



## **FINAL REPORT**

**EURO / INFORMS  
JOINT INTERNATIONAL MEETING  
Istanbul 2003  
JULY 06-10, 2003**

**This document is a final report prepared by Prof. Gülay Barbaroso?lu and submitted to EURO Executive Council in Brussels on January 31, 2004.**

**January 2004**

**Brussels BELGIUM**

# EURO XIX / INFORMS JOINT INTERNATIONAL MEETING

## JULY 06-10 Istanbul 2003

### 1. PLANNING AND ORGANIZATIONAL DECISION-MAKING

In 1999, at the IFORS Conference in Beijing, Istanbul was formally appointed as the candidate to host the EURO XIX Conference in 2003 jointly with INFORMS. One year later in 2000 at the EURO XVI Conference in Budapest, it was formally approved that Istanbul would host the second joint EURO/INFORMS Conference. On the INFORMS side, a proposal was initially submitted in 1997 to organize an INFORMS International Conference in Istanbul during the summer of 2001. This was approved by the Board of Directors, but it was later decided to organize a joint meeting with EURO to benefit from the synergy. By that time, EURO has already designated Rotterdam as its meeting site for 2001 and IFORS 2002 was planned in Edinburgh. This left 2003 as the next available time for the joint meeting. Thus, the proposal was then made for 2003 and it was approved both by EURO and INFORMS.

The Conference organization and structuring was carried out according to the agreement between EURO and INFORMS to organize three joint meetings and signed in 1994.

#### 1.1 Organizing Committee (OC)

Süleyman Özekici was appointed as the chairman of the OC after the EURO Council meeting in Budapest in 2000; since he left his post at Boğaziçi University, Gülay Barbarosoğlu who has been the contact person on the EURO side, was appointed as the new chair as of April 1, 2002. Süleyman Özekici continued to be a member of the Program Committee.

**Chair:** Gülay D. Barbarosoğlu (Boğaziçi University)  
barbaros@boun.edu.tr

**Members:** Thomas Gullede (George Mason University)  
gullede@gmu.edu

Paul Jensen (University of Texas)  
pjensen@mail.utexas.edu

Jo van Nunen (Erasmus University)  
j.nunen@fbk.eur.nl

Zilla Sinuany-Stern (Ben-Gurion University of the Negev)  
zilla@bgumail.bgu.ac.il

Murat Tarımcılar (George Washington University)  
muratt@gwu.edu

Gerhard Wäscher (Otto-von-Guericke-Universität)  
Gerhard.Waescher@Wirtschafts-W.Uni-Magdeburg.de

In the first half of 2001, a local organizing committee was formed consisting of the following people from Bozazi University: Kuban Altinel, Ümit Bilge, Taner Bilgiç, Esra Çnar, Eylem Koca, İhan Or, Süleyman Özekici, Kerem Özkşak, Ali Tamer Ünal.

## 1.2 Programme Committee (PC)

**Co-Chairs:** Murat Tarıncılar, George Washington University, Washington DC  
muratt@gwu.edu

Gerhard Wäscher, Otto-von-Guericke-Universität Magdeburg  
Gerhard.Waescher@Wirtschafts-W.Uni-Magdeburg.de

**Members:** Michael O. Ball, University of Maryland, College Park MD  
mball@rhsmith.umd.edu

Eberhard E. Bischoff, European Business Management School, Swansea  
e.lydiard@swansea.ac.uk

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Nesim Erkip, Middle East Technical University, Ankara  
erkipn@ie.metu.edu.tr

Erhan Erkut, University of Alberta, Edmonton  
erhan.erkut@ualberta.ca

José Soeiro Ferreira, Faculdade de Engenharia da Universidade do Porto  
jsf@fe.up.pt

Karla Hoffmann, George Mason University, Fairfax VA  
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Jakop Krarup, University of Copenhagen, Copenhagen  
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Silvano Martello, University of Bologna, Bologna  
smartello@deis.unibo.it

Süleyman Özekici, Koç University, Istanbul  
sozekici@ku.edu.tr

Gary R. Waissi, University of Michigan, Dearborn MI  
gwaissi@umd.umich.edu

OTARI TOURS, a well-known conference agency in Turkey, was appointed as the official Conference organizer according to the requisites of the agreement between EURO and INFORMS.

### 1.3 Conference Venue

Although the venue had been initially announced as the Istanbul Convention and Exhibition Center at the IFORS Conference in 1999, at the EURO XVIII Conference in Rotterdam in 2001 the local organizers proposed to change the venue without sacrificing anything from quality, technology and convenience. As a matter of fact, the new venue offered more rooms for a higher number of parallel sessions located in the same conference hotel at a lower cost

The meeting was held at Conrad Business and Conference Center, which is the newest and biggest center in Istanbul. It offered excellent facilities with 35 rooms equipped with the most recent technological hardware. The Conrad Hotel, located in the center of the city, was expected to provide sufficient rooms and facilities for accommodation and social activities with various hotels in the vicinity.



### 1.4 Conference Fees

The regular registration fee was initially proposed to be \$365. After the EURO meeting in Rotterdam in 2001, it was decided not to include the banquet fee in the registration fee, but to treat it as optional. By covering the lunches in the regular fee, an additional reduction of 24 USD was achieved. Moreover, the student fee was reduced by 20 USD. Due to the appreciation of the EURO against the USD, there was an approximately 50 EURO decrease in the regular registration fee. The registration fee included lunches, coffee breaks, get-together party, dinner reception at Bo?aziçi University, participation in the sessions and tutorials. For the accompanying persons, the registration fee covered the get-together



party and the dinner reception at Bo?aziçi University.

**Table 1. Conference registration fees**

<b>Fees</b>	<b>Before March 15, 2003</b>	<b>After March 15, 2003</b>
Registration:		
Regular	\$300	\$400
Student	\$100	\$120
Accompanying Person	\$80	\$100
Banquet	\$50	\$50
5K Race	\$20	\$25

## **1.5 Publicity Relations**

One major task in this category has been to determine the proper timing and content of announcements.

### **Preliminary Announcement:**

25000 preliminary announcements were printed in September 2001 and distributed to INFORMS members, national EURO organizations and Turkish universities.

### **Call for Papers:**

25000 call for papers were printed in September 2002 and mailed to INFORMS, national EURO organizations, Turkish universities and industry.

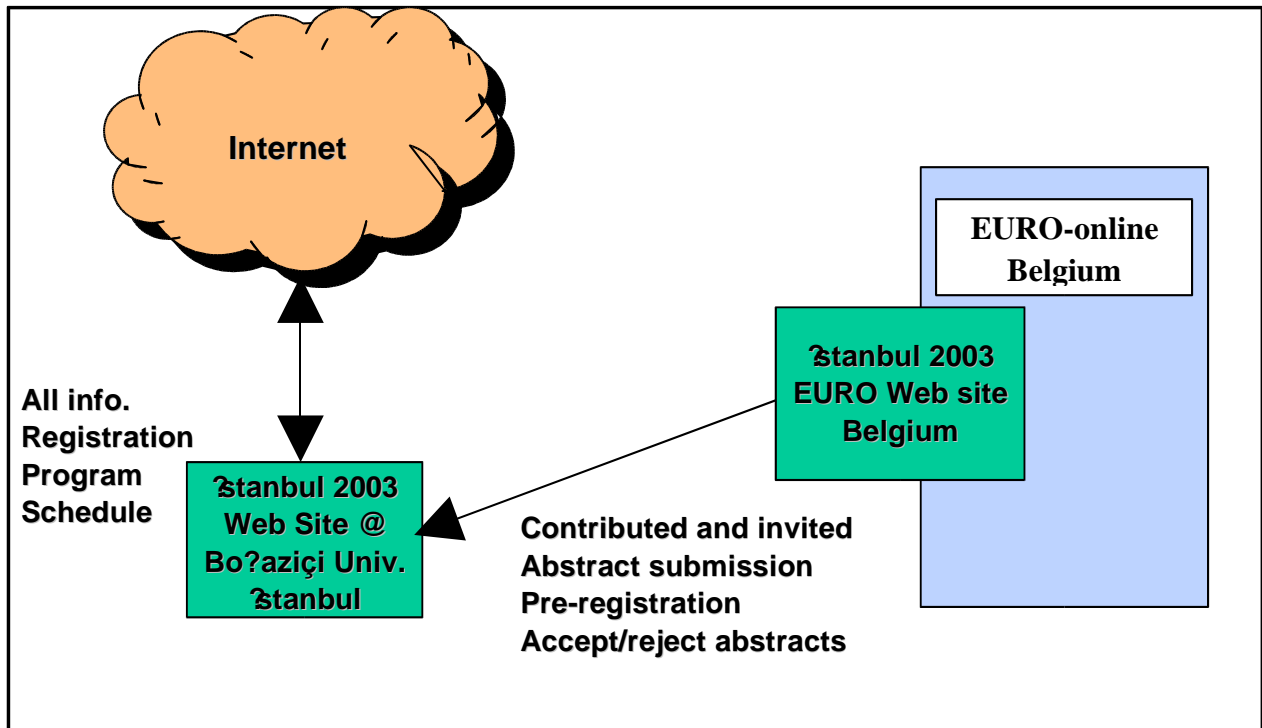
### **Posters:**

500 posters were printed in September 2002 and distributed in various international and national conferences.

