Bulletin

Inside

Special issue of the Bulletin of EURO on *"European Journal of Operational Research"*

Edited by R. Slowinski, J. Teghem and J. Wallenius

Editorial policy

Operational Research (OR) involves the application of scientific methods to the management of complex systems of people, machinery, materials, monetary resources and information. It seeks to produce an understanding of managerial problems and to develop models, which will enable the consequences of decisions to be investigated. OR methods have had widespread application and success in many areas of business, industry and government, and their use is rapidly increasing in social systems and in the international arena. The European Journal of Operational Research (EJOR) is intended to strengthen these advances by publishing **high-quality, original papers** that contribute to the practice of decision making, within and beyond Europe, irrespective of whether their content describes an application or a theoretical development. A special call is made for **case study papers** showing OR in action in firms and other organizations. Mathematical or computer-science contributions should be capable of being used in the foreseeable future.

During its 25-year long history, the Editors of EJOR have been sensitive to publication of **innovative, cross-disciplinary papers**, concerning both methodology and practice of OR. This was possible due to the "editorial team work". Unlike an editorial policy based on the use of area editors, coordinating particular disciplines of OR, the "team work policy" is more resistant to "discipline-bias" which tends to publish papers easily classifiable to particular disciplines.

EJOR has regular and feature issues that appear no more frequently than once per three issues. Each EURO-k conference yields at most two feature issues: one composed of plenary and semi-plenary papers, including the "best applied paper", and another devoted to some leading theme of the conference. Almost all issues contain a leading invited review explaining the developments of an OR topic over the past five years to the general OR reader. In addition to the other five types of contributions described in the 'Instructions to Authors', EJOR includes reviews of OR books published recently. Authors of contributions are asked to read 'Instructions to Authors' before sending four copies to one of the Editors.

The Editors expect that the EURO Working Groups raise initiatives about guest-editing feature issues in their respective domains once per three years, approximately. Initiatives regarding invited reviews and contributed normal review papers (with an enhanced attention to recent EJOR publications) are also welcome from EURO Working Groups.

On January 1st, 1999, the Founding Editors of EJOR, Alan Mercer, Bernhard Tilanus and Hans-Jürgen Zimmermann were replaced by the new team: Roman Slowinski, Jacques Teghem and Jyrki Wallenius. The new Editors intend to continue to work as a team. They will also devote much attention to constant improvement of the scientific quality of the journal. The material presented in this bulletin builds upon experience of the Founding Editors. However, the first year of the new editorial team has permitted us to make new suggestions, in particular regarding the refereeing and guest-editing of feature issues. The effects of these changes will, however, be seen in 2001 and afterwards only because the backlog of papers accepted by the former Editors is so long. When taking measures to increase the quality of the journal the Editors will tend to considerably reduce the waiting time from acceptance to publication.

History of EJOR
Based on Alan Mercer's notes

Alan Mercer first met Bernhard Tilanus and Hans Zimmermann in the offices of North-Holland on October 2nd, 1975. The persons signing for North-Holland were Drs. Wimmers and Fredriksson. A small group of people, including Tilanus and Zimmermann, met to consider a new European OR journal. According to Mercer, some European societies were unenthusiastic about the idea, including the UK, fearing the competition for their national journals. Nevertheless Zimmermann and Tilanus emerged from the group as two editors and it was decided to ask the British society to nominate a third editor, as it was thought essential to have a native English speaker among the editorial team. Mercer was asked to assume the responsibility of an editor by the UK society and he traveled to Amsterdam on October 2nd with little or no briefing. The three editors signed on their own behalf and, according to Mercer, EURO showed no interest in EJOR whatsoever. In those days, publishers provided little or no funding for journals! Universities in Western Europe were generally well supported financially by governments, so that journal expenses were largely met by the editors' universities or by themselves. That situation prevailed for some years with respect to EJOR. Publishers were not anxious to take on EJOR, as journals made comparatively little money. It was the printing revolution that changed the profitability of journals and which awoke EURO's interest.

The first paper was accepted December 23rd, 1975 (Optimization + Objectivity by R. L. Ackoff). The first issue (Vol. 1, No. 1) appeared in January, 1977, including six papers. During the first year, 6 issues (400 pages) were published. The growth was rapid, though. In 1981, EJOR published 3 volumes, 12 issues (4/vol.), totaling 1200 pages.

Types of papers included application and theory/methodology papers. Interestingly, at that time the Editorial Board considered 1200 pages to be EJOR's limit. The practice of publishing (invited) review papers was started in May, 1981. The number of references was limited and the idea was that the review papers would represent author's expressions of opinions of OR/MS/SA. Over time, the Invited Reviews have turned into a very popular feature of EJOR. The importance of application papers was recognized early on and the system was created where the Editorial Associates were encouraged to process one application paper per year. The first Special Issue appeared in April, 1980, guest edited by Bruno Martinoli on Combinatorial Optimization. First EURO Conference papers were published in November 1980, edited by Jakob Krarup from EURO III (4 issues). The idea with the popular special issues was that they would include 10-15 papers each. Feature issues, containing 4-9 papers, on the other hand, would include regular papers as well. In January of 1984 the size of EJOR had grown to 1600 pages and in January of 1986 to 2100 pages mainly to reduce backlog. A Book Review section was included early on (in fact, from the beginning) and a Software section in 1987. In ten years the Editorial Board had grown to 47 scholars, many of whom played an active role with the journal. The Editorial Board included many prominent scholars. In January of 1988 EJOR had become world's largest OR journal - and the backlog was of concern to the editors. The editors discussed the pros and cons of having section (subject) editors and decided to continue without having them.

