

EURO Bulletin

Bulletin of the Association of European Operational Research Societies (EURO)
within the International Federation of Operational Research Societies (IFORS)

from the President-elect

Readers of the Bulletin may be interested in three initiatives which have the potential to assist OR in the newly emerging economies of Central and Eastern Europe. The first is TEMPUS.

TEMPUS

This acronym stands for "Trans European Mobility Programme for Universities". Its second year has just begun. The aim is to re-train Polish, Hungarian and other Central European teachers, in defined priority areas such as agriculture and management. As far as is known there has been only one OR project proposal within TEMPUS. This is between the Polish Academy of Sciences (Prof. Walukiewicz), the University of Copenhagen - DIKU (Prof. Krarup), the U.K. OR Society and the London School of Economics - the main contractor (Dr. Powell, Project Director). This project was one of only 10% of bids which were successful. It has now been operating for one year. Its aim is to structure a complete MBA programme for the new Polish International Business School and to produce detailed teaching notes for the Quantitative Methods part of the course. Funds for TEMPUS are very tightly controlled indeed - most bids were cut in half. The aim of those who devised the programme seems to be to provide hardware, software and language training. The next programme (ACE) is probably more suitable for O.R. people.

ACE

Another acronym - this time for "Action for Co-operation in the field of Economics". Money is available for research projects, seminars, setting up co-operative networks, etc. etc. Unlike TEMPUS there are set amounts payable for different classes of person / activity, e.g. so much per year for a Ph.D. student, so much per day for research activity, and so on. But why would I be writing about "Economics"? The answer is that in this case Economics is defined to include "business" and "economics courses" to include MBAs. Since O.R. is designed to assist business systems and decision-making, Q.E.D.

RUSSIA

A proposal has been put to the U.K. O.R. Society by Dr. Duncan Conway, Vice-President, that it should press for U.K. government grants to be made available for retraining Russian and other republican O.R. specialists in the sort of OR used in a market economy. In the short term small teams could undertake crash retraining programmes and then go out into the field to help with real life problems of the transitional market and of reconstruction. A third phase would involve the creation of long term training programmes jointly between UK universities in the republics. Finally there would be a real need to ensure that a professional OR approach becomes part of the ongoing culture in all republics.

Maurice Shutler

Season's

Greetings

CONTENTS

- 1 from the President-elect
- 2 EURO-officers & members
- 3 EURO Gold Medal
- 4 EURO Summer Institutes
- 5 New EURO Working Groups
- 6 Journals, call for papers
- 7 Events

EURO Bulletin is distributed four times a year through the National Societies. Members having information for the EURO Bulletin are requested to inform their National Societies. The National Societies are requested to send their information to the editor of the EURO Bulletin. Copy deadlines: last dates for editorial copy: 1 March 1992 for the Spring 1992 issue and 1 June 1992 for the Summer 1992 issue.

Editor: Ph. Van Asbroeck, 108 av. Sleenckx, B-1030 Brussels, Belgium (tel. +2 245 60 69, fax: +2 353 05 09)

EURO-officers

President: Jaap Spronk, Erasmus University, P.O. Box 1738, 3000 DR Rotterdam, Netherlands;

Past-President: Jakob Krarup, DIKU Univ. of Copenhagen, Universitetsparken 1, DK-2100 Copenhagen O, Denmark;

President-elect: F. Shutler, Monopolies and Mergers Commission, New Court, 48 Carey Street, London WC2A 2JT, UK;

Vice-President: Isabel Hall Themido, Lisbon Technical University, CESUR, Av. Rovisco Pais, P-1000 Lisbon, Portugal;

Secretary: Catherine Roucairol, Université Paris 6 et INRIA, Domaine de Voluceau, B.P. 105, Rocquencourt, F-78153 Le Chesnay, France;

Treasurer: Jean Bovet, M.A.D., Route d'Oron 100, CH-1000 Lausanne, Switzerland;

Vice-President of IFORS: Jean-Pierre Brans, University of Brussels, CS00, Pleinlaan 2, B-1050 Brussels, Belgium;

EURO-members

Austria: Österreichische Gesellschaft für Operations Research (ÖGOR), c/o Institut für Ökonometrie, OR und Systemtheorie (Prof. G. Feichtinger), Technische Universität Wien, Argentinierstrasse 8, A-1040 Wien;

Belgium: Société Belge pour les Applications des Méthodes Scientifiques de Gestion / Belgische Vereniging voor Toepassing van Wetenschappelijke Methoden in het Bedrijfsbeheer (SOGESCI / BVWB), Eendrachtstraat/rue de la Concorde 53, B-1050 Brussels, (tel.: +2 5134580);

Denmark: Danish Operations Research Society (DORS), c/o Spadille Congress Service, Sommervej 3, DK-3100 Hornbaek, (tel.: 02-202496);

Egypt: Operations Research Society of Egypt (ORSE), c/o Nasser Wahba, Centre for Middle East Management Studies, The American University in Cairo, P.O. Box 2511, Cairo;

Finland: Finnish Operation Research Society (FORS), P.O. Box 702, SF-00101 Helsinki 10;

France: Association Française pour la Cybernétique Economique et Technique (AFCET), 156 Boulevard Péreire, F-75017 Paris, (tel.: 01-47662419);

Germany: Deutsche Gesellschaft für Operations Research (DGOR), Mrs. Astrid Schneeweiss, Lärchenweg 9, D-6901 Wilhelmsfeld, (tel.: 06220-1223);