Electronic copies were all made available on the EURO, INFORMS and Conference web-sites.

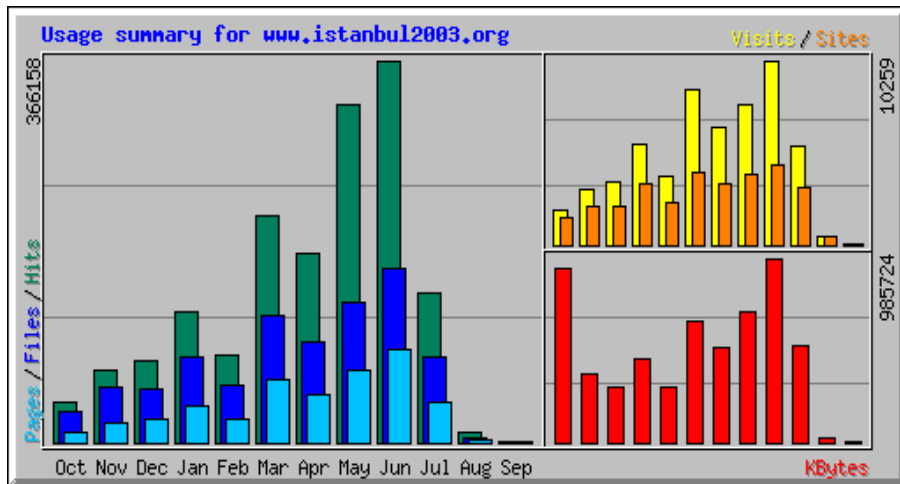
### **Web-site:**

The web site was first made operational in 2001 by the local organizers with basic information. Quality of the web site is an important factor in determining the efficiency of registration, electronic abstract submission and means of communication with potential participants. In early 2002, the web site has been enhanced using the content of the first Call for paper. In the summer of 2002, EURO kindly assisted the local organizers in developing an abstract submission system. As of September 2002, contributed and invited abstract submission and pre-registration services were open via EURO's web server in Belgium with the architecture given below in Figure 1:



**Figure 1 - Web architecture**

The conference web site has received a fair amount of traffic. Figure 2 shows the exponential growth pattern in the traffic of the web server as of September 2003. May and June account for more than 65% of all traffic.



**Figure 2 - Web usage statistics**

The local organizers have developed the online registration system which enabled the participants to register to the conference on-line by paying through a secure web server using a credit card. Our financial partner in this venture is Garanti Bank ([www.garanti.com](http://www.garanti.com)), one of the largest private banks in Turkey that has been offering virtual POS service in Turkey since 1998. Actually Garanti Bank was the seventh in the World and fourth in Europe in providing a SET service. Garanti Bank's Virtual POS service has a share of 75% of all Internet based transactions in Turkey. On-line registration service open to access as of January 20, 2003. The architecture at EURO headquarters

used Linux operating system, mysql database management system and PHP scripts. We used precisely the same architecture on our end. This minimized compatibility problems and provided a very smooth interaction with the EURO site. EURO Webmaster Hadrien Melot's effort in providing this smooth interaction is worth mentioning.

According to the transaction logs, 1211 persons preferred registering using on-line system and 277 persons have chosen to register via bank transfer. Approximately 95 % of the online transactions were realized successfully, and the remaining 5 % were problematic due to double payment, fraud, etc. All these flawed transactions were dealt and solved with bank separately.

## **1.6 Important Deadlines**

Deadlines for important activities were announced initially as follows:

Abstract submission..... January 15, 2003  
Early registration..... March 15, 2003  
Author registration..... May 1, 2003

But, due to the potential Iraqi crisis and SARS, the abstract submission deadline was postponed to May 1, 2003 in due-time. Besides, late abstract submission request of registered participants were accepted until June 15, and these abstracts were also scheduled in the Conference program. Further requests were handled during the conference, but most of them were not included in the abstract booklet.

## **1.7 Meetings of Committees**

INFORMS co-chair Murat Tar?mc?lar and EURO co-chair Gerhard Wäscher had been in regular contact by e-mail after EURO XVII Conference in 2000 to make the major decisions on the conference structure, list of topics, and scientific policies. There was a regular and continuous exchange of information via e-mails among and between the PC and OC members concerning organizational activities and scientific structuring. In addition to electronic communication, the following PC and OC meetings were held:

July 2000.....EURO XVII Conference in Budapest  
July 2001.....EURO XVIII Conference in Rotterdam  
July 2002.....IFORS Conference in Edinburgh  
March 2003.....Istanbul

In these meetings, the main decisions were made about the structure of the plenary, semi-plenary, and tutorial sessions. Plenary and semi-pleenary speakers and tutorialists were identified and invited to the Conference. Clusters were defined and cluster chairs were invited to organize a number of invited sessions in each cluster. In turn cluster chairs invited well-known scientists to organize invited sessions. Each member of the PC took responsibility on a number of areas or keywords, and identified the cluster chairs for these areas in collaboration with the others. In addition to the regular scheduled meetings of the committees, the co-chairs made several visits to ?stanbul to evaluate the conference site and discuss matters related to the scientific program.

## 1.8 Conference Theme and Program

The PC proposed to have a theme for the Conference, and the Conference theme was designated in 2002 at the IFORS Conference in Edinburgh as “**NEW OPPORTUNITIES FOR OPERATIONS RESEARCH**” with a special emphasis on

“**Medical Applications**”

“**Financial Engineering**”

“**Crisis Management**”

## 1.9 Industry Day

Moreover, July 9 Wednesday was designated by the PC as “Industry Day” to place more emphasis on OR/MS applications in industry. August-Wilhelm Scheer of IDS Scheer and Universität des Saarlandes was invited as the plenary speaker, and the title of his talk was determined as “**Business Process Management-from Vision to Execution**”. The Industry Day was further highlighted by a panel discussion on bridging the gap between theory and practice.

## 1.10 Conference Structure

Following the regular format for EURO and INFORMS conferences, Istanbul 2003 meeting featured plenary, semi-plenary and tutorial sessions along with a large number of invited and contributed sessions on topic areas.

### Plenary Sessions

- ★ **EURO GOLD Medalist** : The 2003 EURO Gold Medal was conferred to Professor *Andras Prekopa* and delivered during the Opening Session of the conference
- ★ **Omega Rho Distinguished Guest Lecturer**: Erhan Ç?nlar (Princeton University)  
“*Operations Research and Financial Engineering*”
- ★ **Industry Plenary Speaker**: August-Wilhelm Scheer (IDS Scheer and Universität des Saarlandes)  
“*Business Process Management - from Vision to Execution*”
- ★ **IFORS Distinguished Lecturer**: Richard E. Rosenthal (Naval Postgraduate School)  
“*A Sampling of Optimization Models for Making Hard Decisions*”

### Semi-Plenary Sessions

- ★ Thomas Magnanti (Massachusetts Institute of Technology)  
“*Engineering Exuberance*”
- ★ EURO Excellence in Practice Award (EPA): EPA 2003 was granted to Patrik Everbony, Patrik Flisberg and Mikael Rönnqvist.

*“Laps Care: an operational system for staff planning in home care”*

- ★ EURO Management Science Strategic Innovation Prize (MSSIP) : MSSIP 2003 was awarded to Dr. Stefan Spinler (Wharton School of the University of Pennsylvania, USA) and Prof. Dr. Huchzermeier (WHU Vallendar, Germany)  
*“The Valuation of Options on Capacity in the Presence of State-Contingent Demand”*
- ★ Jan Karel Lenstra (Georgia Institute of Technology).  
*“Half a Century of Combinatorial Optimization”*
- ★ Armann Ingolfsson (University of Alberta) and Tom Grossman (University of Calgary)  
*“OR Education: Spreadsheets as a Powerful Platform for OR/MS Education”*
- ★ V. Daniel R. Guide, Jr. (Pennsylvania State University) and Luc van Wassenhove (INSEAD)  
*“Closed-loop Supply Chains and a Simple Method for Balancing Supply and Demand”*
- ★ Gang Yu (University of Texas at Austin)  
*“Disruption Management”*

