#### EDITORIAL

# No 7-year itch at 40R

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The purpose of this note is to give our readers information on the present state of the journal and its future, following the tradition opened with Bouyssou et al. (2003) and continued in Bouyssou et al. (2006). Three years have passed since our last editorial note, meaning that three entire volumes (each containing four issues) of the journal have been published: vol. 4 (2006), vol. 5 (2007) and vol. 6 (2008).

# 1 What has happened since 2005?

In Bouyssou et al. (2006), we wrote that 40R was "still in its infancy... and [was] therefore still vulnerable to the most common infantile diseases of journals". Three years later, it seems that we have succeeded in fighting these infantile diseases and 40R appears in reasonably good condition.

We briefly summarize here what were the main events in the life of the journal since the end of 2005.

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40R has been accepted in ISI's Science Citation Index Expanded (SCIE). The journal will be covered in the 2008 ISI report (this report will be published in June 2009). 40R will receive an impact factor from 2009. The first impact factor of our journal will be published in 2010. This is clearly excellent news for the journal... although this also means that we are now entering the limited list of Operations Research journals covered by ISI (it presently contains 60 journals) and we will have to work hard to remain in this list and to quickly achieve a reasonable impact factor.

- 4OR has an on-line edition (http://wwww.springerlink.com/content/111812/) that is included in most journal bundles offered by Springer to libraries. This is a major asset for the journal since being clearly visible on the web is a necessary condition for a journal to have a reasonable chance of surviving. Furthermore, accepted papers are available for download on the site, under Online First™, (and have a DOI) as soon as the proofs are corrected. This creates a very nice compromise between the wishes of the editors of the journal to have a reasonable backlog of papers and those of authors willing to see their papers published as soon as possible.
- We have been in position to consistently follow our publishing pace of 4 issues of approximately 85 pages per year. Moreover, since the backlog of accepted papers was increasing, starting with vol. 6 in 2008, the size of the journal has been increased to approximately 100 pages per issue. We have no doubt that we will be in position to face this slight increase in size.
- The quality of the Invited Surveys that were published in the first three volumes of the journal was noticed by the editor of *Annals of Operations Research*, which led to a volume of this journal republishing (updated versions) of these surveys (see Bouyssou et al. 2007b). For a young journal like ours, having succeeded in attracting the attention of a well-established prestigious journal like *Annals of Operations Research* was a strong incentive to pursue our efforts to improve the quality and diffusion of *4OR*.
- Starting 1 January 2009, the journal will be managed by a new editorial team. Denis Bouyssou, having served for two terms of 3 years, is retiring as a one of the principal editors of the journal and is replaced by Philippe Baptiste (readers wanting to know more about Philippe are invited to visit his web page at http://www.lix.polytechnique.fr/~baptiste/). Silvano Martello and Frank Plastria would like to warmly thank Denis Bouyssou for his invaluable contribution to the development of the journal since its inception and to welcome Philippe Baptiste as a new Editor-in-Chief. Further changes in the editorial team are planned and will soon be announced.
- Starting 1 January 2009, a new board of Area Editors is appointed. The motivation for this change is twofold. First, the former board of Area Editors had already served for 6 years and it was legitimate for some of its members to be willing to withdraw; we would like to take this occasion to warmly thank all members of the previous board for the time and effort they gave to the journal. Second, having now 6 years of experience, we wanted to be in position to better reflect in the board of Area Editors fields of OR in which we receive many submissions. We



Type of papers	Number of papers	Number of pages	Percentage of pages (%)
Editorials <sup>a</sup>	3	18	1.6
Invited surveys	11	430	39.4
Research papers <sup>b</sup>	27	443	40.6
Industry papers	6	88	8.1
Education papers	0	0	0.0
PhD Thesis abstracts	28	112	10.3
Total	75	1091	100.0

Table 1 Types of papers published (2006–2008)

think that the new board does this and we would like to welcome all our new Area Editors, confident that they will work hard for the development of the journal.

# 2 What has been published?

The journal currently publishes papers in five different sections:

- invited surveys;
- research papers;
- abstracts of PhD Theses:
- industry papers;
- education papers.

All types of papers, except "education papers", were indeed published in volumes 4–6. We also occasionally publish *book reviews*, as (short) research papers, in which an invited scientist expresses his/her opinion on a recent relevant book in our field. We published one book review in volumes 4–6.

A synthetic view of what was published in volumes 4–6 of 4OR appears in Table 1. Lacking an impact factor for the time being, it is not easy to give precise information on the impact of the papers that are published in the journal. As a proxy measure, let us simply mention here that the downloads of 4OR papers from Springer's site has been steadily increasing during the period, as shown in Fig. 1.

We detail below, for each of the sections of the journal, which papers were published and how they were selected.