Greece: Hellenic Operational Research Society (HELORS), Solomou 20, G-11682 Athens, (tel.: 01-3619892, 01-3607532);

Hungary: Committee of OR at the Hungarian Academy of Sciences, P.O. Box 63, H-1502 Budapest, (Associate Member);

Ireland: Operations Research and Management Society of Ireland (ORMSI), c/o Stokes Kennedy Crowley, 1 Stokes Place, St. Stephen's Green, Dublin 2 (tel.: 735566);

Israel: Operational Research Society of Israel (ORSIS), c/o Faculty of Industrial Engineering and Management, Technion, Haifa, (tel.: 04-292239);

Italy: Associazione Italiana di Ricerca Operativa (AIRO), c/o Signora Agnese Martinoli - Bagnasco, Via Serretto 1/4, I-16131 Genova, (tel.: 010-314415);

Netherlands: Netherlands Society for Operations Research (NSOR), c/o Drs. B. J. Lageweg, Centre for Mathematics and Computer Science, Kruislaan 413, NL-1098 SJ Amsterdam, (tel.: 020-5924091);

Norway: Norwegian Operations Research Society (NORS), c/o Polyteknisk Forening, Rosenkrantzgt. 7, N-0157 Oslo, (tel.: 02-330741);

Poland: Polish Cybernetical Society, c/o Jacek Blazewicz, Technical University of Poznan (Associate Member);

Portugal: Associacao Portuguesa para o Desenvolvimento da Investigacao Operacional (APDIO), Cesur-Instituto Superior Tecnico, Av. Rovisco Pais, P-1000 Lisboa, (tel.: 807455 / 882992);

Spain: Spanish O.R. Statistical and Informatic Society (SORIS), Serrano 123, 280006 Madrid, (tel.: 01-2619800-264);

Sweden: Swedish Operations Research Association (SORA), c/o ITM, Box 26300, S-100 41 Stockholm;

Switzerland: Schweizerische Vereinigung für Operations Research / Association Suisse de Recherche Operationnelle (SVOR / ASRO), c/o SVOR / ASRO Geschäftsstelle, P.O. Box 6313, CH-8023 Zurich, (tel.: 071-233127);

Turkey: Operations Research Society of Turkey (ORST), c/o Seyhun Altunbay, Marmara Research Institute, P.O. Box 21, Gegze-Kocaeli;

United Kingdom: Operational Research Society (ORS), Neville House, Waterloo Street, Birmingham B2 5tx, (tel.: 021-6430236);

Yugoslavia: Yugoslav Society for Electronics, Telecommunications, Automation and Nuclear Engineering (ETAN), Kneza Milosa 9, P.O. Box 356, Belgrade.

EURO Gold Medal 1991

Jacek Blazewicz
Roman Slowinski
Jan Weglarz

The EURO Gold Medal is one of the instruments introduced by an active former President, Jean-Pierre Brans. I guess it will be called a "new instrument" for a while; although its initials GM are the same as in Grand Mother, it always looks new. There are several reasons to that: one fact that the Gold Medal is always a surprise at the opening ceremony of our Conferences. Another reason is the variety of talents which were honoured by this distinction.

Past recipients of the medal have indeed been Hans Zimmermann, Pierre Hansen, Alexander Rinnooy Kan, Martin Beale posthumously and Claude Berge. Representing Germany, Belgium and the Netherlands, the United Kingdom and France, the laureates constitute an almost perfect balancing in the West European geography.

Where should the next medal go? What kind of contribution deserve the highest award in the field of O.R.? This is the kind of question which the jury had to solve in a possibly small number of iterations. I would like to thank my colleagues Rainer Burkard, Radivoj Petrovic, Bernhard Tilanus and Philippe Vincke for their efficient work in the nomination process. It is by the way the first time that a Gold Medal Jury is composed of a majority of members who attended all EURO Conferences.

According to the EURO rules, the award may be conferred on an individual or an institution. The prize consists not only of a gold medal but also of a permanent invitation to the EURO Confer-

ences. By the way a few free admission tickets may be more than a gold medal...

We received about 10 excellent proposals of nomination from the member societies. Convergence was obtained towards an ideal picture of a 41 year old candidate with 2.33 children.

Our laureate is famous for his extensive and deep work in various area of scheduling. More than eighty papers have spread his results throughout the scientific world. Besides three textbooks, his book on deterministic scheduling is now so famous that it will remain in the Annals of O.R.; its presentation is so thrilling that even a Pope would read it.

Covering an extremely wide area and bringing remarkable contributions in a variety of directions our laureate has significantly developed the fields of project scheduling, resource-constrained scheduling, computer scheduling with deadlock avoidance, scheduling on parallel processors, multiprocessor scheduling, flexible manufacturing system scheduling. On top of this a flavour of multicriteria decision making with a touch of decision support systems.

Having attended the EURO Conference for many years our laureate has played a substantial role in promoting O.R. and in creating International links with the IFORS and EURO Community in particular. These efforts have been extremely successful since this long story was recently brought to a happy end.

Traditionally the medal is conferred on a single recipient who proclaims in his speech that he does not deserve it. It happened once that two laureates received a gold medal together; in his inaugural speech, each one was asserting modestly that the other laureate deserved the medal much more than himself, which after

all made people think the jury had made the wrong choice. This time we tried to avoid the problem.