### **Tutorial Sessions**

- ★ Hartmut Stadtler (Technische Universität Darmstadt): Supply Chain Management and Advanced Planning
- ★ Paolo Toth (DEIS, University of Bologna): Optimization Problems in Railway Applications
- ★ Stavros Zenios (University of Cyprus): Advances in Financial Modeling and Portfolio Optimization
- ★ Andres Weintraub (Departamento de Ingeniería Industrial, University of Chile): Modeling and Algorithmic Challenges in Forestry--20 Open Problems
- ★ Gilbert Laporte (Ecole des Hautes Etudes Commerciales de Montreal): Vehicle Routing
- ★ Peter Bell (Richard Ivey School of Business, The University of Western Ontario): Revenue Management
- ★ Ibrahim Osman (Olayan’s School of Business, American University of Beirut): Metaheuristics: Models, Analysis, and Directions
- ★ Gary Lilien (Smeal College of Business Administration, The Pennsylvania State University): Marketing Engineering
- ★ Salih Neftçi (City University of New York, University of Reading): Financial Engineering
- ★ David Chadwick (University of Greenwich) and Grenville Croll (Arthur Andersen): The Subversive Spreadsheet
- ★ Rakesh Sarin (The Anderson School at UCLA): Group Decisions and Intergenerational Equity
- ★ Murat Köksalan (Middle East Technical University): Multiple Criteria Decision Making
- ★ Mete Soner (College of Administrative Sciences and Economics, Koc University): Option Pricing with Constraints
- ★ Mathias Kirchmer (IDS-Scheer) and Savas Özatalay (School of Business Administration,

Widener University): Enabling the Value Chain for e-Business

- ★ Rolf Moehring (Tech. Univ. Berlin): Routing in Telecommunication and Traffic Networks
- ★ Dimitri Bertsekas (Electrical Engineering and Computer Science, MIT): A New Look at Convexity, Duality, and Optimization
- ★ Horst Hamacher (Technische Universität Kaiserslautern): Cancer Radiation Planning
- ★ Jan Van Mieghem (Kellogg School of Management, Northwestern): Capacity Investment and Portfolio Hedging
- ★ Bezalel Gavish (Cox School of Business, Southern Methodist University): Modelling of Telecommunications and Electronic Commerce
- ★ Richard Francis (College of Engineering, University of Florida) and Timothy Lowe (Tippie College of Business, University of Iowa): Demand aggregation in facility location models
- ★ Daron Acemoglu (Department of Economics, MIT): A New Approach to Search Theory
- ★ Hervé Thiriez (Groupe HEC, Management Science and Information Systems) Creative Operations Research Modeling using Excel and Add-ins
- ★ Yasar Ozcan (Department of Health Administration, Virginia Commonwealth University) OR/MS in Health Care: Contemporary Issues and Solutions
- ★ Raffi Amit (The Wharton School, University of Pennsylvania) Applications of Quantitative Methods in Entrepreneurship Research
- ★ Robert Sargent (Syracuse) Verification and Validation of Computer-Based Models
- ★ Grace Lin (IBM) Adaptive Value Chain Optimization
- ★ Cynthia Barnhart (Center for Transportation and Logistics, Massachusetts Institute of Technology) Aircraft and Crew Scheduling
- ★ Marielle Christiansen (Norwegian University of Science and Technology) OR Applications in Maritime Transportation

### **Clusters and Invited/Contributed Sessions**

410 sessions were scheduled in 100 major clusters. Among these, 128 were contributed and 282 were invited. The list of clusters and cluster chairs are provided in Table 2 while the list of invited sessions and session chairs are given in Table 3. The national distribution of invited and contributed sessions is provided in Figure 3 and Figure 4, respectively.

**Table 2. List of Clusters and Cluster Chair(s)**

<b>Cluster</b>	<b>Cluster Chair(s)</b>
Airline Applications	Christine Strauss
Analytic Hierarchy Process	Ernest Forman
Artificial Intelligence, ES and Neural Networks	Gary Koehler
Bayesian Statistics	Refik Soyer
Bioinformatics	Metin Turkay
Capacity Planning	Alf Kimms

Complex Societal Problems	Dorien J. DeTombe
Cross-Entropy	Reuven Y. Rubinstein
Cutting and Packing	Andrea Lodi Jose Fernando Oliveira
Data Envelopment Analysis	Emmanuel Thanassoulis
Data Mining and Data Base Modeling	Ozgur Turetken Ramesh Sharda
Decision Theory and Analysis	Graham Mathieson Li Dengfeng
Disaster and Crisis Management	Gulay D. Barbarosoglu
E-Commerce	Kemal Altinkemer
Economic Modeling	Hayri Onal
Education and Distance Learning	Armann Ingolfsson
Energy Policy and Planning	Ilhan Or
Engineering Management	Dundar Kocaoglu
Entrepreneurship	Moren Levesque
Environmental Management	H.-D. Haasis, Univ. Bremen
Finance and Banking	Dimitris Tsioutsias
Financial Engineering	Stavros A. Zenios
Flexible Manufacturing Systems	Kathryn E Stecke
Forestry Management	Peter Lohmander
Fuzzy Sets and Systems	Marc Roubens
Game Theory	Murat Sertel
Graphs and Networks	Stefano Pallottino
Group Decision Making and Negotiation	Melvin Shakun Marc Kilgour
Health Care	Yasar Ozcan
Innovation	Maria Romanova
Knowledge Management	Gilles Coppin Michael Stankosky
Large Scale Optimization	Vardan Petrosyan Ozlem Ergun
Location	Vedat Verter
Management Information Systems	Kemal Altinkemer
Marketing and e-Commerce	Tulin Erdem
Mathematical Programming	Tonguc Unluyurt Alper Atamturk
Medical Applications	Horst Hamacher
Metaheuristics	Ibrahim Osman
Military Operations Research	Gulay D. Barbarosoglu
Multi-Criteria Decision Aids	Raymond Bisdorff
Multi-Objective Decision Making	Murat Koksalan
Natural Resources	Hayri Onal
Network Design	Mustafa Pinar
Optimization, Combinatorial	Peter Hammer
OR Applications in South Pacific	Erhan Kozan
OR in Development	Hans.W. Ittmann
OR In Sports	John Norman
Parallel Algorithms and Implementation	Ilkay Boduroglu
Production and Inventory Systems	Fikri Karaesmen
Programming, Dynamic	Moshe Sniedovich
Programming, Integer	Giuvanni Rinaldi
Programming, Linear	Enriqueta Vercher
Programming, Nonlinear	Mustafa Pinar
Project Management and Scheduling	Rainer Kolisch



Queueing Systems	Erol Gelenbe
Reliability and Maintenance	Suleyman Ozekici
Revenue Management and Pricing	Itir Karaesmen
Risk Analysis and Management	Spiros Martzoukos Rita D'Ecclesia
Routing	Paolo Toth
Scheduling	Ceyda Oguz Christopher Potts
Service Operations	Zeynep Aksin
Simulation	Jack Kleijnen
Stochastic Models	Suresh Sethi Metin Cakanyildirim
Strategic Planning and Management	Maureen Meadows)
Supply Chain Management	Yasemin Aksoy Wallace Hopp
System Dynamics and Systems Theory	Yaman Barlas
Telecommunications	Kemal Altinkemer
Timetabling	Jonathan Thompson
Transportation and Logistics	Maurizio Bielli
Warehouse Design, Planning, and Control	Rene de Koster
Work Flow Management Systems	Gabriele Kotsis
Robust Optimization	John-Paul Clarke
EWG EUROFUSE Fuzzy sets	Janos Fodor
EWG MODEST Modelling of economies and societies in transition	Jan W. Owsinski
EWG WATT Working group on automated time tabling	Jan A.M. Schreuder
EWG DEAPM DEA and performance measurement	Holger Thiele
EWG EUROPT Continuous Optimization Working Group	Tibor Illes
EWG E-Cube European Working Group on Experimental Economics	Klaus Ladner

**Table 3. List of Invited Sessions and Chairs**

Session Name	Chair
2D Packing	LODI, Andrea
2D Rectangular C&P	ALVAREZ-VALDES, Ramon
3D Packing	BISCHOFF, Eberhard
Additional Objectives and Constraints in C&P	YANASSE, Horacio
Advanced Topics in Project Scheduling	DEMEULEMEESTER, Erik
AHP/ANP and Applications	KARPAK, Birsen
Air Traffic Management	TEODOROVIC, Dusan
Airline Applications- I	STRAUSS, Christine
Airline Applications- II	STRAUSS, Christine
Alternative Modeling Formalisms and Formulations	BARLAS, Yaman
Applications in the Utilities Sector- I	NORSWORTHY, John R.
Applications in the Utilities Sector II	CASU, Barbara
Applications of Bayesian Methods	HAHN, Eugene
Applications of Revenue Management	KUYUMCU, Ahmet
Applications of Simulation	BARCELO, Jaume
Applications on the Financial Sector	PASTOR, José Manuel
Approximation Algorithms and Interior Point Methods	GULER, Osman
Artificial Intelligence, Expert Systems and Neural Networks - I	KOEHLER, Gary
Artificial Markets Modeling	CONSIGLIO, Andrea
Asset Liability Management	SAUNDERS, David
Bayesian Inference in Stochastic Models	WILSON, Simon
Bayesian Methods in Finance	LYNN, Nicholas
Bayesian Queues	ARMERO, Carmen
Bayesian Reliability Modeling	RUGGERI, Fabrizio
Bayesian Stochastic Optimization	POPOVA, Elmira
Bioinformatics	TÜRKAY, Metin
Boolean Functions	BOROS, Endre
Bounded Rationality and Marketing Strategy	IYER, Ganesh
Call Center Operations - II	DE VERICOURT, Francis
Call Center Operations- I	MAGLARAS, Costis
Capacity Planning	LI, Shanling
Classification via Mathematical Programming	SHINMURA, Shuichi
Clinical Care Models	GRUNOW, Martin
Combinatorial Methods for Graph Problems	ARBIB, Claudio

