The Newsletter of the

Spring 2005

EDITOR'S CORNER

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Welcome to another issue of the TSL Newsletter. Please feel free to send your news items and announcements for the next TSL Newsletter, scheduled for Fall 2005, to me.

Elise Miller-Hooks
Civil & Environmental Engineering
University of Maryland
elisemh@umd.edu

Feature Article: An update on TSL bylaws, SIGs and Society application

Dear TSL friends,

It has been four months since my previous update on the status of the TSL bylaws, SIGs, Society application, and other TSL matters, and it is time for another update. To refresh the memories, I will repeat some things mentioned in the previous update.

The proposed TSL bylaws were approved in the TSL election in December 2004 with 66 votes in favor and 1 vote opposed. Unfortunately, that was not the end of the road in what turned out to be a much longer and more bureaucratic process than we had anticipated. Initially, and naively, we believed that the INFORMS Subdivisions Council was going to deliberate on our bylaws at their meeting in New York on February 13-14, but later we were told that it was not on their agenda because the INFORMS Sections and Societies Committee had not dealt with it yet. The chair of the INFORMS Sections and Societies Committee informed us that the Committee was going to discuss our proposed new bylaws at their meeting on March 25. On April 11 we were informed that the Committee had discussed our proposed new bylaws, but that some concerns were raised and therefore the bylaws had not been approved. Of course, we were anxious to find out what these

concerns were, but after several email messages and phone calls by Elise Miller-Hooks and myself, we were not able to obtain a clear statement of what the concerns were, and we were referred to Mary Magrogan for an explanation. On May 31, Mary Magrogan responded with a number of questions. The five major concerns were the following: (1) All nominees for elected positions should be members of both INFORMS and TSL at the time of the nomination. (2) The nomination process was confusing. (3) INFORMS cannot guarantee meeting space for SIG business meetings at the INFORMS annual meeting. (4) The SIGs cannot collect dues. (5) We should state what happens to any funds allocated to a SIG if the SIG should cease to exist. We responded to the concerns as follows: (1) The following statement was added to the bylaws: "To be eligible to be elected to the Section Board, a nominee must be a member of both INFORMS and The Section at the time of his/her nomination, and the nominee must agree to serve if elected." (2) We simplified the language regarding the nomination process. (3) We understand that INFORMS cannot guarantee meeting space for SIG business meetings at the INFORMS annual meeting, but no change was needed to the bylaws in this regard. (4) The bylaws never made provision for SIGs to collect dues, so no change regarding this point was needed. (5) The following statement was added to the bylaws: "If a SIG is eliminated, any remaining funds allocated to the SIG will become available for use by The Section." On June 23, Mary Magrogan indicated her satisfaction with the bylaws, and she forwarded the bylaws to the **INFORMS Sections and Societies Committee** for their deliberation. At this time, July 26, we are still waiting for news from the INFORMS Sections and Societies Committee.

If approved by the INFORMS Sections and Societies Committee, the proposed bylaws then have to be considered by the INFORMS Subdivisions Council. Thereafter, if approved by the INFORMS Subdivisions Council, the bylaws next have to be considered and

approved by the INFORMS Board. Based on historical records, most years the INFORMS Board seems to meet four times per year: around February, May, August, and October. Thus, the best case scenario at this time seems to be that the proposed bylaws will be approved and in effect some time in August, but based on recent experience the chances of that happening seem slim. Thus we hope that the new bylaws will be approved by the time of the next INFORMS annual meeting.

Which brings us to the SIGs and election of SIG officers and international liaisons. The following people have been nominated and have agreed to run for office (additional nominations are still welcome):

SIGs

Freight Transportation and Logistics: Chair: Ann Campbell, Alan Erera Vice-Chair: Karen Smilowitz-Corr

Urban Transportation:

Chair: Jim Moore

Vice-Chair: Laurie Garrow, Henry Liu

Facility Logistics: Chair: Russ Meller Vice-Chair: Kevin Gue

ITS:

Chair: Travis Waller

Vice-Chair: Yi-Chang Chiu

Air Transportation: Chair: Diego Klabjan

Vice-chair: Jay Rosenberger

International liaisons: Europe and Africa: Frédéric Semet Stein Wallace

Asia-Pacific: Janny Leung Raymond Cheung

Americas:

Cristián Cortés (together with Juan Carlos Munoz)

3 of 4 1/6/2010 2:36 PM José Eugenio Léal Juan Pablo Antún Callaba

Although it seems that it may be some time before the SIGs are officially in place, the various interest groups are assisting the TSL cluster chair, Pablo Durango-Cohen <pdc@northwestern.edu>, in organizing the TSL sessions for the upcoming INFORMS annual meeting in New Orleans.