Basing his choice on these experiences the jury has attempted to set up an even more intricate event for the sixth Gold Medal.

For the first time in its life, EURO goes East. Nowadays research is often a teamwork; even criteria become multicriteria. Similarly processors are frequently grouped and they form so called multiprocessors.

Is it not natural in such circumstances to think of a EURO Multi-medal? Or a MultiGold Medal MGM: you all heard of MGM, it is almost universal. Imagine the day when a set of professors would be scheduled to receive a multimodal in parallel?

Ladies and gentlemen, all deadlocks have been avoided so that this day has come: it is my pleasure to introduce the Laureates of the sixth EURO Gold Multi-medal: the parallel professors of Poznan.

Forming essentially the group of O.R. in the Institute of Computing Science at the Technical University of Poznan, the club consists of Jacek Blazewicz, Roman Slowinski and Jan Weglarz with an average age of 41 (and 2.33 children in average).

Even if it is a multimodal, there will be a single address by Professor Jan Weglarz, director of the Institute of Computing Science; the topic is not "How we got the medal" but "Modeling of scheduling problems via mathematical programming". But first we would like the Polish Trinity to accept the Gold Medal.

Dominique de Werra

EURO Summer Institutes

**1991 - ESI VII -
Urban Traffic
Management**

This year the ESI took place in Cetraro, Calabria, Italy. The organization by Dr. Maurizio Bielli was very efficient, the location was superb and of course it was another great success. The ESI was attended by 21 young scientists and practitioners from 12 different countries, including one Canadian and one Chinese.

The scientific programme was excellent and provided an insight into the recent developments in O.R. that will soon contribute to improve efficiency in Urban Traffic Management.

As an initial spin-off of this ESI some joint projects are already on the way and a new EURO Working Group has been formed.

This formula of workshops "sandwiched" with beach lunches and swimming for under 35's, so cleverly designed by dear past President Jean-Pierre Brans, has, once again, proved to be a success. The time devoted to the participants by the many lecturers who spent a full week in Cetraro was one of the keys to the ESI's success. Indeed many participants mentioned that this was the aspect of the Institute that they appreciated most for it contrasted so much with the image of the "busy Professor" that they are used to.

Congratulations to our Italian colleagues.

Isabel Themido
(EURO Vice-President)

**1992 - ESI VIII -
Risk Management in
Complex Production &
Transportation
Systems**

This EURO Summer Institute will deal with Risk Management in respect to physical hazards (as opposed e.g. to financial) in complex production and transportation systems.

Within these limits, the theme is broad and encompasses a large number of scientific disciplines and interested parties. A full understanding of this field presupposes industrial experience, knowledge of public policy making and human factors.

Given this, the topic of the ESI should be of great interest to ORers - and conversely, for OR skills at the "soft" end are of relevance in defining and structuring problems, and quantitative modelling techniques are equally important since good treatment of hard science and engineering data as well as financial costs, is crucial in most Risk Management problems.

SORA believes that the time is ripe for an ESI that brings the "hard" and "soft" strands of OR together in dealing with a problem area of utmost social importance.

Date and location:

12-30 June, 1992, Rescue Service College, Rosersberg, Sweden. Rosersberg is located some 40 kilometers from the city of Stockholm and quite close to the main airport of Stockholm. The train station is 3 kilometers away from the college. The college is located in a park area

including an old palace, today a museum. The ESI will have access to the premises of the palace.

If you are under 35 and wish to participate please contact your local O.R. Society or write directly to the coordinator:

Dr. Sven-Eric Anderson
Projektveckling AB
Block 11
S-194 53 Upplands Vasby
Sweden.

Phone: (46) 760 91660
(46) 760 87294 (home)
Fax: (46) 760 87340.

**1993 - ESI IX -
Hierarchical
Planning**

Date and location:

March 1993, Mannheim, Germany.

Coordinator:

Prof. Dr. Christoph Schneeweiss
University of Mannheim
D-6916 Mannheim, Schloss
Germany.

Phone: (49) (621) 292 5413
Fax: (49) (621) 292 1270

New EURO Working Groups

Urban Traffic and Transportation

COORDINATOR:

Dr. Maurizio Bielli
National Research Council
Viale Manzoni, 30
I-00185 Rome, Italy
Tel: (39) (6) 77 00 31
Fax: (39) (6) 77 00 31

PURPOSE AND HISTORY

The EURO Working Group on Urban Traffic and Transportation was founded in July 1991 in Cetraro (Italy), during the 7th EURO Summer Institute on Urban Traffic Management.

The objectives of this Working Group are:

- to provide a forum for exchange of information and research experiences in the field of urban traffic and transportation;
- to encourage joint research projects and the development of theoretical methods and applications;
- to promote the cooperation among different institutions and organizations, leaders at National and International level in the field of urban transportation systems.

The primary field of interest for the Working Group is:

Operations Research methods, mathematical models and computation algorithms to solve and support the solution of problems faced by city authorities and public transport companies.

Relevant areas of interest are:

- traffic control and simulation models;
- traffic network equilibrium models;
- land-use and urban transportation planning;
- application of Combinatorial Optimization;
- public transport management.

The potential activities of the Working Group are the following:

- organization of meetings and workshops;
- editing of a Newsletter;
- promotion of joint research;
- implementation, comparison and validation of software packages;
- application and transfer of models and tools to real case environments.