Session Name	Chair
Combinatorial Optimization - C5	GUNLUK, Oktay
Combinatorial Optimization - II	ONN, Shmuel
Combinatorial Optimization- I	IBARAKI, Toshihide
Combinatorial Optimization in VLSI Design	KORTE, Bernhard
Communications and Transportation Network	SFORZA, Antonio
Competitive Marketing Strategy	SUDHIR, K.
Consistency in Multicriteria Group Decision Support Systems	MORENO-JIMÉNEZ, José María
Consumer Expectations and Marketing Strategy	ERDEM, Tulin
Contemporary Issues in Option Pricing	MARTZOUKOS, Spiros
Continuous Location Problems	KRARUP, Jakob
Corporate and Organizational Change	BRADL, Peter
Cross Entropy	RUBINSTEIN, Reuven Y.
Cross-Selling	SUN, Baohong
Customer Relationship Management - I	GERSTNER, Eitan
Customer Relationship Management - II	WINER, Russell
Cutting Plane Methods for Graph and Flow Problems	FRANGIONI, Antonio
Data Mining	BOROS, Endre
Data Mining and Finance	BOYLU, Fidan
Demand Aggregation in Facility Location Models	HAMMER, Peter
Disaster Management- I	COMFORT, Louise
Disaster Management- II	ONCULER, Ayse
Discrete and Continuous Non-Convex Optimization	ATAMTURK, Alper
Discrete Models	BOROS, Endre
Discrete Optimization Problems in Circuit Layout Design	ANJOS, Miguel
Dynamic Programming - I	IWAMOTO, Seiichi
Dynamic Programming - II	SMITH, David
E-Commerce Auctions	ANANDALINGAM, Gnana
Education Arcade	WAISSI, Gary
Electricity Markets	OREN, Shmuel
Empirical Applications - I	TORTOSA-AUSINA, Emili
Empirical Applications - II	THANASSOULIS, Emmanuel
Empirical Applications - III	PASTOR, Jesús T.
Empirical Research in Cross-Cultural Negotiations	KOESZEGI, Sabine

Session Name	Chair
Energy and Related Public Sector Applications	DYNER, Isaac
Energy Policy and Planning in Latin America	SMITH, Ricardo
Energy Policy and Planning in Latin America	VELÁSQUEZ, Jesús
Environmental and Ecological Applications	SAYSEL, Ali Kerem
Environmental Aspects of Closed-Loop Supply Chains	PAPPIS, Costas P.
Environmental Management - I	LETMATHE, Peter
Environmental Management - II	GELDERMANN, Jutta
Environmental Management - III	HAASIS, Hans-Dietrich
ESIGMA - I	STEWART, Theodor
ESIGMA - II	BELTON, Valerie
ESIGMA - III	SALO, Ahti
ESIGMA - IV	ROIG-SANNEMANN, Gustavo Daniel
ESIGMA - V	DOUMPOS, Michael
EURO Excellence in Practice Award	PIDD, Michael
EWG Complex Societal Problems- II	PETKOVA, Olga
EWG Complex Societal Problems- III	DE TOMBE, Dorien
EWG DEAPM	THANASSOULIS, Emmanuel
EWG Location Analysis	LEVIN, Yuri
EWG MCAD - I	TUZMEN, Ayca
EWG MCAD - II	BUSHENKOV, Vladimir
EWG MCAD - III	OZTURK, Meltem
Exact and Heuristic Algorithms for Vehicle Routing Problems	SEMET, Frederic
Explorations into Multiple Issue Auction and Negotiation Technologies	TEICH, Jeffrey
Extensions and Applications of DEA	FØRSUND, Finn R.
Facilitation, Collaboration and DDM	VAN GRINSVEN, Jürgen
Facility Location and the Environment	ANTUNES, Antonio
Financial Modelling	SPRONK, Jaap
Financial Models	LEV, Ben
Financial Models	LEV, Ben
Financial Planning under Uncertainty	PFLUG, Georg
Financial Risk Management	VLADIMIROU, Hercules
Fleet management	UKOVICH, Walter
Flow-Shop and Just-In-Time Scheduling	KUBIAK, Wieslaw
Forestry Management - I	LOHMANDER, Peter
Freight Transport Management	ZAK, Jacek
Fuzzy Linear Programming	VERCHER, Enriqueta
Fuzzy Sets in OR	DE BAETS, Bernard

Session Name	Chair
GDN Keynote Session - I	KILGOUR, Marc
GDN Keynote Session- II	KERSTEN, Gregory
GDN Keynote Session- III	KILGOUR, Marc
GDN Panel	SHAKUN, Melvin
Geometric Search	JAILLET, Patrick
Graph Applications	AGNETIS, Alessandro
Graphs and Hypergraphs	VÍZVÁRI, Béla
Graphs, Approximation and Complexity	HOCHBAUM, Dorit
Group Collaboration	ROSENTHAL-SABROUX, Camille
Hazmat - I	OZDEMIR, Deniz
Hazmat - II	VERTER, Vedat
Hazmat - III	ERKUT, Erhan
Hazmat - IV	KARA, Bahar
Health and Related Sector Applications	HAFEEZ, Khalid
Health Care Service Operations	CHICK, Stephen
Hub Location	KARA, Bahar
Human Resources Management	SWIERCZ, Paul
Information and Accuracy Issues	TOKTAY, Beril
Information Technology and Closed-Loop SCs	VAN NUNEN, Jo
Information Theoretic Methods	SOOFI, Ehsan
Innovation	ROMANOVA, Maria
Innovation and Growth	LECHLER, Thomas
Innovative Applications of Group Decision and Negotiation	JARMAN, Rodney B.
Innovative Manufacturing and Capacity Management	SWAMINATHAN, Jayashankar
Integer Programming - I	WEISMANTEL, Robert
Integer Programming - II	GENTILE, Claudio
Integer Programming - III	CAPRARA, Alberto
Integrated Inventory and Transportation Models	CETINKAYA, Sila
Interior Point Methods	TERLAKY, Tamas
Internet and Wireless Networks	ORMECI, E. Lerzan
Internet Delivery of OR Services	FOURER, Robert
Inventory Control and Reverse Logistics - I	INDERFURTH, Karl
Inventory Control and Reverse Logistics-II	INDERFURTH, Karl
Inventory Management	VAN HOUTUM, Geert-Jan
Issues in Flexible Manufacturing - II	STECKE, Kathryn E.
Issues in Flexible Manufacturing- I	PACIFICI, Andrea
Issues in Long-term Care and Quality	WAN, Thomas T. H.
Issues in Reverse Logistics Networks	DEKKER, Rommert

Session Name	Chair
Kernel Methods in Data Mining and Applications	TRAFALIS, Theodore
Knowledge Leveraging	KAVRAKO?LU, ?brahim
Knowledge Management	STANKOSKY, Michael
Location Methodology	MELO, Teresa
Location Models	BERMAN, Oded
Location Models under Uncertainty	DASKIN, Mark
Location Routing Problems	SALAZAR GONZÁLEZ, Juan José
Long-term Care Models	CHAUSSALET, Thierry
Lot Sizing and Scheduling	KUHN, Heinrich
Maintenance Optimization	DOYLE, E. Kevin
Management of Innovation and New Products	DUTTA, Shantanu
Managing High Technology Projects	ELIMAM, Abdelghani
Market Entry	SCHADE, Christian
Marketing Mix Management	HILDEBRANDT, Lutz
Measurement and Evaluation Models in Health Care	OZCAN, Yasar
Medical Applications - I	HAMACHER, Horst
Medical Applications - II	HAMACHER, Horst
Meta-Heuristics Directions	OSMAN, Ibrahim
Meta-Heuristics for Flow-Shop Scheduling	RUIZ, Ruben
Meta-Heuristics for Optimization	DENGIZ, Berna
Meta-Heuristics for Routing	EGLESE, Richard
Meta-Heuristics for Scheduling	HINDI, Khalil
Metamodels in Simulation	KLEIJNEN, Jack
Military OR - I	WIJMALEN, Diederik J.D.
Military OR - II	SIMOES GOMES, Carlos Francisco
Military OR - III	LOHMANDER, Peter
Mobile Communications	AMIRI, Ali
Modeling Agent and/or Customer Behavior in Service Delivery	AKSIN, Zeynep
Modeling and Analysis Methodology	BILLER, Bahar
Modeling and Managing Financial Risk	D'ECCLESIA, Rita
Modeling Languages and Systems for Optimization	KALLRATH, Josef
Models for Freight Transportation	CRAINIC, Teodor Gabriel
Modern Scheduling Problems and Solutions	POTTS, Chris
MODM - C1	HENIG, Mordecai
MODM- I (DEA)	KORHONEN, Pekka
Multi-Echelon Systems	DE KOK, Ton
Multi-Objective Comb. Optimization - I	EHRGOTT, Matthias