Next is the matter of our application to become an INFORMS Society. A number of people, including Cindy Barnhart, Theo Crainic, Bernard Gendron, Elise Miller-Hooks, Warren Powell, and myself have been working on putting together our application document. This will be sent to all TSL members. Then we have to have a referendum, in which the TSL members vote on approving the application. If approved, the application will continue on an arduous process, similar to the one outlined above for the approval of the new TSL bylaws.

Please feel free to send me your questions, comments, and suggestions.

Anton Kleywegt

The new TSL mailing list is <<u>transci-logistics-section@list.informs.org</u>>. If you do not receive email sent to transci-logistics-section@list.informs.org, then please let me know at <u>elisemh@umd.edu</u>.

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TSL News and Notes

Congratulations to our Members and Friends

Mahyar Amouzegar, Senior Military OR Analyst at RAND Corporation, has been elected Vice President of Western Decision Science Institute. Congratulations to Mahyar!

Russell Meller was promoted to the rank of professor of industrial and systems engineering at Virginia Tech. Congratulations to Russell!

News from the Facility Logistics (soon to be official) SIG We've had a good response to the IFORS 2005 call for papers. Eight of us have agreed to suffer the sands of Hawaii to present our work. We even had the misfortune to draw sessions on the last day --- I guess we'll have to stay the entire time. We also have 16 talks scheduled for the INFORMS 2005 meeting in New Orleans . We look forward to seeing everyone there.

I want to bring to your attention the **International Material Handling Research Conference 2006**, which is sponsored by the College-Industry Council on Material Handling Education (CICMHE). Next year's conference will be held in June, 2006 in Salt Lake City . It is a great way to meet colleagues from all over the world doing research in facility logistics. Last year's conference in Graz , Austria was fantastic. Make plans to submit a paper for next year's event in Salt Lake City . Details to follow.

And for ongoing research: **Anthony Ross** of Michigan State University is investigating the potential impact of RFID technology on operational efficiency "within the four walls" of a warehouse. In many applications, RFID tags are applied by manufacturers as a value-added service for distributors, but potential improvements for the manfacturer's distribution center are foregone. Ross's work, which is sponsored by IBM, is looking at the implications. **John Bartholdi** and Steve Hackman of Georgia Tech have been investigating the design of fast pick areas in a distribution center. They have built models to address three levels of questions: How large should the fast pick area be? What skus should be stored there? And in what quantities should they be stored? Their work has demonstrated tremendous improvement over commonly-used design techniques in industry.

On the teaching side, **Russ Meller** of Virginia Tech was recently funded by the Material Handling Industry of America to investigate "The Future of Material Handling Education." Russ's study will attempt to project what material handling education will look like in the next 20 years. For example, is it likely to remain an important component of an education in logistics, or could it be relegated to an appendix in textbooks of

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the future? We look forward to his results!

Finally, **Spyros Reveliotis** of Georgia Tech recently published a monograph on *Real Time Management of Resource Allocation Systems*. Details are available at www.springeronline.com.

Kevin R. Gue Department of Industrial & Systems Engineering Auburn University

Reporting on NZIMA Workshop on Mathematical Models for Optimizing Transportation Services

From April 19-22, 2005, mathematicians, traffic modelers, and operations research practioners gathered in Auckland, New Zealand for a workshop on Mathematical Models for Optimizing Transportation Services. The workshop, which was hosted by the Department of Engineering Science at the University of Auckland, was jointly funded by the New Zealand Institute of Mathematics and its Applications (NZIMA) and the Operations Research group of the University of Auckland as part of a tematic programme in optimization supported by NZIMA.

The theme of the workshop was optimization of transportation services with a focus on three broad topics of major importance: transportation planning under uncertainty, optimizing the design of transportation systems, and pricing and revenue management. The workshop ran over four days with approximately half a day being devoted to each of the focus areas. A special session was also held on the use of modeling, optimization, simulation and other mathematical tools for improving the efficiency of emergency services (ambulance, fire, police).