NUMBER OF MEMBERS: 30

FUTURE PLANNED ACTIVITIES:

1st meeting: Munich (Germany), June 1992 (organizers: Mr. Juan Carlos Moreno Banos and Mr. Bernhard Friedrich, Laboratory of Automatic Control, Technical University of Munich, Arcistrasse 21, D-8000 Munchen 2, Germany).

Information Systems

COORDINATOR:

Mr. Georgios I. Doudikis
Athens University of Economics and Business, Informatics Department, 76 Patisson Street, Athens, 10434 - Greece
Tel: (30) (1) 823 73 61
Fax: (30) (1) 822 62 04
Tel./Fax home: (30) (1) 681 12 64
Telex: 225363 ASOE GR.

COORDINATOR FOR THE NEXT MONTHS:

Dr. Edgar Whitley, Information Systems Department c/o Room S107, London School of Economics and Political Science, Houghton Street, London WC2A 2AE, UK.

PURPOSE AND HISTORY

Some of the impetus for starting a Working Group on Information Systems came from the fact that the UK Operational Research Society had launched a European Journal of Information Systems, and is also sponsoring a joint conference on Information Systems next year. It was felt that a EURO Working Group would provide the ideal forum for bringing together Information Systems practitioners in a single European group. In the short-term we will use the European Journal of Information Systems to publish information about IS related issues to members of the working group.

We hope to have a widely advertised meeting of the working group early next year, in advance of the First European Conference on Information Systems which is jointly sponsored by the European Journal of Information Systems (through the UK Operational Research Society) and ACM SIGBDP.

If you want to become a member of the Working Group please contact the coordinator Mr. Doudikis.

NEWSLETTER: European Journal of Information Systems.

FUTURE PLANNED ACTIVITIES:

Closer involvement with the European Journal of Information Systems.
Possibility of organizing a meeting of the Working Group early next year in advance of the European Conference. Possibility of organizing a stream at the First Joint European Conference on Information Systems.

Journals, call for papers

The editing of the present section was closed on 31 December, 1991 (* denotes information featured in previous issues).

A new Journal: Czechoslovak Journal for Operations Research

The Czech and Slovak Society for Operations Research has recently submitted application to IFORS for full membership. The application is presently being discussed by the Administrative Committee. In the meantime the Society is in the process of launching the Czechoslovak Journal for Operations Research, a new independent Internationally oriented journal dealing with theoretical, computational and applications aspects of operations research, econometrics, mathematical economy and the theory of social choice.

The Editor of the Journal is Frantisek Turnovec, Department of Operations Research and Econometrics, the School of Economics, Bratislava, Czechoslovakia. The list of Associated Editors includes names from Austria, USA, Germany, Hungary, Poland and Czechoslovakia.

Papers must be in English and should not exceed 15 manuscript pages typed double spaced including diagrams, figures, tables etc. Short information about new software products, interesting applications and technical notes should not exceed 5 double spaced manuscript pages. Papers for publications should be sent to: Michal Fendek, CSJOR, Department of Operations Research and Econometrics, the School of Economics, Odbojarov 10, Bratislava, CS-83220, Czechoslovakia.

European Journal of Operational Research: Special issue on lotsizing models for production planning

The need for lotsizing emerges when for technical or economical reasons successive processes (like e.g. production and consumption) are not, or cannot be synchronized.

Although technological developments have increased the capacity of industrial organizations to synchronize operations, lotsizing remains a very important coordination tool when full synchronization is impossible.

European Journal of Operational Research (EJOR) devotes a special issue on lotsizing models for production planning. Submitted papers may focus on new theoretical developments concerning lotsizing models, but contributions discussing applications of lotsizing models and techniques in practice are specially welcomed. For example, contributions may deal with -but are not restricted to the following topics:

- models and solution procedures for lotsizing in capacitated environments;
- procedures for reduction of setup time and costs;
- interaction between dynamic lotsizing and sequencing aspects;
- lotsizing and maintenance;
- interrelation between product line design and lotsizing;
- lotsizing and safety stocks in MRP or DRP systems;
- mathematical complexity results and mathematical programming based algorithms for lotsizing problems;
- interaction between lead-times and batching/unbatching decisions;
- decision support systems for lotsizing;
- models and solution procedures for lotsizing in complex

(multilevel) product structures; - lotsizing restrictions imposed by environmental constraints (e.g. pollution laws).

Guest-editors for the special issue are Marc Salomon, Roelof Kruik, and Luk N. Van Wassenhove. Authors should follow standard guide-lines for EJOR as stated in each issue of the journal. All papers will be evaluated using the EJOR standard review process. Four copies of the manuscript should be sent to: Marc Salomon, Erasmus University, Rotterdam School of Management, P.O. Box 1738, NL-3000 DR Rotterdam, The Netherlands (tel.: +31 10 4082021, fax: +31 10 4523595, email: msalomon@fac.fbk.eur.nl). Deadline for submission of papers 1 March, 1992.

* 6th EURO Working Group Meeting on Locational Analysis, April 21-24, 1992

The 6th meeting of the EURO Working Group on Locational Analysis will be organized by José Moreno Pérez in Puerto de La Cruz, Tenerife, from April 21 to 24, 1992. As usually, topics of interest are continuous and discrete location models, covering problems, location-routing problems, competitive location theory, layout problems, etc.. Contributions may be devoted to new theoretical results, algorithms, open problems, reviews and real world applications.