On July 11th, 1990 EURO signed (for the first time) an agreement with Elsevier, conceding that the

title (EJOR) belonged to EURO. The agreement covered Elsevier's right to use the title, payments to EURO, appointment of editors, etc. Other milestones included that in 1990 EJOR was one of only 10 non-US journals included in "A Guide to 100 Publishing Opportunities for Business Faculty". The editors kept encouraging innovative papers. According to leading US scholars during the 1980's, 13 of the most important 17 papers on plant location had appeared in EJOR. Location Science was much less successful in this respect - generating discussion about generalist vs. specialist journals. Another field centrally represented in EJOR is DEA. EJOR published the seminal paper on DEA by Charnes, Cooper and Rhodes in 1978. Incidentally, one of the referees for this paper wanted it to be reduced in size to 1-2 pages! By 1995, the size of EJOR had grown to 5300 pages (now 5500 pages), and the price was affordable only to institutions. It had become truly international; the 1994 issues contained articles by authors from 30 countries. North American authors accounted for 48%, European authors 35%, Far East 7%, others 10%.

After being editors for EJOR for more than 20 years, the editors decided to resign en bloc so that after 1998 they would not referee any new submissions. They acted as the search committee for the new editors on behalf of the publisher. During the editorship of Mercer, Tilanus and Zimmermann, EJOR grew from a 400 page a year journal to the largest OR journal in the world, with the number of institutional subscriptions not much behind the large journals in natural sciences. It is respected and read throughout the OR community. It has published many seminal papers in different subfields of OR and influenced the development of OR in the world.

The Editors

Starting from January 1st, 1999, the Editors of the European Journal of Operational Research are Roman Slowinski, Jacques Teghem and Jyrki Wallenius

ROMAN SLOWINSKI

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Roman Slowinski, born 1952, received the MS degree in computer science, PhD degree in operations research and Habilitation degree in computing science from the Poznan University of Technology (PUT), in 1974, 1977 and 1981, respectively. Currently, he is professor of operations research and decision science in the Institute of Computing Science of the PUT. Within this institute, he is heading Laboratory of Intelligent Decision Support Systems (IDSS). He has been professor on European Chair at the University of Paris Dauphine and invited professor at the Swiss Federal Institute of Technology in Lausanne, and at the University of Catania.

While being the Editor of the *European Journal of Operational Research*, he is also Editor of *Foundations of Computing and Decision Sciences*, and Area-Editor of *Fuzzy Sets and Systems* responsible for decision analysis. He has been Program Committee Chair of the 1995 European Conference of Operations Research (EURO XV) in Jerusalem.

Roman Slowinski has done extensive research on:
■ methodology and techniques of decision support, including multicriteria decision analysis, preference modeling, knowledge-based decision support, managing uncertainty in decision support systems,
■ fuzzy linear programming with single or multiple objective functions,
■ rough set approach to knowledge and data engineering, in particular, to multicriteria decision analysis,
■ project and production scheduling, scheduling under fuzziness, water supply system programming,
■ decision support in medicine, technology, economics and environmental studies.

Within this scope, he has published 10 monographs, 3 textbooks and more than 200 papers,

among others in: *Naval Research Logistics, European J. Operational Research, J. Operational Research Society, Fuzzy Sets and Systems, Int. J. Man-Machine Studies, Mathl and Computer Modelling, Zeitschrift fuer Operations Research, ACM Transactions on Mathematical Software, Communications of the ACM, Medical Informatics, JORBEL, Fuzzy Economic Review, RAIRO, Applied Stochastic Models and Data Analysis, J. Multiple Criteria Decision Analysis, J. Computers and Mathematics with Applications, J. Computers in Industry, Water Resources Bulletin, J. Decision Systems, Int. Trans. Operational Research, Computational Intelligence, Fundamenta Informaticae, AI Expert Magazine, Int. J. Intelligent Systems in Accounting, Finance and Management, INFOR, Int. J. of Environment and Pollution, J. of Global Optimization, IEEE Trans. on Knowledge and Data Engineering.*

He is laureate of the State Award for scientific achievements (Warsaw, 1988), the Sixth EURO Gold Medal, by European Association of OR Societies (Aachen, 1991), the Edgeworth-Pareto Award, by International Society on Multiple Criteria Decision Making (Cape Town, 1997) and the Best Theoretical Paper Award by the Decision Sciences Institute (Athens, 1999).

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Jacques Teghem, born 1948, received MS and PhD degrees in Mathematics (Applied Probability) from University of Brussels in 1969 and 1976 respectively. He is currently Professor at Faculté Polytechnique de Mons and a part-time Professor at Université de Bruxelles.

His teaching activities include Mathematics (Linear Algebra; Calculus; Probability), Operations Research

(Mathematical Programming; Production Management; Stochastic Processes and Applications; and Multicriteria Decision Making). His research interests include Control of stochastic processes; Queueing Systems; Multi-objective optimization; Treatment of uncertainties and imprecision in OR models; Combinatorial optimization; Metaheuristics.

Jacques Teghem has published numerous books and journal special issues, including:
■ Stochastic versus fuzzy approaches to multi-objective mathematical programming under uncertainty (in collaboration with R. Slowinski), Kluwer Academic Publishers, Dordrecht (1990).
■ Programmation linéaire, Editions Ellipses and Editions Université de Bruxelles (1997).
■ Mathematical programming: a tool for Engineering (in collaboration with M. Save), guest editor, special issue of "Engineering Optimization", vol. 18, n° 1-3 (1991).
■ Francoro, guest editor, special issue of JORBEL, vol. 35, 3-4 (1995).
■ Métaheuristiques (in collaboration with M. Pirlot), Editions Hermès, to appear in 2000.