Session Name	Chair
Multi-Objective Comb. Optimization-II	EHRGOTT, Matthias
Multi-Objective Metaheuristics	GODART, Jean-Marc
Multi-Project Capacity Planning	HANS, Erwin W.
Nesting - I	BENNEL, Julia
Nesting-II	OLIVEIRA, Jose Fernando
Network Design	YAMAN, Hande
Network Routing and Telecommunication Applications	EKIN-KARASAN, Oya
Neural and other Approximating Networks in Stochastic Optimal Control	ZOPPOLI, Riccardo
New Approaches for Resource-Constrained Scheduling Problem	UETZ, Marc
New Approaches in Inventory Management	GÜLLÜ, Refik
New Directions in Supply Chain Research	IYER, Ananth
New Models and Algorithms for Resource-Constrained Project Scheduling	ALVAREZ-VALDES, Ramon
Non Smooth and Non Convex Programming	DUER, Mirjam
Opportunities and Wealth Creation	MINNITI, Maria
Optimization and Simulation	GURKAN, Gul
Optimization Opportunities Arising in Real Problems	ZUDDAS, Paola
OR Applications in South Pacific - I	HIGGINS, Andrew
OR Applications in South Pacific - II	DELEN, Dursun
OR Applications in South Pacific - III	OHUCHI, Azuma
OR Applications in South Pacific - IV	SEKIGUCHI, Yasuki
OR in Agriculture and Forestry Management	PLA, Lluís M.
OR in Development	ITTMANN, Hans.W.
OR in Sports - I	NORMAN, John
OR in Sports - II	TRICK, Michael
Parallel Algorithms & Implementation	BODUROGLU, Ilkay
Performance Evaluation and Optimization of Stochastic Models - I	MOCANU, Stéphane
Performance Evaluation and Optimization of Stochastic Models-II	LIBEROPOULOS, George
Performance/Efficiency and Financing in Health Care	O'NEILL, Liam

Session Name	Chair
Planning and Resource Allocation Models in Health Care	RAUNER, Marion
Portfolio Optimization	OZEKICI, Suleyman
Practical Facility Location Models	NICKEL, Stefan
Pricing and Auctions	KESKINOCAK, Pinar
Pricing and Revenue Management - I	PERAKIS, Georgia
Pricing and Revenue Management in SCs	KARAESMEN, Itir
Pricing and Revenue Management-II	ÖNAL, Hayri
Product Assortment Decisions	DRAGANSKA, Michaela
Project Scheduling Under Risk	ULUSOY, Gündüz
Project Scheduling with Storage Constraints	NEUMANN, Klaus
Public transportation	ADAMSKI, Andrzej
Quadratic Assignment and Network Design	SMITH, J. MacGregor
Queueing Applications in Telecommunications	ÇA?LAR, Mine
Queueing Models and Traffic Control	FRIEDRICH, Bernhard
Radiation Oncology	HOLDER, Allen
Reliability Testing	ALT?NEL, ?. Kuban
Retail Supply Chains	TON, Zeynep
Revenue Management and Pricing of Inventories	GÜRLER, Ülkü
Revenue Management in Services	AKÇAY, Yalç?n
Reverse Logistics	NALCA, Arcan
Rework Issues in Closed-Loop Supply Chains	FLAPPER, Simme Douwe
Rich Vehicle Routing Problems - I	HASLE, Geir
Rich Vehicle Routing Problems-II	HASLE, Geir
Rich Vehicle Routing Problems-III	HASLE, Geir
Robust Optimization	CLARKE, John-Paul
SADERYL: A DSS for Vehicle Routing and Facility Location Problems	CORBERAN, Angel
Scalable Enterprise Systems	PULAT, Pakize
Scheduling - I	VINCENT, T'kindt
Scheduling - II	POTTS, Chris
Scheduling in Automated Manufacturing	AKTURK, M. Selim
Scheduling in Computer Systems	DROZDOWSKI, Maciej
Scheduling in Production Systems	OGUZ, Ceyda
Searching Discrete Locations	ALPERN, Steve

Session Name	Chair
Semi Infinite Programming and Extensions	STILL, Georg
Service Delivery Design	CHEVALIER, Philippe
Simulation and Logistics	MERKURYEV, Yuri
Simulation Models in Health Care	LEONARD, Kevin
Social Choice	BRAMS, Steven J.
Social Choice, Allocation, and Bargaining	SANVER, Remzi
Spare Parts Management-I	VAN HOUTUM, Geert-Jan
Spare Parts Management-II	VAN HOUTUM, Geert-Jan
Spare Parts Management-III	VAN HOUTUM, Geert-Jan
Special Topics in Risk Management	JABBOUR, George
Stochastic Model Applications	GUESSOW, Jens
Stochastic Models and Orders in Reliability Theory	SHAKED, Moshe
Stochastic Models in Operations Management	GÜRLER, Ülkü
Stochastic Models in Semiconductor Manu.	KATIRCIOGLU, Kaan
Store Brands	PAUWELS, Koen
Strategic and Quality Issues in Closed-Loop SC	TAGARAS, George
Strategic Management - I	MEADOWS, Maureen
Strategic Management-II	MEADOWS, Maureen
Subjective Probability Judgment	ULU, Canan
Supply Chain Design and Contracts	KAYAL?GIL, Sinan
Supply Chain Design and Management	ESKIGUN, Erdem
Supply Chain Dynamics	BARLAS, Yaman
Supply Chain Management - C1	TOKTAY, Beril
Supply Chain Management - I	BOYACI, Tamer
System Dynamics and Theory	BARLAS, Yaman
Teaching Revenue Management	BELL, Peter
Telecommunications Network Design	TADEI, Roberto
Theoretical Issues in DEA - I	PODINOVSKI, Victor
Theoretical Issues in DEA - II	CUBBIN, John
Theory of Search Games and Rendezvous	GAL, Shmuel
Topics in Supply and Demand Management	OZER, Ozalp
Topics in Supply Chain Research	KARABATI, Selçuk
Topics in Yield and Price Management	KAZAZ, Burak
Traffic Assignment	BELLEI, Giuseppe
Transport and Environment	SINAY, Maria Cristina
Transportation Systems	MALONE, Kerry

Session Name	Chair
Trust in Technology	LIPPERT, Susan
Tutorial on Cross Entropy Method for Combinatorial Optimization	RUBINSTEIN, Reuven Y.
Tutorial on Logical Analysis of Data	HAMMER, Peter

Session Name	Chair
Variance Reduction Methods	NICOLA, Victor
Warehouse Design, Planning, and Control - I	DE KOSTER, René
Work Flow Management Systems	KOTSIS, Gabriele

### 1.11 Paper Submission

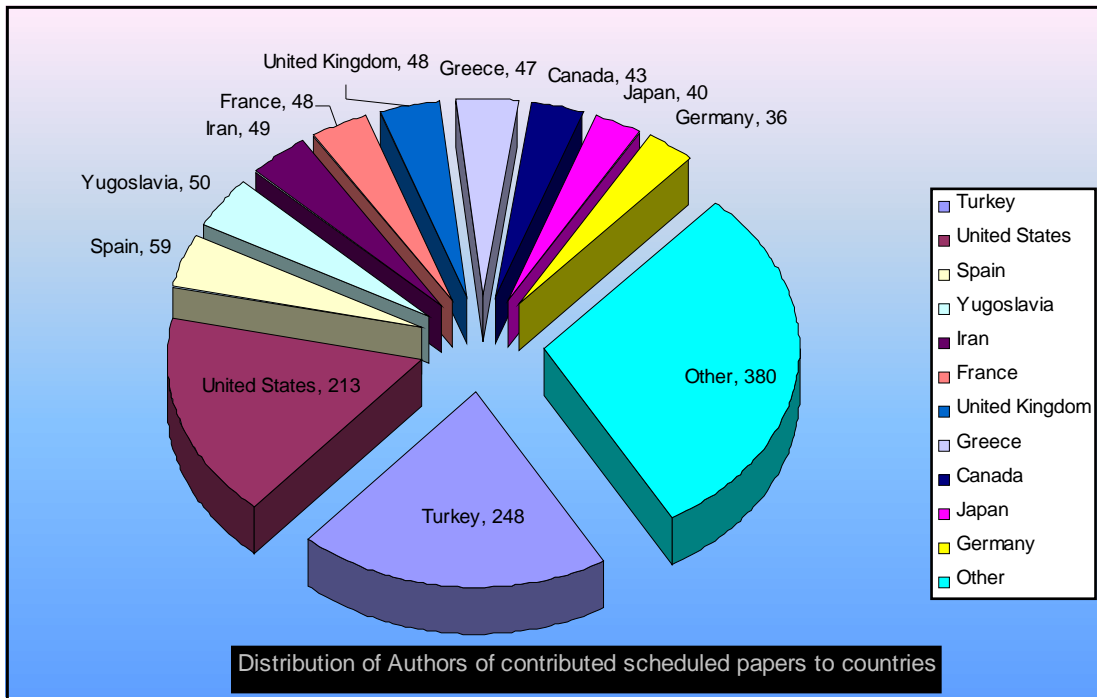
Electronically 1857 papers were submitted, and 1510 of them were scheduled. Among the scheduled papers, 903 of them were invited and 607 of them were contributed. Of all the papers submitted, 1705 papers were submitted before May 1, 2003, **the author registration deadline**. By months this was distributed as follows:

April	200
March	635
February	166
January	415
Pre-Jan 2003	271

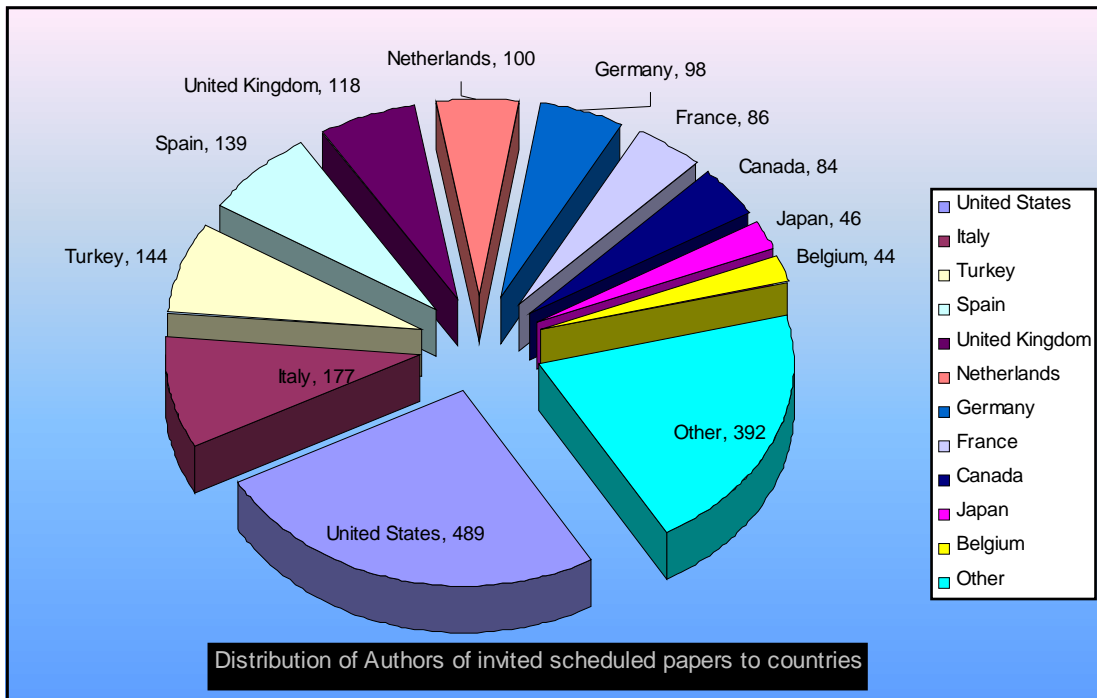
There were 1302 papers submitted as of March 15, 2003, **the early registration deadline**. Number of registered people was not close to this number though due to the uncertainty about the US-Iraq dispute and the SARS epidemic at that time. Under normal circumstances, one should expect by the early registration deadline about 70-80% of the conference papers to be submitted and a corresponding amount of fees to be collected.

Another 152 papers were submitted after May 1, 2003. A great majority of these 152 late papers were invited papers that were late in submitting for one reason or another.

National distribution of authors is summarized in Figures 3 and 4.



**Figure 3 - Distribution of scheduled contributed papers**



**Figure 4 - Distribution of scheduled invited papers**



## **1.12 Preparation of the Final Program and Abstract Booklet**

As of June 1, 2003 the abstract database was retrieved from EURO's Belgium site and it was maintained in Istanbul. This was a MySQL database and provided the basis for the final program and the abstract booklet.

The program committee came up with the skeleton of the program and inserted paper numbers from the database to an excel sheet. This excel sheet was then inserted to the database. The local committee provided a scheduling web interface for the program committee to make changes to the program. This interface has been used till the end of the conference and actually quite heavily during the conference.

The local organizing team had to go through the abstract database to check for consistency. This proved to be an arduous task. In particular, many colleagues did not know what to write in the affiliation field of the form they were presented at the time of paper submission. Probably this should be accompanied with an explanation in the future forms. The consistency checking was well worth the effort when we dumped the abstract database for the abstract booklet. We could produce the abstracts in the booklet with relatively less effort. We dumped the abstracts directly to Adobe Freehand (the software that is also used by the publisher). We could reflect changes to the program until mid-June in the abstract booklet using this procedure.

## 2. THE CONFERENCE

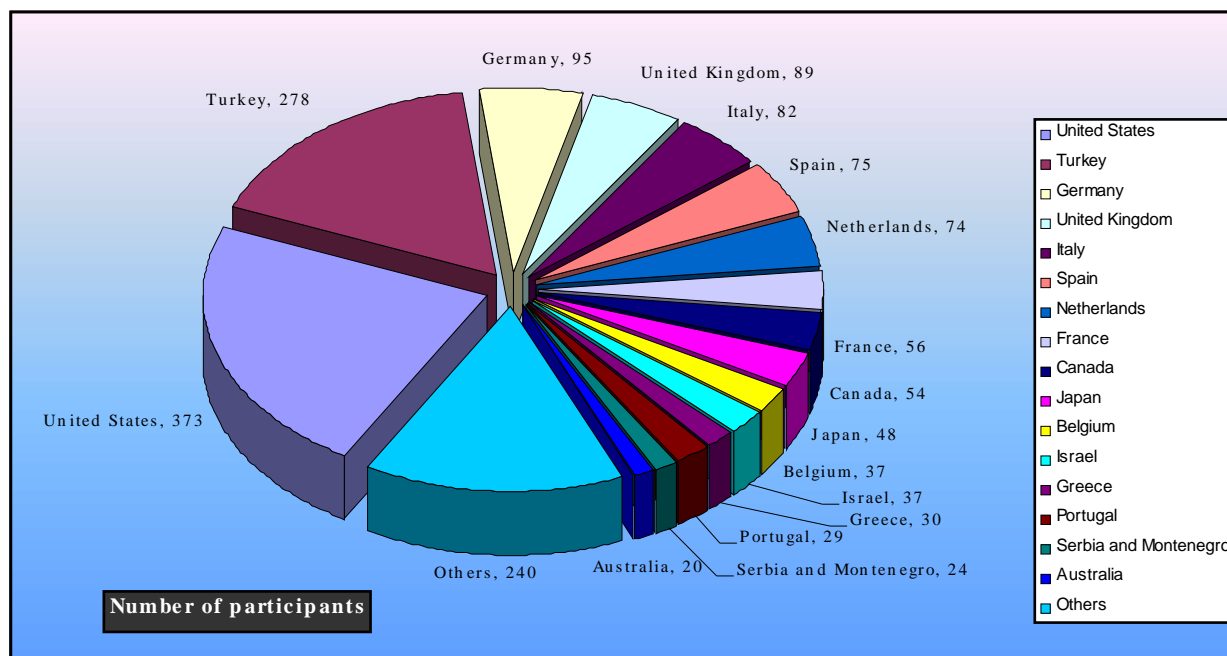
The Conference was held in the Conrad Conference and Convention Center as planned, and all plans were implemented without experiencing any unexpected disruption or major modifications.

### 2.1 Attendance at the Conference

1641 delegates participated to the conference. 1507 (including ECE delegates) of them paid a registration fee, and 134 of them were sponsored by the conference committee or they received complimentary registration. Distribution of the delegates through nations is given below in Table 4 and in Figure 5:

**Table 4. Nationalities of delegates**

Country	Number of participants	Country	Number of participants	Country	Number of participants
United States	373	Poland	12	Belarus	2
Turkey	278	Norway	11	Hong Kong	2
Germany	95	Saudi Arabia	11	India	2
United Kingdom	89	Sweden	11	Lebanon	2
Italy	82	Iran	10	Marshall Islands	2
Spain	75	Czech Republic	9	Romania	2
Netherlands	74	Hungary	8	Thailand	2
France	56	Singapore	8	Argentina	1
Canada	54	Chile	7	Armenia	1
Japan	48	Croatia	6	Egypt	1
Belgium	37	New Zealand	6	Ghana	1
Israel	37	Colombia	5	Iceland	1
Greece	30	Ireland	5	Liechtenstein	1
Portugal	29	Latvia	5	Lithuania	1
Serbia and Montenegro	24	Russia	5	Netherlands Antilles	1
Australia	20	South Africa	4	Qatar	1
Brazil	17	Taiwan	4	Tunisia	1
South Korea	17	Cyprus	3	United Arab Emirates	1
Austria	14	Denmark	3	KKTC	1
Finland	14	Mexico	3	Luxembourg	1
Switzerland	13	Algeria	2		



**Figure 5 - Distribution of participants**

## 2.2 Delegates from East and Central Europe

EURO provided financial aid to support the attendance of delegates from East and Central European Countries during the early registration period, the regular participants paid \$65 per person (\$25 for a student), and in the late registration period, the regular participants paid \$85 per person (\$30 for a student). Applications for this aid were evaluated by the local organizing committee, and almost all of the applications were answered positively. A total amount of \$11900 was allocated as the ECE financial aid.