Potential contributors are kindly invited to submit a short abstract in English. For further information please contact: José Moreno Pérez, Depto. de Estadística e I.O., Facultad de Matemáticas, Universidad de La Laguna, 38271 La Laguna, Tenerife, Spain (tel.: (34) 22 60 3229, fax: (34) 22 60 3347, E-mail: JMP@IAC.ES).

Events

The editing of the present section was closed on August 19, 1991 (* denotes information featured in previous issues).

January 14 or 21, 1992
LAMSADE Seminar, Roman Slowinski on "aide à la décision à partir d'une connaissance expérimentale: introduction à la théorie des ensembles approximatifs", Paris, France;
Information: B. Roy & D. Bouysou, Université Paris-Dauphine, LAMSADE, pl. M. de Lattre de Tassigny, F-75775 Paris CEDEX 16, France, (tel.: (33-1) 45-05-14-10, fax: (33-1) 47-55-44-22, telex: 649322);

January 20-22, 1992
* Workshop on Broadband Communications, Estoril, Portugal;
Information: Prof. Augusto Casaca, INESC, Rua Alves Redol 9, Apartado 10105, 1017 Lisboa Codex, Portugal, (phone: +351 1 545150, fax: +351 1 525843, E-mail: ajc @inesc.ctt.pt);

January 23, 1992
Joint Conference of The Operational Research and Strategic Planning Societies on Environmental Assessments and Contingency Planning for Disasters, London, UK;
Information: The Operational Research Society, Neville House, Waterloo Street, Birmingham B2 5TX, UK (tel.: 021 643 0236, fax: 021 631 3485);

January 23-24, 1992
* 6th National Congress on Quantitative Methods for Decision Making, Brussels, Belgium; Deadline for abstracts: October 15, 1991;
Information: Yves Pochet, Université Catholique de Louvain, C.O.R.E., Voie du Roman Pays 34, B-1348 Louvain-la-Neuve, Belgium, (phone: +10 - 474334);

January 29-30, 1992
* AFCET/SEE Meeting on Automation of Mixed Continuous and sequential Processes, Paris, France;
Information: AFCET, 156 Bld. Péreire, F-75017 Paris, France;

February 4-5, 1992
Seminar on Commercial Parallel Processing, London, UK;
Information: UNICOM Seminars, Brunel Science Park, Cleveland Road, Uxbridge, Middlesex, UB8 3PH, UK, (tel.: 0895 256484, fax: 0895 813095);

February 5-6, 1992
Seminar on Quantitative Methods, Super Computers and AI in Finance, London, UK;
Information: UNICOM Seminars, Brunel Science Park, Cleveland Road, Uxbridge, Middlesex, UB8 3PH, UK, (tel.: 0895 256484, fax: 0895 813095);

February 11, 1992
LAMSADE Seminar, Louis Duckstein on "recherche du compromis dans la gestion d'une nappe karstique avec données floues", Paris, France;
Information: B. Roy & D. Bouysou, Université Paris-Dauphine, LAMSADE, pl. M. de Lattre de Tassigny, F-75775 Paris CEDEX 16, France, (tel.: (33-1) 45-05-14-10, fax: (33-1) 47-55-44-22, telex: 649322);

February 13-15, 1992
9th Symposium on Theoretical Aspects of Computer Science, Paris-Cachan, France;
Information: AFCET-STACS'92, 156 bd. Péreire, F-75017 Paris, France, (tel.: (33) 1 47662419, fax: (33) 1 42679312);

February 17-21, 1992
* 7th International Working Seminar on Production Economics, Innsbruck, Austria;
Information: Janerik Lundquist, Department of Production Economics, Linköping Institute of Technology, S-581 83 Linköping, Sweden, (phone: +46/13 281505, fax: +46/13 281873);

February 18-21, 1992
* Singapore International Conference on Intelligent Control and Instrumentation, Singapore;
Information: SICICI'92 Secretariat, IEEE Singapore Section, 200 Jalan Sultan 11-03, Textile Centre, Singapore 0719;

March 1992
EURO Working Group "Decision Support Systems" 3rd meeting, Budapest, Hungary;
Information: A. Edelmayer, Hungarian Academy of Sciences, Budapest, Hungary;

March 9-11, 1992
* IFAC Symposium on Control of Power Plants and Power Systems, Munich, Germany;
Information: VDI/VDE-GMA Secretariat Symposium Power Plants and Systems, P.O. Box 1139, D-4000 Düsseldorf, Germany, (fax: +49 211 62 14 575);

March 16-19, 1992
* 4th International Conference on Information Networks and Data Communication, Espoo, Finland;
Information: INDC-92 Conference Secretariat c/o Kyllikki Kari, Finnish Information Processing Association, Tulkinkuja 3, SF-02600 Espoo, Finland, (phone: +358 0 5121255; fax: +358 0 5121276);

March 26-27, 1992
EURO Working Group "Multicriteria Aid for Decision" 35th Meeting, Chania, Crete, Greece;
Information: Y. Siskos & C. Zopounnidis, Technical University of Crete, Department of Production Engineering and Management, Aghiou Markou Street, 73132 Chania, Crete, Greece, (tel. 821 - 64186, fax: 821 - 64824 or 42176);