A novel feature of the conference was the addition of two special panel discussions that were sponsored respectively by the dairy company Fonterra and the Auckland Regional Transport Authority (ARTA). The panel discussions were introduced and led by researchers at these organizations, who gave fascinating descriptions of their transportation issues. For example Fonterra must schedule the collection of milk from 15,000 farms each day, with volumes that vary considerably over the milking season as well as from day to day. This poses an enormous challenge to vehicle routing optimization software. A major issue also debated by the panel was the effect of uncertainty on the routing techniques and how to accommodate these in planning robust schedules. The ARTA discussion was also lively with uncertainty in origin-destination forecasts being a key concern for traffic planners.

The first day of the workshop was notable for a public television appearance by Mike Florian who was asked to comment in a broadcast interview about a hotly debated

proposal to introduce tolled highways to Auckland . A clip of his interview can be downloaded from www.esc.auckland.ac.nz/Transportation.

The workshop had over 80 registrations and was truly international in flavor with participants and speakers from Australia , Canada , Chile , China , Denmark , Germany , India , Israel , the Netherlands , Norway , Singapore , Spain , Sweden , USA and New Zealand . Presentations from the conference are available on the conference website www.esc.auckland.ac.nz/Transportation.

Andy Philpott, Matthias Ehrgott and David Ryan



Professor Marston Conder of NZIMA opens the Workshop



2005 INFORMS Transportation Science & Logistics Dissertation Prize Competition

Nominations are invited for the 2005 Dissertation Prize Competition sponsored by the INFORMS Section on Transportation Science & Logistics. This award is the oldest and most prestigious honor for doctoral dissertations in the transportation science and logistics area.

Eligible doctoral dissertations are those completed and submitted between June 1, 2004 and May 31, 2005 in the general area of transportation science and logistics.

To be considered, a dissertation must be nominated by the thesis supervisor, who must submit the following items:

- * an electronic copy of the dissertation (in PDF),
- * an electronic copy of the extended abstract (3-5 pages), separate from the thesis (in PDF),
- * an electronic copy of the letter of nomination from the dissertation supervisor supporting the submission and stating his/her assessment of why the thesis is worthy of the award (in PDF), and
- * an electronic abstract of 300 words without formula or mathematical notation (in PDF).

When submitting these documents, please name files as follows: *Dissertation*: last name, first name initial, diss.pdf (e.g., smith)diss.pdf).

Extended Abstract: last name, first name initial, exabs.pdf (e.g., smithjexabs.pdf)

Nomination Letter: last name, first name initial, nom.pdf (e.g., smithjnom.pdf)

Abstract: last name, first name initial, abs (e.g., smithjabs.pdf)

Submissions should be sent to Jennifer Alvarado, assistant to committee chair: jdalvara@usc.edu:

The deadline for receipt of submissions is July 31, 2005. The recommendations of the judges will be announced in the meeting of the Section on Transportation Science & Logistics at the Fall 2005 INFORMS meeting. If you have any questions, please contact Randolph Hall at rwhall@usc.edu

CONFERENCE, WORKSHOP AND COURSE ANNOUNCEMENTS

Western Decision Science Institute (WDSI) Conference The WDSI Conference will be held on April 11- 14, 2006 in Hawaii. The deadline for paper submission is Oct 1, 2005. TSL members may be interested in sending their papers to the Logistics and Supply Chain Track. For more information contact Mahyar Amouzega at mahyar@rand.org or visit the following web site: http://wdsinet.org/.

Course: Modeling and Simulation of Transportation Networks

August 1-5, 2005

Offered by Professor Moshe Ben-Akiva, the MIT ITS Laboratory, and the MIT Professional Educations Program

Course Description: An in-depth study of the world's most sophisticated traffic models and simulation methods, including the theory and applications of origin-destination estimation and prediction for real-time applications; traffic flow models and alternative simulation methods; dynamic traffic assignment methods; and traffic control and route guidance systems. Incorporates lectures, case studies and software demos dealing with the design, evaluation and operation of real-time traffic management systems.