**Table 5. Financial Aid to ECE Countries**

Name of the Country	Number of ECE holders
Republic of Armenia	3
Belarus	2
Bulgaria	1
Croatia	2
Czech Republic	4
Hungary	5
Latvia	5
Lithuania	1
Romania	1
Russia	4
Poland	9
Serbia and Montenegro	25
<b>Total</b>	<b>62</b>

**Table 6. Financial Aid to ECE Countries**

Type of Participant	Number	Amount of Financial Aid Granted (in US \$)
Full Participant	48	10,880
Student Participant	14	1,020
Total	62	<b>11,900</b>

### 2.3 Attendance at Sessions

Based on the session reports received from the session chairs, attendance at the invited and contributed sessions is summarized in Table 6. 7526 participations occurred during the Conference. Average number of sessions that a participant attended is  $7526/1641 = 4.59$ . There were 144 “no-show” instances among 1510 papers scheduled in 410 sessions ( 9.5% ). Detailed “no-show” information is summarized in Tables 7-8 and Figures 6-7 where “0” indicates that all the papers were actually presented in the sessions already scheduled.

**Table 7. Attendance at the sessions**

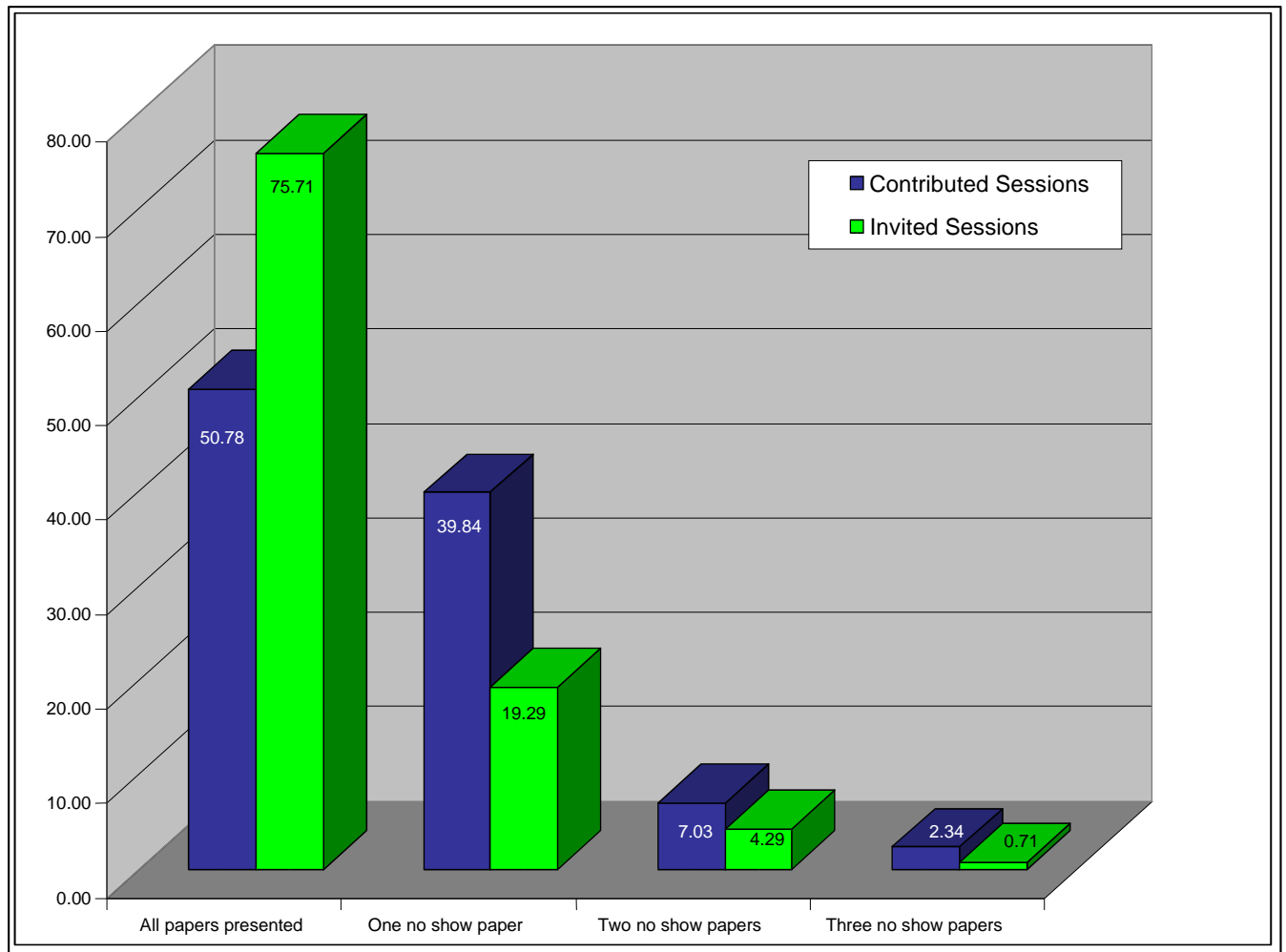
Number of sessions		
Number of delegates	Contributed	Invited
1-5	7	8
6-10	31	33
11-15	46	51
16-20	26	84
21-25	11	41
26-30	6	32
31-35	1	22
36-40	0	3
41-45	0	5
>45	0	3
Total	128	282

**Table 8. “No-Show” Distribution**

Session Type	No-Show				Total
	0	1	2	3	
CONTRIBUTED	65	51	9	3	128
INVITED	214	54	12	2	280
Total	279	105	21	5	410

**Table 9. Daily “No-Show” Distribution**

Days	No-Show				Total
	0	1	2	3	
July 7	83	21	9	1	114
July 8	49	25	6	1	81
July 9	78	29	3	2	112
July 10	69	30	3	1	101
Total	279	105	21	5	410



**Figure 6 – “No-Show” Percentages in Invited and Contributed Sessions**

## 2.4 Special Journal Issues

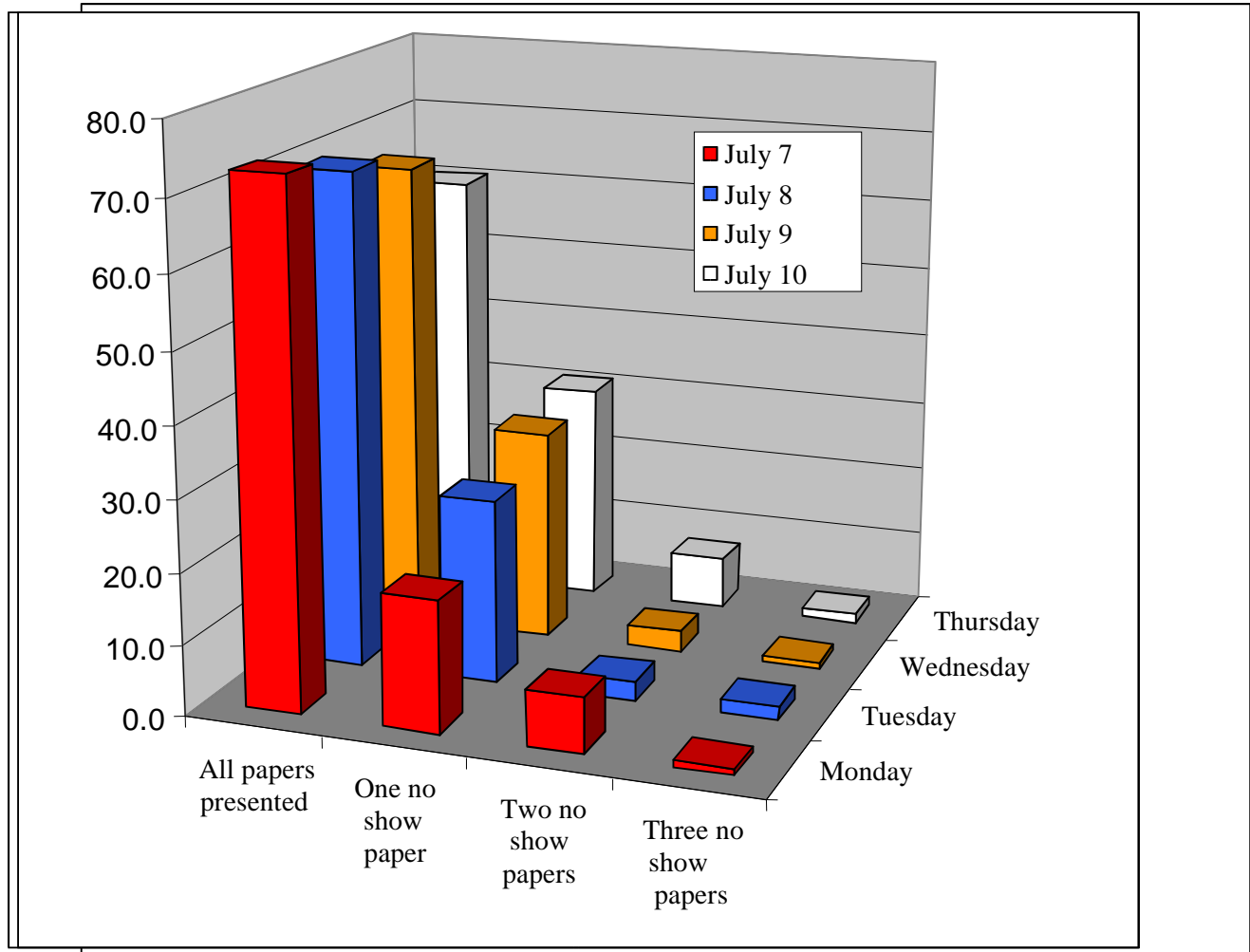
Selected papers presented at the conference were invited for publication in special conference issues of the following journals:

- **EJOR special issue**

A special issue of EJOR will be published in 2004. The theme of the special issue is "New Opportunities for Operations Research". Accordingly, papers are particularly invited from areas such as Financial Engineering, Health Care & Medical Applications, Reverse Logistics, Marketing, Telecommunications, Revenue Management, E-Commerce, Bioinformatics etc.