March 31, 1992
LAMSADE Seminar, Jacques Teghem on "problèmes d'affectation multicritère", Paris, France;
Information: B. Roy & D. Bouysou, Université Paris-Dauphine, LAMSADE, pl. M. de Lattre de Tassigny, F-75775 Paris CEDEX 16, France, (tel. (33-1) 45-05-14-10,

Events (continued)

fax: (33-1) 47-55-44-22, telex: 649322);

April 7-10, 1992

* **Statistics in Public Resources & Utilities, and Care of the Environment**, Lisboa, Portugal; Information: Prof. Vic. Barnett, Department Probability and Statistics, University of Sheffield, Sheffield S3 7RH, UK;

April 13-15, 1992

ECCO - European Chapter on Combinatorial Optimization 5th meeting, Graz, Austria; Information: R. E. Burkard, Institut für Mathematik B, Technische Universität Graz, Kopernikusgasse 24, A-8010 Graz, Austria, (tel.: 0316 873 7125, e-mail: BURKARD@KOP.TU-GRAZ.ADA.AT);

April 13-15, 1992

* **The Young OR Conference**, Warwick, UK; Information: Adrian Gains, London School of Economics, London, UK, (tel.: 071 405 7686 ext. 2671);

April 21, 1992

LAMSADE Seminar, Virgile Gabrel on "présentation d'un problème d'optimisation combinatoire multicritère: la gestion de production de système d'observation de la terre par satellite", Paris, France; Information: B. Roy & D. Bouysou, Université Paris-Dauphine, LAMSADE, pl. M. de Lattre de Tassigny, F-75775 Paris CEDEX 16, France, (tel.: (33-1) 45-05-14-10, fax: (33-1) 47-55-44-22, telex: 649322);

April 21-24, 1992

* **6th Meeting of the EURO Working Group on Locational Analysis**, Tenerife, Spain; Information: José Moreno Pérez, Depto. de Estadística e I.O., Facultad de Matemáticas, Universidad de La Laguna, 38271 La Laguna, Tenerife, Spain, (tel.: (34) 22 603229, fax: (34) 22 603347, E-mail: JMP@IAC.ES);

April 21-24, 1992

* **11th European Meeting on Cybernetics and Systems Research**, Wien, Austria; Information: EMCSR 1992 Committee, c/o Österreichische Studiengesellschaft für Kybernetik, Schottengasse 3, A-1010 Wien, Austria, (phone: +43-1-53532810, fax: +43-1-630652, E-mail: sec%ai-vie.uucp@relay.eu.net);

April 22-25, 1992

EURO Working Group "Financial Modelling" Meeting, Cogne, Italy; Information: L. Peccati, Università Degli Studi di Torino, Istituto di Matematica Finanziaria, Via Legnano 11, I-10128 Torino, Italy, (tel.: (39) (11) 544004);

April 26-29, 1992

* **ORSA/TIMS Joint National Meeting**, Orlando, FL, USA; Information: Bill Swart, Industrial Engineering Dept., University of Central Florida, Orlando, FL 32816, USA;

April 27-29, 1992

* **IFAC Symposium on Dynamics and Control of Chemical Reactors, Distillation Columns and Batch Processes**, College Park, Maryland, USA; Information: DYCORD+ '92, Chemical Engineering Department, Univ. of Maryland, College Park, MD 20742-2111, USA;

May 4-6, 1992

* **Optimization Days 1992**, Montréal, Canada; Information: M. Gendreau & P. Marcotte, Centre de Recherche sur les Transports, Université de Montréal, Case Postale 6128, Succ."A", Montréal, Canada, H3C 3J7, (phone: (514)343-7575, fax: (514)343-7121, E-mail: jopt92@crt.umontreal.ca);

May 18-22, 1992

XXIVes Journées de Statistique, Brussels, Belgium; Information: XXIVes Journées de Statistique, Université libre de Bruxelles, L.M.T.D - CP 124, av. Jeanne 44, B-1050 Brussels, Belgium;

May 21-22, 1992

14th Symposium on Mathematical programming, Washington, D.C., USA; Information: A. V. Fiacco, Dept. of Operations Research and the Institute for Management Science and Engineering, School of Engineering and Applied Science, The George Washington University, Washington, D.C. 20052, USA;

May 25-28, 1992

* **IFAC Symposium on Information Control Problems in Manufacturing Technology**, Toronto, Canada; Information: Dr. J. Srimgeour, Montreal Road Bldg. M-50, Ottawa, Ontario, K1A 0R8, Canada;

June 1992

EURO Working Group "Urban Traffic and Transportation" 1st meeting, Munich, Germany; Information: Juan Carlos Moreno Banos & Bernhard Friedrich, Laboratory of Automatic Control, Technical University of Munich, Arcistrasse 21, D-8000 Munchen 2, Germany;

June 1-3, 1992

1992 CORS Conference, Toronto, Canada; Information: T. Szandtner, Conference Chairman, Ernst & Young, P.O. Box 251, T-D Centre, Toronto, Ontario M5K 1J7, Canada, (tel.: (416)947-3090, fax: (416)864-1174);

June 1-5, 1992

* **International Conference on Optimization Techniques and Applications & Pre-Conference Workshops on Optimization**, Singapore, Singapore; Information: Dr. F.S. Chou, ICOTA'92 Conference Secretary, Faculty of Business Administration, National University of Singapore, 10 Kent Ridge Crescent, Singapore 0511, Singapore, (phone: (65) 7723167 / 7723067, fax: (65) 7771296, bitnet: SDSBZ@NUS3090);

