Monitoring and Analysis of Ship Operational Data as a Safety Improvement Measure – Presentation of Case

Study” that was supervised by the member of LMT and NTUA Lecturer Dr. Nikolaos P. Ventikos received an Honorary Award for its quality and contribution to the maritime science and practice. More specifically, the Thesis of Mr. Asimomitis deals with the methods of monitoring, recording, and analyzing data coming from the operation of ships (maritime transport) both in real time and through the development of extensive databases to improve all maritime related critical parameters, such as safety, efficiency, quality of service etc. So as to study these methods, the review of the respective practices already used in air transport was put into scrutiny aiming at the formulation of the best possible framework to be adopted by the shipping industry.

**Ongoing doctoral research at LMT**

An important part of the research undertaken at LMT is reflected in the work of its graduate and undergraduate students. It is a priority for LMT to disseminate its academic research work and link it with the real challenges faced by the industry. In this context, and continuing from previous newsletters, the ongoing work of LMT’s doctoral candidates is briefly presented.

***Protection of banking organizations and shipping companies against macroeconomic financial risks.***

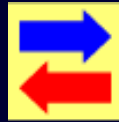
This work has been undertaken by Ph.D. Candidate Nikolaos D. Manos (he began his doctoral studies at LMT in 2009 supervised by Ass. Prof. D. Lyridis). The incentive for his research work was the recent global financial crisis that still affects economies all over the globe and he has up to now proceeded in an in-depth investigation of previous financial crises that took place since the beginning of the last century, citing various important factors that affect economies locally and globally.

The fact that many of those crises had different characteristics (duration, intensity, overall repercussions, sectors of activities mainly affected etc) gave the opportunity to categorize the financial crises and extract useful conclusions about the factors that could lead to the creation of such crises as well as methods of prevention and treatment. Furthermore, he has proceeded with the examination of previous research related to his subject. Despite the considerable interest in applications of neural networks in economics there have been only few studies that have applied neural networks to macroeconomic time series



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and there is no specific research done on forecasting the biffex or some other maritime index.

Starting his research from a macroeconomic perspective and based on his introductory work he aimed at finding a method to predict a financial crisis within the maritime sector. For this purpose, he gathered data over a 20 year period concerning various macroeconomic factors that could affect the basic maritime economic index BDI. Through the data processing via neural networks he finally concluded that the sharp decline of the BDI index during 2009 could have been predicted to some extent. In order to complete his research on the shipping sector he will extend his protection techniques also in a microeconomic perspective by analyzing the operation of a single maritime company.

## Meetings and Events

### attended by LMT staff

- European Maritime Day in Gijon, Spain, May 17-21
- East West Transport Corridor II workshop, Malmoe, Sweden, May 19
- SuperGreen technical meeting organized by IHS Fairplay, Gothenburg, Sweden, May 20-21
- "1st International Mermaid Congress of Maritime Cadets/Students", Piri Reis University, Istanbul, Turkey, May 21-25
- "4th South East Europe Energy Dialogue" Conference, Institute of Energy for South East Europe, Thessaloniki, Greece, June 3-4
- TEN-T Days 2010 Conference, Zaragoza, Spain, June 8-9
- "International Conference on Human Performance at Sea", University of Strathclyde, Glasgow, Scotland, UK June 16-18
- "The 19th SRA-Europe Meeting: Risk, governance & accountability", King's College, London, UK, June 21-23
- EIRAC workshop, Wiesbaden, Germany, June 23-24
- FIREPROOF project meeting, Paris, France, June 29-30

### Papers, presentations and speeches published / presented by LMT staff

- Kontovas, C.A., Psaraftis, H.N., Ventikos, N. (2009) "An Empirical Analysis of IOPCF Oil Spill Cost Data", Marine

Pollution Bulletin (in press) <http://dx.doi.org/10.1016/j.marpolbul.2010.05.010>

- Psaraftis, H.N., Kontovas, C.A. (2010) "Balancing the Economic and Environmental Performance of Maritime Transportation", Transportation Research Part D (in press) <http://dx.doi.org/10.1016/j.trd.2010.05.001>
- Ventikos N.P. (2010), "Risk Analysis in Maritime Transport: the Framework, the Problems and the Perspectives", Naftika Chronika, Vol. 129, pp. 34-36 (in Greek)
- Ventikos N.P., Louzis K., Koimtzoglou A. (2010), "Ship Wreckage in Greece: A Fairytale or a Nightmare to Be?", Proceedings of the 19th SRA-Europe meeting: Risk, governance & accountability, London, UK, pp. 102-103.
- Ventikos N.P., Lyridis D.V., Lykos G.V., Logothetis T. (2010), "Identifying and Assessing Non-Technical Skills on Greek Maritime Officers: the Story under the Spotlight", Proceedings of the "International Conference on Human Performance at Sea", Glasgow, UK, ISBN: 978-0-947649-73-9, pp. 433-442.

The LMT staff wishes you  
a pleasant summer  
vacation



photo from Aegean Rally 2010 (source: [www.horo.gr](http://www.horo.gr))