Jacques Teghem has published 70 papers in different journals of Operations Research (*European Journal of Operations Research; Journal of the Operations Research Society; Zeitschrift fuer Operations Research; Asia-Pacific Journal of Operations Research; Journal of Multicriteria Decision Analysis; Journal of Global Optimization; Computers and Operations Research; Journal of Heuristics; Journal of Mathematical Modelling; Fuzzy Sets and Systems; Applied Stochastic Models and Data Analysis; Journal of Production Economics*, etc.).

Jacques Teghem served as Chairman of the Conference 'Francoro I' (Mons, Belgium, 1995), Chairman of the EURO XVI Conference (Brussels, Belgium, 1998), and as Member of the Programme Committees of several international OR conferences. He is past president of the Belgian O.R. Society and has been Belgian delegate at the Administration Council of the Association of European Societies of Operations Research (from 1992 till 1999) and co-editor of the Belgian Journal of O.R. (from 1987 till 1995). He is co-editor of *Foundations of Computing and Decision Sciences*, laureate of the Japanese grant "Matsumae Foundation" and member of several professional societies (INFORMS, MPS, POMS, …).

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Jyrki Wallenius, born 1949, received the BS (with honours), MS, and PhD degrees from the Helsinki School of Economics and Business Administration (HSEBA) in 1970, 1971, and 1975, respectively. Currently he is Professor of Management and Director of the International Center at HSEBA. Since August 1st, 1999 he is also Vice Rector (Research) of HSEBA. Wallenius has been a visiting professor at Purdue University, Arizona State University and Texas A&M University.

Prior to becoming an Editor, Jyrki Wallenius served on the Editorial Board of the European Journal of Operational Research (1981-1998). He is also an Editorial Board Member of three other journals, including the Journal of Multi-Criteria Decision Analysis. He is an Executive Committee Member of the International Society of Multiple Criteria Decision Making, and a Past President of the Finnish OR Society. Jyrki Wallenius' professional memberships include INFORMS, DSI, FORS, Int. Soc. MCDM, and MBA Roundtable.

Jyrki Wallenius is listed in Who's Who in Finland, Who's Who in European Executive Education, Marquis Who's Who in the World, International Directory of Business and Management Scholars and Research. He is recipient of the following awards and distinctions: Edgeworth-Pareto Award, Int. Soc. of Multiple Criteria Decision Making (Coimbra, 1994); an Honorable Mention for the Interactive Telecommunications Program and its Director: 'Educational Innovation of the Year'-Contest, SEFE, Finland (1998); Bronze Medal, HSEBA (1999).

Jyrki Wallenius has published about 80 articles and edited several books and journal special issues about multiple criteria decision making, decision support, behavioral decision theory, negotiation modelling, and electronic auctions and markets in such journals as *Management Science, Operations Research, European Journal of Operational Research, Decision Support Systems and Electronic Commerce, International Journal of Technology Management, Electronic Markets, Annals of Operations Research, Decision Sciences, Naval Research Logistics, Group Decision and Negotiation*.

The Editorial Board

The activity of the Board Members includes:
1. Generally encourage people to submit their **best** papers to EJOR.
2. **To identify authors and topics for Invited Reviews**. To send a formal invitation, the Editors need names and full addresses of the authors. The only reason for not accepting the Member's advice would be if a similar review were in the pipeline.
3. Encourage authors of **innovative case studies** to submit them to EJOR.

4. Act as a **super referee**, when asked by an Editor. Sometimes the Editors cannot find suitable referees. At other times, two eminent referees will give totally conflicting advice; these need to be reconciled. The Editors are only sending papers in Member's areas of expertise.
5. Provide advice on the acceptability, or otherwise, of uninvited reviews. Then the Member is asked for a simple yes or no to publication.

The names and affiliations of the Members of the Editorial Board

Sven Axsater ....Lund University, Lund, Sweden
Egon Balas.................................Carnegie Mellon University, Pittsburgh, USA
Paul van Beek...........................Wageningen University, Wageningen, Netherlands
Jean-Pierre Brans.....................Free University of Brussels, Brussels, Belgium
Cathal M. Brugha ....University College Dublin, Dublin, Ireland
Derek Bunn...............................London Business School, London, Great Britain
Rainer Burkard.........................Technical University of Graz, Graz, Austria
Christer Carlsson......................Åbo University, Åbo, Finland
William W. Cooper................University of Texas at Austin, Austin, USA
Laureano F. Escudero ....University of Madrid, Madrid, Spain
Alan Farley ....Monash University, Clayton, Australia
Pierre Hansen ....Ecole des Hautes Etudes Commerciales, Montreal, Canada
Toshihide Ibaraki.....................Kyoto University, Kyoto, Japan
Jack P.C. Kleijnen.....................Catholic University of Brabant, Tilburg, Netherlands
Rudolf Kruse ....Otto von Guericke University of Magdeburg, Magdeburg, Germany
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Katsuhisa Ohno.......................Nagoya Institute of technology, Nagoya, Japan
Giacomo Patrizi.......................University of Rome "La Sapienza", Rome, Italy
Gerard Plateau.........................University of Paris 13, Paris, France
Charles ReVelle.........................The John Hopkins University, Baltimore, USA
Marc Roubens..........................University of Liège, Liège, Belgium
Bernard Roy..............................University of Paris-Dauphine, Paris, France
Yannis Siskos............................Technical University of Crete, Chania, Greece
Eric Taillard...............................University of Applied Sciences of Western Switzerland, Yverdon, Switzerland
Luis Valadares Tavares............Technical University of Lisbon, Lisbon, Portugal
Tamás Terlaky..........................McMaster University, Hamilton, Canada
Lyn Thomas ....University of Edinburgh, Edinburgh, Great Britain
Paolo Toth ....University of Bologna, Bologna, Italy
John Ulhøi.................................The Åarhus School of Business, Åarhus, Denmark
Gerhard Wäscher.....................Martin Luther University of Halle-Wittenberg, Halle, Germany
Dominique de Werra.............Ecole Polytechnique Fédérale de Lausanne, Lausanne, Switzerland
Jan Weglarz...............................Poznan University of Technology, Poznan, Poland
Laurence Wolsey.....................Catholic University of Louvain, Louvain-la-Neuve, Belgium
Uri Yechiali ....Tel Aviv, University, Tel Aviv, Israel