- **HCMS special issue**

A special issue of Health Care Management Science (HCMS) will be published in 2004. All papers will be refereed according to HCMS standards. The theme of the special issue is "Contemporary Health Care Applications in OR/MS".



**Figure 7 –Daily “No-Show” Percentages**

• **OMEGA special issue**

A special issue of OMEGA Journal will be published in 2004. All papers will be refereed according to OMEGA Journal standards. The theme of the special issue is "New Approaches in Management and Management Science".

**2.5 Social Events**

Some social activities have been planned and the required reservations and arrangements have been made in that direction.

- ★ July 6 Get-Together Party, Conrad Hotel
- ★ July 7 Dinner Reception, Boğaziçi University
- ★ July 8 Bosphorus Cruise Dinner
- ★ July 8 5K Race, Belgrade Forest
- ★ July 9 Banquet, an Ottoman Palace

Participations to the social events were high, and the approximate attendance figures are provided in Table 10.

**Table 10. Participation to the social events**

<b>Events</b>	<b>Participants</b>
Get-Together Party, Conrad Hotel	~850
Dinner Reception, Bo?aziçi University	~1700
Banquet, Dolmabahçe Palace	~1000
5K Race, Belgrade Forest	34

## 2.6 Exhibitions

A total of 5 exhibitors attended the conference to display books and software. The list of exhibitors is given Table 11. Special mention should be made of the stand of EURO and INFORMS at the exhibition.

**Table 11. List of exhibitors**

<b>Exhibitor</b>	<b>Description</b>
<b>ILOG, Inc.</b>	ILOG is the leading developer and supplier of mathematical programming and constraint programming optimization technology.
<b>John Wiley &amp; Sons, Ltd.</b>	Founded in 1807, John Wiley & Sons, Ltd. is an independent, global publisher of print and electronic products, specialising in scientific and technical books, textbooks and education materials, journals, professional and consumer books.
<b>Kluwer Academic Publishers</b>	Kluwer Academic Publishers is a leading publisher of academic books and journals in a very broad perspective.
<b>Palgrave Macmillan</b>	Palgrave Macmillan is a global academic publisher, serving learning and scholarship in the field of higher education, and publishing for the related professional business, management and OR markets.
<b>Springer-Verlag</b>	Springer publications cover all relevant areas for Operations Research, from Business Administration, Production, Simulation to Applied Computer Science and Applied Mathematics: books, journals, electronic media.



### 3. FINANCIAL STRUCTURE

#### 3.1 Income ( 2003 Realized Fees)

ITEMS		NUMBER	FEE (USD)	UNIT FEE (USD)	EURO (USD)	INFORMS (USD)	TOTAL (USD)
<b>REGISTRATION FEES</b>							
Early Registration (Full)		825	300	21,00	17.325,0	17.325	34.650
Late Registration (Full)		191	400	29,00	5.539,0	5.539	11.078
Early Registration (ST)		207	100	7,00	1.449,0	1.449	2.898
Late Registration (ST)		222	120	8,40	1.864,8	1.865	3.730
Complementary	1	134		0			
Euro Contribution (Full Early)	2	28	65	4,55	127,4	127	255
Euro Contribution (Full Late )	2	20	85	5,95	119,0	119	238
Euro Contribution (St Early)	2	8	25	1,75	14,0	14	28
EURO Contribution (St Late)	2	6	30	2,10	12,6	13	25
<i>Total</i>		1.641			26.451	26.451	52.902

### 3.2 Revenue

ITEMS		NUMBER	FEE (USD)	REVENUE (USD)
<b>1. REGISTRATION FEES</b>				
Early Registration (Full)		825	300	247.500
Late Registration (Full)		191	400	76.400
Early Registration (ST)		207	100	20.700
Late Registration (ST)		222	120	26.640
Complementary	1	134		0
Euro Contribution (Full)	2	28	65	1.820
Euro Contribution (Full)	2	20	85	1.700
Euro Contribution (St)	2	8	25	200
EURO Contribution (St)	2	6	30	180
<i>Sub-total</i>		1.641	260	375.140
<b>2. EXHIBITORS &amp; SPONSORS</b>				
<i>Sub-total</i>				13.000
<b>3. EURO</b>				
<i>Sub-total (3)</i>				11.900
<b>4. BANQUET</b>				
<i>Sub-total</i>		700	50	35.000
<b>5. ACCOMPANYING PERSONS</b>				
<i>Sub-total</i>		44	90	3.960
<b>TOTAL REVENUE</b>				439.000
<b>TOTAL COST</b>				427.704
<b>PROFIT</b>				11.296
<b>YAD SHARE OF PROFIT</b>				7.500
<b>NET PROFIT</b>				3.796

(1) Complementary registrations include

- 26 Organization/Program Committee members
- 42 Plenary/Semi Plenary/Tutorial speakers
- 60 Support staff (students and research assistants)
- 4 Euro/Informs Participants

(2) Euro contribution has been deployed to provide partial support to 62 participants from Central & East European Countries with the breakdown of

- 48 Full participants
- 14 Student Participants

(3) At today's exchange rates, cost of supporting 62 participants from East and Central Europa has exceeded the 10,000 Euro limit by about \$900.

### 3.3 Expenses

ITEMS	NUMBER	UNIT COST(USD)	TOTAL COST(USD)
<b>1. PRINTINGS</b>			
First Announcement	25.000	0,10	2.500
Invitation Program	25.000	0,40	10.000
Paper/Envelopes	8.000	0,05	400
Final Program	1.716	0,60	1.030
Tutorials & Abstract CD	1.716	0,90	1.544
Tutorials & Abstract Booklet	1.716	5,60	9.610
<i>Sub-total</i>			25.084
<b>2. MAILINGS</b>			
<b>2.1 First Announcement</b>			
Europe+USA	22.000	0,40	8.800
Turkey	3.000	0,25	750
<b>2.2 Invitation Program</b>			
Europe+USA	22.000	0,50	11.000
Turkey	3.000	0,30	900
<i>Sub-total</i>			21.450
<b>3. MEETING OF COMMITTEES</b>			
Travel (Europe)	7	600	4.200
Travel (USA)	8	850	6.800
Accommodation	12	450	5.400
<i>Sub-total</i>			16.400
<b>4. CONGRESS SECRETARIAT</b>			
Personnel			6.000
Equipment Rental & Procurement			15.000
Insurance			2.000
Banking & Financial Expences			9.000
Posters & Flags	25	100,00	2.500
Conference Administration			6.000
<i>Sub-total</i>			40.500
<b>5. CONGRESS KIT</b>			
Conference Bags	1.716	9,00	15.444
Name Tags & Tickets	1.716	2,20	3.775
<i>Sub-total</i>			19.219
<b>6. CONVENTION CENTER</b>			
Includes all the following items	5	6.000	30.000
Conference rooms			
EJOR meeting (1)			
Sunday EC meeting (1)			
<i>Sub-total</i>			30.000



**7. SOCIAL PROGRAM**

Coffee breaks (8 x \$2)	1.200	16	19.200
Welcome cocktail (min. 500)	1.000	15	15.000
Reception (min. 1000)	1.600	35	56.000
Banquet (min. 950)	950	35	33.250
Lunch (4 x \$6)	1.100	24	26.400
Transportation			9.500
Music, Security & Cleaning			17.500
Site Rentals (Dolmabahçe)			22.000
<i>Sub-total</i>			198.850

**8. PLENARY/SEMI PLENARY SPEAKERS & TUTORIALISTS**

Travel (Europe)	12	550	6.600
Travel (USA)	12	850	10.200
Accommodation	8	500	4.000
<i>Sub-total</i>			20.800
<b>9. PHONE + FAX + PHOTOCOPY</b>			2.500
<b>10. EURO FEE</b>			26.451
<b>11. INFORMS FEE</b>			26.451

<b>TOTAL EXPENSES</b>			427.704
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(1) Only the meetings held in the conference rooms and dates are covered.

	1.1 USD = 1 EURO	1USD = 1400000TL	1 USD = 1.49 CHF
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