June 9-11, 1992

* **5th IFAC/IFIP/IFORS/IEA Symposium on Analysis, Design and Evaluation of Man-Machine System**, Den Haag, The Netherlands;

Events (continued)

Information: Mr. P. L. Brinkman, c/o Man-Machine Systems Group, Lab. for Measurements and Control, Faculty of Mechanical Eng. and Technology, Mekelweg 2, NL-2628 CD Delft, The Netherlands;

June 13-27, 1992

* 8th EURO Summer Institute on Risk Management in Complex Production and Transportation Systems, Rosersberg, Sweden;

Information: Sven-Eric Anderson, Projektutveckling AB, Block 11, S-19453 Upplands Vasby, Sweden, (tel.: (46) 760 91660 or 87294 (home), fax: (46) 760 87340);

June 16-18, 1992

* IFAC/IFIP/IMACS International Symposium on Artificial Intelligence in Real-Time Control, Delft, The Netherlands; Information: AIRTC 1992, Congress Office KIVI, P.O. Box 30424, NL-2500 GK Den Haag, The Netherlands, (fax.: +31 70 3919840);

June 22-24, 1992

7th IMACS International Conference on Computer Methods for Partial Differential Equations, New Brunswick, NJ, USA;

Information: K. Hahn, IMACS PDE-7 Conference Secretary, Rutgers University, Department of Computer Science, New Brunswick, NJ 08903, USA, (fax: 908-932-5530);

June 22-25, 1992

* IFORS - SPC 2 on Transition to Advanced Market Economies, Warszawa, Poland;

Information: Prof. A. Straszak, IFORS - SPC 2, Systems Research Institute, Polish Academy of Sciences, 6 Newelska, Warszawa 01-447, Poland;

June 23-25, 1992

* 18th IFAC/IFIP Workshop on Real-Time Programming, Brugge, Belgium;

Information: Mr. Luk Pauwels, Coordinator, Desguinlei 214, B-2018 Antwerpen, Belgium;

June 24-26, 1992

* IFAC Workshop on Support Systems for Decision and Negotiation Processes, Warszawa, Poland;

Information: Dr. Zbigniew Nahorski, DNS'92, Systems Research Institute, Polish Academy of Sciences, Newelska 6, 01-447 Warszawa, Poland;

June 29-30, 1992

* DGOR/ORSA Joint Conference on New O.R. Developments in the Area of Production, Hagen, Germany;

Information: Dr. Günter Fandel, Institute of Production Management, Fernuniversität, D-5800 Hagen I, Germany, (tel.: 02331 8042625);

June 29 - July 01, 1992

* EURO XII / TMS XXXI Joint International Conference on Operational Research & Management Science, Helsinki, Finland;

Information: EURO Secretary, Paolo Toth, DEIS, University of Bologna, Via Risorgimento 2, I-40136 Bologna, Italy;

June 29 - July 01, 1992

ESIGMA - EURO Summer Institute Group on Multicriteria Analysis, Helsinki, Finland;

Information: Ph. Vincke, Université Libre de Bruxelles, C.P. 210, Bld. du triomphe, B-1050 Brussels, Belgium;

June 29 - July 01, 1992

EURO Working Group "Financial Modelling", Helsinki, Finland;

Information: T. Martikainen, I. Virtanen & P. Ylli-Olli, University of Vaasa, P.O. Box 297, 65101 Vaasa, Finland, (tel.:358 61 248111, fax: 358 61 248344, e-mail: tlm@chymde.uwasa.fi);

July 6-8, 1992

Euro Working Group "Project Management and Scheduling" 3rd Workshop, Como, Italy;

Information: Prof. L.V. Tavares, CESUR-IST, Av. Rovisco Pais, 1000 Lisboa, Portugal, (fax: (351) (1) 73 45 38);

July 6-9, 1992

CO92 meeting on Combinatorial Optimisation, Oxford, UK; Information: CO92, Department of Statistics, 1 South Parks Road, Oxford OX1 3TG, UK, (e-mail: CO92@uk.ac.ox.vax);

July 12-15, 1992

Marketing Science Conference: Advances and Practices of Marketing Science, London, UK;

Information: M. Uncles, London Business School, Sussex Place, Regent's Park, London NW1 4SA, UK, (tel.: 071 262 5050, fax: 071 724 7875, e-mail: ms1992@uk.ac.lon.lbs);

July 19-24, 1992

* 10th International Conference on Multiple Criteria Decision Making, Taipei, Taiwan, R.O.C.;

Information: Prof. Gwo-Hsiung Tzeng, Energy Research Group & Institute of Traffic and Transportation, College of Management, National Chiao Tung University 4F,114, Sec.1, Chung-Hsiao W. Rd., Taipei 100, Taiwan, R.O.C., (phone: 011-886-2-3146515, fax: 011-886-2-3120082);

August 1992

* 13th International Congress on Cybernetics, Namur, Belgium;

Information: International Association for Cybernetics A.I.C., Palais des Expositions, Place André Rijckmans, B-5000 Namur, Belgium;

August 17-19, 1992

* 8th International Conference on CAD/CAM Robotics and Factories of the Future, Metz, France;

Information: Docteur J.-M. Proth, INRIA LORRAINE Technopole Metz 2000, 4 Rue Marconi, F-57070 Metz, France, (tel.: (33) 87 20 35 00; fax: (33) 87 76 39 77);