Book Review Section Editor

Daniel Vanderpooten............University of Paris-Dauphine, Paris, France

Instructions to Authors

1 **The editorial policy** of the European Journal of Operational Research (EJOR) is to publish high quality, original papers that contribute to the practice of decision making. Each paper will be classified in a category, which will be one of **invited review, case study, computer focus, theory and methodology, perspectives for practice, short communication or continuing debate**. Anyone interested in writing a review in the typically EJOR style is requested first to suggest a topic to the editors. Theory and methodology papers will be those normally published in academic journals, including applications of theoretical developments without real data but capable of being used in the foreseeable future. Whilst a case study must also be acceptable to traditional referees, it should describe an actual problem. More often than not, a computer will have been involved in an application or case study but it may not have been essential. However, as the distinction between operational researchers and computer experts becomes more blurred, there are studies which focus on the role of the computer, leading to computer focus papers. Apart from short communications, such as letters to the editors, there is a need for professional interest papers. These articles, which will be refereed only by the editors, will give perspectives for the practice of OR. Ideally, they will be relatively short, quickly published and contain newsworthy information of the sort normally only available for reading by practitioners in the trade periodicals. Papers contributing to continuing debate about research priorities in OR are also welcome. Papers which do not conform with the editorial policy will be rejected.

2 **Practitioners** often suffer from the need to conceal commercial secrets. Referees will take this into sympathetic consideration when advising on a case study, computer focus or an application paper but it will not be allowed to detract from the clarity of the presentation. The criterion of contributing to the practice of decision making remains inviolate but takes a different form. Originality may be demonstrated by applying OR to a problem with interesting new aspects or by providing fresh insights leading to successful implementation. Equally, a case study might be worthy of publication simply because it can be used to convince managers of the value to be gained by applying OR to particular problems.

3 **Authors** of articles within the scope of EJOR are invited to submit four copies of their papers to one of the editors as described in the Keywords section. Submission to EJOR implies that the paper is not submitted to any other journal at the same time. The refereeing process will only start after the editors have received **four copies** of the paper which contains an abstract and keywords. Authors not conforming with this policy will be requested to provide four **complete** copies; the editors will not make insertions.

4 **Manuscripts** should be written in English. Authors are encouraged to obtain assistance in the editing of their papers for proper use of English prior to submission. Manuscripts must be typed on one side of the paper in double or one-and-a-half line spacing throughout, with wide margins. Pages should be numbered consecutively. A duplicate copy should be retained by the author.

5 **Titles**, both of the article itself and of the sections, should be brief and specific.

6 **Name(s)** of the author(s): for information retrieval, please specify your name always in exactly the same way; initials or given name first, and family name last.

7 **Full mailing address(es)**, including e-mail, of the author(s) should be given, at the institution where the research has been done. If the current mailing address differs, this should be supplied in a footnote. Please indicate the corresponding author.

8 **An abstract** should be given with every article. It should be self-contained and understandable by the general OR reader outside the context of the article. It should be free from formulae, specialized jargon, acronyms and references. It should be specific and between 50 and 150 words of length.

9 **Keywords** must be included and **at least the first one should be selected from the list** given in the Keywords section. Some keywords from

outside this list may be added but the total number of keywords should not exceed five. The letters before the keywords in the Keywords section are those of the surnames of the three editors. To reduce the length of the refereeing time, **the paper should be submitted to the editor whose initial is given before the most important keyword selected from the list**.

10 **Sections** should be decimally numbered. Titles should be specific, except "Introduction", "Summary", and "Conclusions".

11 **Paragraphs** should be indented in the manuscript to avoid ambiguities when a line ends on a full stop.

12 **Tables** hardly ever need vertical lines. They should be numbered consecutively and have a self-explanatory title. In designing tables please take the column and page width of EJOR into account.

13 **Figures** should be numbered consecutively and have a self-explanatory caption. Special care should be given to the drawing. Except for a reduction in size, they will appear in the final printing in exactly the same form as submitted by the author; normally they will not be redrawn by the printer. In order to make a photographic reproduction possible, all drawings should be on separate sheets, with wide margins, drawn high quality, large size, bold lined and bold lettered. Exceptions are diagrams containing only formulae and a small number of straight lines (or arrows); these can be typeset. It is also possible to accommodate photographs. Original figures should not be included with the papers sent for refereeing (see 17 below).

14 **Formulae** should normally be displayed on a separate line and numbered, if referred to, in parentheses on the right. They should be typed. If this is impossible and handwritten symbols are used, these should be listed separately. Keep formulae as simple as possible. The solidus / is preferable to the horizontal division line. Avoid the letters o and l. Avoid super- or subscripted super- or subscripts.

15 Please **avoid excessive use of footnotes**. Other short notes can be incorporated in the text in parentheses or square brackets; lengthy notes can be presented as appendices.

16 **References** should only be made to literature with which there is a direct and important interface. Dragging along a cumulative list of everything published on the subject should be avoided. Journal names should be written out in full. For referencing one should choose either system A or system B, examples of which are given below for a paper in a journal, for a book, for a contributed paper in a volume and for an unpublished but obtainable paper, respectively. We encourage references to downloaded electronic papers and relevant websites.