Recent research areas studied include: microscopic, mesoscopic and macroscopic demand and supply simulation models; dynamic simulation-assignment models with multiple user classes for ITS applications; analytical dynamic traffic assignment models; traffic flow models; computational aspects, shortest path computations; methods to estimate and predict origin to destination (O-D) flows; real-time O-D model development; travel choice model development, with current emphasis on driver behavior in the presence of information; multimedia tools for the collection of related choice data; traffic

control and guidance systems; congestion pricing issues; factors that affect traveler's departure-time, route, mode and destination choice decisions; and off-line evaluation methods using traffic simulation.

Website: http://professional.mit.edu/ApplicationFiles/web/WebFrame.cfm?web_id=376

Course registration, contact information and a full course description are available through the MIT Professional Institute website at the above URL.

ODYSSEUS 2006: Third International Workshop on Freight Transportation and Logistics - call for papers

Altea (Spain), May 23-26, 2006

Organized by Universitat de València, Universidad Politécnica de Valencia and Universitat Politècnica de Catalunya

This workshop, as the two previous ones held in Crete (2000) and Sicily (2003), is devoted to models, algorithms, strategies, and software systems which enable decision support in freight transportation and logistics. In a nice environment, the workshop will bring together researchers and practitioners who study and implement solutions to these problems. All contributions are welcome, but we are particularly interested in contributions in one or several of the following fields:

- Vehicle Routing
- Fleet and Crew Management
- Modal Transportation: Rail, Truck, Maritime, etc.
- Intermodal Transportation
- Terminal Management
- Supply Chain Optimization
- Network Design and Planning
- City Logistics
- Freight Intelligent Transportation Systems

Since one of the main goals of the workshop is to encourage new collaborations and joint projects, the number of presentations will be limited. This policy should allow discussions during and after the presentations and encourage an active participation, which is not possible at larger conferences. In addition to presentations, the workshop is intended to be a forum for exchange of recent experiences and results.

Location: On his way back from Troy to Ithaca, Odysseus lost his way and reached the mythic land of Ogigia, usually sited in the eastern Mediterranean Coast, where he spent almost 7 years. To the several speculations on Ogigia's actual location, we must add a new one: Altea. And if this is not correct, it

really deserves to be. Finding its way to the sea from the top of a hill, the Village of Altea , formerly a sailor and peasant's region, is protected from the cold winter winds by the near mountains and owns one of the most beautiful Mediterranean bays. 10 Kms North from Benidorm, 50 from Alicante and 120 South from Valencia, Altea and its surroundings offers a state-of-the-art frame for this workshop.





Conference Chairs: Angel Corberán, Teodor Gabriel Crainic,

Elena Fernández, Jose María Sanchis

Local Committee: Enrique Benavent, Vicente Campos, Rafael Martí, Enrique Mota

Scientific Committee: Jaume Barceló, Cynthia Barnhart, Paolo Dell'Olmo, Michel Gendreau, Tore Grünert, Anton J. Kleywegt, Martine Labbé, Gilbert Laporte, Oli B.G. Madsen, Hani S. Mahmassani, Raffaele Pesenti, Juan José Salazar, Martin Savelsbergh, Frederic Semet, Maria Grazia Speranza, Eiichi Taniguchi, Daniele Vigo, Stefan Voss

Paper submission: Papers submitted for presentation at the conference will be selected on the basis of an extended abstract of about 3 pages. All abstracts will be reviewed by the international scientific committee. Further information and instructions are posted on the conference web site: www.uv.es/odysseus2006/.

One regular participant registration fee must be paid for each paper presented.

Important Dates and Deadlines:

Extended abstracts deadline: November 15, 2005

Notification of acceptance: January 31, 2006 Early registration deadline: February 28, 2006 Workshop dates: May 23 - May 26, 2006

Registration Fees (in euros)

Early registration (before February 28) 450 Late registration 550 PhD Student (early registration) 300 PhD Student (late registration) 400 Accompanying Person 275 (including lunches) Accompanying Person 175 (not including lunches)

The fee for participants includes: welcome cocktail, the use of all conference facilities, coffee breaks and lunches, abstracts booklet, excursion and social dinner. The fee for accompanying persons includes: welcome cocktail, excursion and social dinner.

Conference Information: Conference web site: www.uv.es/odysseus2006/

Reminder: The new TSL mailing list is < transci-logistics-section@list.informs.org>. Members who do not get email sent to the TSL mailing list should let the TSL secretary, Elise Miller-Hooks, know at < elisemh@umd.edu>.

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