August 18-20, 1992

* 7th IFAC / IFORS Symposium on Modelling and Control of National Economies, Beijing, China;

Information: Prof. Chen Decuan, Institute of Policy and Management, Academia Sinica, Beijing, China;

Events (continued)

August 22-26, 1992

* 6th IFAC / IFORS Symposium on Large Scale Systems, Theory and Applications, Beijing, China; Information: Prof. Changpu Wu, Beijing Institute of Technology, Beijing, China;

August 25-28, 1992

* 17th Symposium on Operations Research, Hamburg, Germany; Information: Martin Schader, Dept. of Computer Science, Universität der Bundeswehr Hamburg, Holstenhofweg 85, D-2000 Hamburg 70, Germany;

August 30 - September 3, 1992

* 11th International Conference on Pattern Recognition, Den Haag, The Netherlands; Information: 11th ICPR Secretariat, Delft University of Technology, Department of Electrical Engineering, P.O. Box 5031, NL-2600 GA Delft, The Netherlands, (tel.: +31 15 78.60.52; fax: +31 15 62.20.00; E-mail: ICPR@ET.TUDELFT.NL);

September 1-4, 1992

Work with Display Units 3rd International Conference, Berlin, Germany; Information: ERGONOMIE Institut für Arbeits-und Sozialforschung, Forschungsgesellschaft mbH, Soldauer Platz 3, D-1000 Berlin 19, Germany;

September 3-6, 1992

* International Conference on Information and Systems, Dalian, China; Information: Dr. Zhang Shengkai, ICIS NO. 1. Baoding St.116001, Dalian Institute of Light Inds. Tech., Dalian, China;

September 7-11, 1992

* 12th World Computer Congress, Madrid, Spain; Information: Grupo GEYSECO Agency, Capitan Haya 60, 2º, E-28020 Madrid, Spain;

September 8-10, 1992

1992 Conference of The Operational Research Society, Birmingham, UK; Information: The Operational Research Society, Neville House, Waterloo Street, Birmingham B2 5TX, UK, (tel.: 021 643 0236, fax: 021 631 3485);

September 8-10, 1992

International Seminar on Statistical Confidentiality, Dublin, Ireland; Information: International Statistical Institute Permanent Office, 428 Prinses Beatrixlaan, P.O. Box 950, NL-2270 AZ, Voorburg, The Netherlands;

September 13-18, 1992

* 6th International Conference on Stochastic Programming, Udine, Italy; Information: Prof. Giovanni Andreatta, Dept. of Pure and Applied Mathematics, Via Belzoni 7, I-35131 Padova, Italy;

September 23-25, 1992

8th International Symposium on Technical Diagnostics, Dresden, Germany; Information: Conference Secretariat TD 92, Scientific-Technology Society for Measurement and Automatic Control (WGMA), P.O. Box 1315, D-1086 Berlin, Germany;

October 7-11, 1992

* 6th Latin-Iberian-American Meeting on Operations Research and Systems Engineering, Mexico, Mexico; Information: Javier Marquez Diez-Canedo, Departamento de Administracion, Instituto Tecnológico Autonomo de Mexico- ITAM, Rio Hondo n°1, Tizapan San Angel, Mexico, D.F., Mexico, C.P. 01000 (fax.:550-7637 or 548- 5620);

October 14-16, 1992

Optimization in Planning and Operation of Electric Power Systems Tutorial, Thun, Switzerland; Information: K. Frauendorfer, Institute for Operations Research, Moussonstrasse 15, CH-8044 Zurich, Switzerland, (tel.: 01 257 37 72);

December 7-11, 1992

* XVth International Biometric Society Conference, Hamilton, New Zealand; Information: IBC'92 Secretary, Ruskura Agricultural Centre, Private Bag 3080, Hamilton, New Zealand, (tel.: +64(7)856 2839, fax: +64(7)838 5012, e-mail: ibc@ruakura.maf.govt.nz);

December 14-16, 1992

International Conference on Operational Research for Development, Ahmedabad, India; Information: J. Rosenhead, London School of Economics & Political Science, Houghton Street, London WC2A 2AE, UK, (tel.: 071 955 7637, fax: 071 955 7416, telex: 24655 LSELON G);

January - February 1993

* IFIP Conference on Computational Techniques of Stochastic Programming, Seregelyes, Hungary; Information: Dr. Istvan Deak, Deputy Head of the O.R. Dept., Computer and Automation Institute, Kende u. 13-17, H-1111 Budapest XI, Hungary;

May 3-6, 1993

6th International Symposium on Applied Stochastic Models and Data Analysis, Chania, Crete, Greece; Information: J. Janssen, CADEPS-ULB, Ecole de Commerce Solvay, 50 av. F.D. Roosevelt cp 194/7, B-1050 Brussels, Belgium, (tel.: 32-2-6503883, fax: 32-2-6502785) or C. H. Skiadas, Department of Production Engineering and Management, Technical University of Crete, 73132 Chania, Crete, Greece, (tel.: 30-821-59627, fax: 30-821-42176);

July 12-16, 1993

* IFORS XIII on OR: Expanding Horizons, Lisboa, Portugal; Information: Professor J. Dias Coelho, Faculdade de Economia, Travessa Estevao Pinto, P-1000 Lisboa, Portugal;