System A. References in the text are indicated by arabic numerals enclosed in square brackets. In the list of references they are listed alphabetically, e.g.:
[1] M.J. Alves, J. Clímaco, Using cutting planes in an interactive reference point approach for multiobjective integer linear programming problems, *European Journal of Operational Research* 117 (3) (1999) 565--577.
[2] A. Jensen, *Traffic, Operational Research, Futurology*, North-Holland, Amsterdam, 1980.
[3] M.J.D. Powell, A view of nonlinear optimization, in: J.K. Lenstra, A.H.G. Rinnooy Kan, A. Schrijver (Eds.), *History of Mathematical Programming*, Elsevier Science Publishers, Amsterdam, 1991, pp. 119-125.
[4] D. Sarkar, W.I. Zangwill, *File and work transfer in cyclic queue systems*, Technical Paper, AT&T Bell Laboratories, Holmdel, NJ, 1990 (Downloadable from website http://...).

System B. References in the text are indicated by authors' names and year of publication in parentheses:
Alves, M.J., Clímaco, J., 1999. Using cutting planes in an interactive reference point approach for multiobjective integer linear programming problems, *European Journal of Operational Research* 117 (3) 565-577.

Jensen, A. 1980. *Traffic, Operational Research, Futurology*, North-Holland, Amsterdam.

Powell, M.J.D., 1991. A view of nonlinear optimization. In: Lenstra, J.K., Rinnooy Kan, A.H.G., Schrijver, A. (Eds.), *History of Mathematical*

Programming, Elsevier Science Publishers, Amsterdam, pp. 119-125.

Sarkar, D., Zangwill, W.I., 1990. *File and work transfer in cyclic queue systems*, Technical Paper, AT&T Bell Laboratories, Holmdel, NJ (Downloadable from website http://...).

17 **Electronic manuscripts** are welcomed by the publisher, to whom they must be sent directly **only after the paper has been accepted for publication by the editors**, together with a copy of the manuscript in its final form, with the original figures and with the form provided by the editors. Electronic manuscripts have the advantage that there is no need for rekeying of text, thereby avoiding the possibility of introducing errors and resulting in reliable and fast delivery of proofs. The preferred storage medium is a 3.5 inch disk in MS-DOS format, although other systems may be used, e.g., Macintosh (in this case, the file must be saved in the usual manner; the option "save in MS-DOS format" should not be used). Authors should make absolutely sure that the file on the disk and the accepted version of their paper are identical. A new and correctly formatted disk should be used and labeled with the author's name; the software and hardware used should be specified as well as the title of the file to be processed. The file should not be converted to plain ASCII. Authors should make sure that the letter "l" and digit "1", and also the letter "O" and digit "0" are used properly, and should format their article (tabs, indents, etc.) consistently. Characters not available on one's word processor (Greek letters, mathematical symbols, etc.) should not be left open but indicated by a unique code (e.g., "gralpha", "<alpha>", "@", etc., for the Greek letter "a"). Such codes should be used consistently throughout the entire text; a list of codes used should accompany the electronic manuscript. Authors should not allow their word processor to introduce word breaks and should not use justified layout. Authors should adhere strictly to the general instructions above on style, arrangement and, in particular, the reference style of the journal.

18 **Corrections** in the proof stage, other than printer's errors, should be avoided; otherwise, cost arising from such extra corrections will be charged to the authors. Upon acceptance of an article, authors will be asked to transfer copyright of the article to the publisher. This transfer will ensure the widest possible dissemination of information. No page charge is made. Twenty-five reprints of each contribution are available free of charge. Additional reprints can be ordered. A reprint order form will be sent together with the proofs.

19 **The publisher** will inform authors of the issue in which a paper is to appear immediately it has been scheduled for publication. Invited reviews and case studies will continue to receive the top priority. However the editors will also give a high priority to the shorter theory and methodology papers. Consequently authors cannot be given an indication of publication dates but the editors will attempt to maintain a backlog of accepted papers which is no larger than necessary to produce attractively balanced issues.

List of EJOR keywords

1	(S)	Agriculture
2	(T)	Airlines
3	(T)	Applied probability
4	(S)	Artificial intelligence
5	(S)	Assignment
6	(W)	Banking
7	(W)	Auctions/bidding
8	(S)	Biology
9	(S)	Branch and bound
10	(W)	Business process reengineering
11	(S)	Combinatorial optimization
12	(S)	Complexity theory
13	(S)	Computing science
14	(T)	Constraints satisfaction
15	(T)	Control
16	(T)	Convex programming
17	(W)	Cost benefit analysis
18	(S)	Cutting
19	(W)	Data envelopment analysis
20	(S)	Decision support systems
21	(W)	Decision analysis
22	(T)	Developing countries
23	(T)	Distribution
24	(T)	Dynamic programming
25	(W)	Economics
26	(W)	Education
27	(S)	Energy
28	(W)	Environment
29	(S)	Evolutionary computations
30	(S)	Expert systems
31	(T)	Facilities planning and design
32	(W)	Finance
33	(W)	Flexible manufacturing systems
34	(T)	Forecasting
35	(T)	Fractional programming
36	(S)	Fuzzy sets
37	(T)	Game theory
38	(W)	Gaming
39	(S)	Genetic algorithms
40	(T)	Geometric programming
41	(T)	Global optimization
42	(W)	Goal programming
43	(W)	Government
44	(T)	Graph theory
45	(W)	Group decisions and negotiations
46	(W)	Health services
47	(S)	Heuristics
48	(W)	Human resources
49	(T)	Integer programming
50	(T)	Interior point methods
51	(W)	Internet
52	(T)	Inventory
53	(W)	Investment analysis
54	(S)	Knowledge-based systems
55	(T)	Large scale optimization
56	(T)	Linear programming
57	(T)	Location
58	(T,W)	Logistics
59	(T)	Maintenance
60	(W)	Manpower planning
61	(W)	Manufacturing
62	(W)	Marketing
63	(T)	Markov processes
64	(S)	Medicine
65	(S)	Metaheuristics
66	(T)	Military
67	(S)	Modelling systems and languages
68	(S)	Multi-agent systems
69	(S,W)	Multiple criteria analysis
70	(S,W)	Multiple objective programming
71	(T)	Multivariate statistics
72	(W)	Natural resources
73	(S)	Network flows
74	(S)	Neural networks
75	(T)	Nonlinear programming
76	(W)	Organization theory
77	(S)	Packing
78	(S,T)	Parallel computing
79	(T)	Parametric programming
80	(T)	Penalty methods
81	(S)	Petri nets
82	(S)	Polyhedra
83	(W)	Pricing
84	(W)	Production
85	(W)	Productivity and competitiveness
86	(S)	Project management and scheduling
87	(W)	Psychology
88	(W)	Purchasing

Codes of editors:

(S) Roman Slowinski
(T) Jacques Teghem
(W) Jyrki Wallenius

Information for Guest-Editors

1 The **European Journal of Operational Research (EJOR)** welcomes opportunities to enable guest-editors to assemble papers. They will be published as a **Feature Issue**. A feature issue consists of a cluster of at least 6 and at most 20 papers. A feature issue may be a full issue or, depending on the size of the issue and size of the feature part, will be completed with regular papers. A feature issue will include feature theme words on the front cover and spine, a title page, and, if desired, an Editorial and an Invited Review paper. (The numbers of papers refer to papers of an average length of 6,000 words, or 10 printed pages. The overall reduction factor to estimate the number of printed pages from the number of manuscript pages is 0.5).

2 All feature issues should have a uniform **theme and a title**. The papers should be a cohesive cluster by content, not because they were presented at a certain general-interest conference, nor because they originate from a certain geographic region. Organizers of specialized symposia or workshops are encouraged to consider a feature issue as being appropriate for the publication of selected contributions. Then it is suggested that the papers should be collected before or at the meeting.

3 Organizers of **meetings sponsored by EURO**, wishing to publish selected contributions, should consider EJOR with priority. The proposal of a feature issue should be addressed to one of the editors of EJOR who covers the corresponding keyword. He is called **Contact Editor** hereafter.

4 The guest-editor should seek to incorporate an **Invited Review** on the theme of his/her issue. Invited reviews are intended to be useful to operational researchers generally rather than being written for other specialists in the same field. Consequently, authoritative expressions of opinion on the state of knowledge are sought, rather than an interconnected list of references. Also, we would ask authors of invited reviews to aim for 6,000 words and certainly not to exceed 9,000 words.

5 All papers to be published in EJOR should be in **English** and will normally by refereed by three referees, anonymous to the author. The final decision concerning a manuscript should be based on at least two well-founded reports. Before announcing the final acceptance of a paper to the author, the guest-editor is asked to send the summary of the refereeing process to the contact editor in order to make a concerted decision.

6 It is an author's responsibility to ensure that the standard of English is acceptable. Guest-editors should insist upon this. Manuscripts should generally conform with EJOR's Instructions to Authors, a reproduction of which may be found at the end of each individual issue.

7 A tight **time scheme** is of utmost importance because contributors to a feature issue are faced with "touringcar waiting time": the first author that submitted an acceptable paper must wait for the last author's paper to be accepted. The following maximum time scheme is suggested:

- **month 0:** deadline for submission of papers, preferably at some occasion like a workshop, a miniconference, etc.;
- **month 1:** send papers to three referees each;
- **month 2:** send papers returned unrefereed to other referees;
- **month 3:** remind referees that did not respond;
- **month 4:** make editorial decision* on the basis of three or two referees' reports; that is, (a) reject, (b) accept, (c) accept if the author deals with minor comments satisfactorily, or (d) reconsider if the author revises the paper in view of major comments from referees;
- **month 6:** deadline for resubmission of papers;
- **month 7:** send revised papers to be reconsidered to original referees accompanied by all referees' reports;
- **month 9:** remind referees that did not respond;

- **month 10:** make editorial decision*, that is, (a) reject, (b) accept, or (c) accept if the author deals with minor second-round comments satisfactorily;

- **month 11:** deadline for final resubmission; constitute feature issue; write Editorial. Good papers coming in after the cut-off date may be communicated to the contact editor to be published in a regular issue.

8 Send one copy of the **complete manuscript** of the feature issue to the contact editor including:

- a table of contents, specifying the order of the papers;

- an Editorial from the guest-editors, if desired;

- an Invited Review paper, if one is to be included;

- a list of referees employed, to be merged in the annual acknowledgement to referees;

- a list of authors' mailing addresses, if these are lacking on the papers themselves;

- month received and month accepted on each paper;

- abstract and keywords on each paper.

9 The feature issue will be sent to our **publisher Elsevier**, desk-edited and typeset and the authors will get proofs, with priority. As soon as the feature issue is scheduled for publication, the authors will be notified by Elsevier; the minimum production lead-time is 5 months.

10 Guest-editors can make use of **EJOR stationery**, Instructions to Authors, Referee Forms and standard letters, to be obtained from the contact editor.

11 Guest-editors will obtain ten **complimentary copies** of their feature issue.

*Acceptance should be concerted with the contact editor.

Guidelines for Invited Reviews

The European Journal of Operational Research seeks to incorporate an **invited review** in almost each issue. They play a very significant role in promoting the field of OR.

Invited reviews are intended to be useful to operational researchers generally rather than being written for other specialists in the same field. Consequently, authoritative expressions of opinion on the state of knowledge are sought, rather than an interconnected list of references. Also, we would ask authors of invited reviews to aim for 6,000 words and certainly not to exceed 9,000 words.

Normally, the invited reviews are not refereed, however, the editors are seeking for advice and comments from an expert.

Notes for Referees

The primary purpose of the EUROPEAN JOURNAL OF OPERATIONAL RESEARCH is to serve as a means of professional communication between operational researchers joined in EURO, the Association of European Operational Research Societies within the International Federation of Operational Research Societies.

The editorial policy is to publish high quality papers that contribute to the practice of decision making. The contents may describe a case study, an application or a theoretical development that must be capable of being used in the foreseeable future. Surveys and professional interest papers are also acceptable.

The referee's function is of the utmost importance, because the editors cannot be expected to have detailed expertise in all branches of the theory and application of operational research. Referees are requested to see their role as advising the editors and authors. If a paper can be revised so as to attain a high standard in terms of both content and presentation, then referees should seek to help the author with constructive suggestions. Detailed comments may be written in the margin of the manuscript, which should be returned to the editors. Also, it would be helpful to the editors if a referee who advocates that a paper be radically revised would indicate whether he is willing to see any resubmitted paper.

Practitioners often suffer from the need to conceal commercial secrets. Referees should take this into sympathetic consideration when advising on a case study or an application paper but it should not be allowed to detract from the clarity of the presentation. The criterion of contributing to the practice of decision making remains inviolate but takes a different form. Originality may be demonstrated by applying operational research to a problem with interesting new aspects or by providing fresh insights leading to successful implementation. Equally, a case study might be worthy of publication simply because it can be used to convince managers of the value to be gained by applying operational research to particular problems.

The referee's report form has been devised to assist both the referees and the editors; a copy will normally be sent to the author. In particular, ordinal scales have been included to enable reports to be summarized in a relatively standard way. Also, Please make sure that all relevant recent references to EJOR articles have been properly cited.

The identity of individual referees will normally be concealed and a referee should only sign the report if he/she wishes his/her name to be passed on to the author. Referees may communicate directly with authors, if they wish. The names of all those who have served as referees will be published once per annum.

Referees are kindly requested to complete their reports within eight weeks of receiving a paper. Anyone who is unable to do so should either seek a suitable substitute or return the manuscript to the editors as soon as conveniently possible.

The editors are grateful for the help and advice received form the many referees and are anxious that an individual should only be asked to scrutinize papers of personal interest. Hence referees are invited to keep the editors informed of any changes in their own areas of interest, using the EJOR keyword format.

Referee's report

TITLE: ....

AUTHOR(S):..

PAPER NUMBER: ....REFEREE ID NUMBER:...

Please circle one answer for each of the following questions and the overall recommendation.

General Judgment	**Very False**	**False**	**?**	**True**	**Very True**
1. The author is familiar with the existing state of knowledge.	1	2	3	4	5
2. The topic is relevant to the scope of EJOR.	1	2	3	4	5
3. This is a new and original contribution.	1	2	3	4	5
4. The paper makes a valuable contribution to the practice of OR.	1	2	3	4	5
5. The title is appropriate.	1	2	3	4	5
6. The abstract and keywords are adequate.	1	2	3	4	5
7. The paper is logically and technically correct.	1	2	3	4	5
8. The interpretations and conclusions are sound and justified by the results.	1	2	3	4	5
9. The paper is well presented and organized.	1	2	3	4	5
10. The writing style/English is clear and understandable.	1	2	3	4	5
11. The paper is of the right length. If not, please explain:	1	2	3	4	5
12. The references are adequate.	1	2	3	4	5

13. Rating of this paper in comparison to similar papers published in top-rated scientific journals:

☐ Below publ. level	☐ Bottom 20%	☐ Below average	☐ Average	☐ Above average	☐ Top 20%

Overall Recommendation

4   Acceptable without any changes
3   Acceptable with minor modifications
2   Major revision: needs to be re-written and re-evaluated
1   Unacceptable

Please give detailed comments on a separate sheet to justify your general judgment and recommendation.

Editors

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Call for Referees

In order to ensure the quality of the EUROPEAN JOURNAL OF OPERATIONAL RESEARCH, the Editors would like to update and increase the list of potential referees. If you would be ready to evaluate manuscripts which have been submitted to the journal for publication, please return this form to the appropriate editor, after having indicated your areas of interest and competence.

☐ Prof.　　　　☐ Dr.　　　　☐ Mr.　　　　☐ Mrs.

First name:...

Name: ....

Postal address: ....

....

E-mail: ....Fax: ....

I am prepared to referee potential contributions for the EUROPEAN JOURNAL OF OPERATIONAL RESEARCH in the future. My areas of interests are*:

1. ....

2. ....

3. ....

4. ....

5. ....

* From the list given in the keywords section, you may select up to five keywords (identified by the corresponding number) in the order of decreasing preference. In addition to some "official" EJOR keywords you may insert your own for greater precision.

Availability of EJOR

EJOR is available in paper version as well as electronically in **ScienceDirect** and **Decision Sciences Web**.

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Subscription prices and conditions can be found via Decision Sciences Web: www.elsevier.nl/locate/dsw

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Decision Sciences Web (www.elsevier.nl/locate/dsw) provides you, free of charge, with all information on EJOR, including abstracts and facilities for searching the articles published. Full text articles are available as well, provided your institution has a subscription to the paper version of the journal.

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E U R O   M E M B E R   S O C I E T I E S   C O R N E R

This corner is devoted to news passed on by EURO Member societies to the EURO Bulletin. In view of its international scientific status, EURO reserves the right not to publish in its bulletin any statement that is only slightly (or not at all) related to Operational Research.

The UK OR Society

Operational Research in the 21st Century:
Communications and Knowledge Management

12 – 14 September 2000
University of Wales, Swansea

Call for Papers

The annual conference of the UK Operational Research Society offers an opportunity to share and reflect on our experience of OR practice and theory and in particular this year to speculate on the future of OR. We anticipate getting up to 300 abstracts, organised into 15 streams to which you are invited to contribute. Ideally there will be streams on the theme topics - Communications and Knowledge Management - but as usual all ideas are welcome. All abstracts appear in the conference handbook and selected refereed papers will be published in JORS. All abstracts and presentations should however be supported by a paper. These can cover work in progress, case studies, reflections on the nature of OR, discussions of new techniques, tutorials giving up to date reviews of the state of OR today. There is an updated list of streams and lots of other information available on the Society's website www.orsoc.org.uk (click on OR 42 in the quick links panel on the homepage). You are also encouraged to submit your contribution online. You only need give brief details for now - you can submit final details later with your abstract.

Volunteers to run the streams as well as contribute to them are also eagerly sought - if you fancy doing this then contact programme organiser Misha Hebel: Misha.Hebel@brunel.ac.uk

The conference has one or two innovations, and one or two returns to some ideas that were successful in the past. We are limiting the number of plenary speakers, but those we do have will be very exciting, and may be controversial. The programme promises to provide a mix of the known, tried, and tested, with some newcomers, such as e-commerce. With the agreement of JORS editor John Ranyard we have decided to have refereed papers in addition to the normal presentations. The idea is that a special conference edition of JORS will be published.

For any further information please contact Chris Barrett: barrett@orsoc.org.uk. Alternatively see the conference programme or for the latest on OR42 why not join one of our new mailing lists and receive the news by email.

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EURO events calendar

10-11/03/00	EWG	HOP: Vienna, Austria schneeweiss@bwl.uni-mannheim.de http://orgwww.bwl.univie.ac.at/hop2000
4-18/03/00	ESWI	EURO Winter Institute: Lac Noir, Switzerland marino.widmer@unifr.ch http://iiufpc44.unifr.ch/ESWI_18
30-31/03/00	EWG	Aid for Multicriteria Decisions: 51st Meeting, Madrid, Spain mcda51@ceu.es http://www.ceu.es/mcda51
31/03-1/04/00	EWG	EUROFUSE: 5th Meeting - Workshop on Scheduling and Planning , Mons, Belgium Bernard.DeBaets@rug.ac.be http://allserv.rug.ac.be/~bdebaets
17-19/04/00	EWG	Project Management and Scheduling: Univ. of Osnabrueck, Germany pms2000@matematik.uni-osnabrueck.de
Spring 00	EWG	Financial Modelling: Trondheim, Norway Molenaar@few.eur.nl
18-20/05/00	EWG	ECCO: Capri, Italy http://www.ecco2000.unina.it/ecco2000.html Van-Dat.Cung@prism.uvsq.fr
8-10/06/00	EWG	Decision Support Systems: 11th annual meeting of the EURO Working Group on Decision Support Systems. Toulouse, France zarate@irit.fr
14-16/06/00	EWG	PAREO: Second international Workshop of the PAREO working group on Parallel Processing in Operations Research. Paderborn, Germany pareo@uni-paderborn.de http://www.uni-paderborn.de/~PAREO2000
4-7/07/00	EWG	Group and Negociation Decision Support: Glasgow, Scotland Fran@mansci.strath.ac.uk http://www.cbe.wwu.edu/gdn/GDN2000.html
16-19/07/00	EURO XVII	Budapest, Hungary hencsey@sztaki.uk http://www.sztaki.hu/conferences/euro17/
31/07-4/08/00	EWG	ORAHS: Glasgow, Scotland jri@gcal.ac.uk

EURO events calendar

16-18/08/2000	EWG	WATT: PATAT2000, The 3rd international conference on the Practice And Theory of Automated Timetabling. erben@fh-konstanz.de/patat2000/ http://www.asap.cs.nott.ac.uk/ASAP/ttg/patat-index.html
12-15/09/00	EWG	Transportation: 8th Meeting, Rome, Italy bielli@iasi.rm.cnr.it http://pft2.iasi.rm.cnr.it/ewgt/homen.html
Autumn 00	EWG	Financial Modelling: New York, USA Molenaar@few.eur.nl
5-7/10/00 (to be confirmed)	EWG	Aid for Multicriteria Decisions: 52nd Meeting, Vilnius, Lithuania roy@lamsade.dauphine.fr
14-17/12/00	EWG	Locational Analysis: Barcelona, Spain daniel.serra@econ.upf.es
9-11/07/01	EURO XVIII	http://www.euro2001.org: Rotterdam, The Netherlands

If you want to add any EURO event, please contact the EURO Office (euro@ulb.ac.be).

ESWI: EURO Summer & Winter Institute
EURO-k: EURO Conference
EURO Prime: EURO Prime Conference
EWG: EURO Working Group Meeting
Mini EURO: Mini EURO Conference

EURO XVII

17th European Conference on Operational Research
Budapest, Hungary, July 16-19, 2000
http://www.sztaki.hu/conferences/euro17

OR FOR A UNITED EUROPE
25th Anniversary of EURO

Hosted by The Hungarian Operational Research Society (HORS)

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Fax: +361 386 9378 - E-mail: richter@sztaki.hu
http://www.sztaki.hu/conferences/euro17

Important dates

Notification of abstract acceptance ....1 March 2000
Second Announcement and Preliminary Programme ....1 April 2000
Deadline for early registration ....15 May 2000
Final Programme ....1 June 2000
Conference...16-19 July 2000