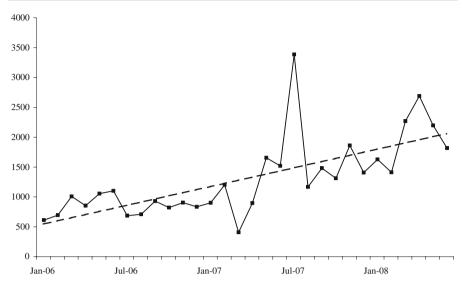
### 3 Invited surveys

In volumes 4–6, we have published 11 invited surveys, one per issue (except for one issue (vol. 4(1)) in which the invited survey was replaced by editorial notes, as in the current issue). The average length of these papers was 39 pages (compared to 32 in volumes 1–3) with a minimum of 18 pages and a maximum of 64 pages. This means that a substantial part of the journal is devoted to these texts. Whereas the room taken



a One editorial was an obituary

b Among the 27 research papers published, one was a book review



**Fig. 1** Monthly downloads of 4OR papers from Springer's site, January 2006–June 2008 (Source: Springer). Linear adjustment (*dotted line*): y = 52t + 493

up by these surveys decreases the space left for research papers, our belief is that they are appreciated by the OR community (this is confirmed by a high number of downloads). Hence, they will tend to be frequently referenced, therefore increasing the visibility of the journal, which should be beneficial to all authors in the long run.

Papers in this section are solicited by one of us and are reviewed collectively by the three of us. We have tried hard to solicit papers dealing with important or emerging fields of OR. Furthermore, we have strived to obtain papers from authors coming from a large variety of countries (see Table 2; we conventionally record the nationality of the majority of authors, using the country of origin of the first author to break ties). Our policy is to solicit surveys written by well-established scholars, presenting the state-of-the-art of relevant Operations Research areas. We detail in Sect. 3.1 how the *Annals of Operations Research* volume containing the ones in volumes 1–3 saw light. We detail in Sect. 3.2 the invited surveys that were published in volumes 4–6.

### 3.1 The Annals of Operations Research volume

At the beginning of 2006 we contacted Peter L. Hammer proposing him to prepare an invited survey on logical data analysis. Our invitation included the list of the invited surveys that we had published in volumes 1–3 (2003–2005) of the journal. We were delighted with his immediate answer. Peter was impressed by the quality of the surveys, and, being Editor-in-Chief of *Annals of Operations Research*, he proposed us to collect the surveys in a volume of this series, in order to make them more widely available to the OR community. We agreed to give the authors the opportunity to revise and update their work. We were finalizing the preparation of the volume when, at the end of 2006, Peter tragically died (see the obituary by Boros et al. 2007, in the journal).



**Table 2** Country of origin of invited surveys published (2006–2008)

Country	Number of surveys	Percentage (%)
Italy	3	27.3
France	2	18.2
Canada	1	9.1
New Zealand	1	9.1
Poland	1	9.1
Switzerland	1	9.1
UK	1	9.1
USA	1	9.1
Total	11	100.0

The volume, titled *Surveys in Operations Research (Invited Surveys from 4OR)* (Bouyssou et al. 2007b) and dedicated to the memory of Peter L. Hammer (1936–2006), appeared in September 2007. We very shortly describe here its contents, referring the reader to Bouyssou et al. (2007a) for a more detailed description.

- 1 The omnipresence of Lagrange (4OR 1/1, Lemaréchal 2003): Claude Lemaréchal points out that Lagrangean relaxation is not just a technique for handling combinatorial optimization problems, but a basic method in many more optimization issues.
- 2 The dial-a-ride problem: Variants, modeling issues and algorithms (4OR 1/2, Cordeau and Laporte 2003): Jean-François Cordeau and Gilbert Laporte present an exhaustive introduction to door-to-door delivery problems arising in social services.
- 3 Lifting, superadditivity, mixed integer rounding and single node flow sets revisited (4OR 1/3, Louveaux and Wolsey 2003): Quentin Louveaux and Laurence Wolsey show that a combination of integer rounding and lifting techniques provides a unified way to obtain many of the valid inequalities for mixed 0-1 sets that have been proposed in the literature.
- 4 Models and solution techniques for frequency assignment problems (40R 1/4, Aardal et al. 2003): Karen Aardal, Stan van Hoesel, Arie Koster, Carlo Mannino and Antonio Sassano give a thorough overview of the different modeling ideas developed for the various situations in which a frequency assignment problem arises in wireless communication.
- 5 Combinatorial auctions (4OR 2/1, Abrache et al. 2004): Jawad Abrache, Teodor Gabriel Crainic, Michel Gendreau and Monia Rekik review several contributions from the Operations Research literature on a particular type of auctions in which participants are allowed to bid on bundles of multiple heterogeneous items.
- 6 Ethics in OR/MS: Past, present and future (4OR 2/2, Brans and Gallo 2004): Jean-Pierre Brans and Giorgio Gallo discuss fundamental questions on the social role of Operations Research / Management Science tools and the new challenges posed by the growing complexity of the problems which humanity is facing today.



7 Combinatorial optimization and hierarchical classifications (4OR 2/3, Barthélemy et al. 2004): Jean-Pierre Barthélemy, François Brucker and Christophe Osswald review several extensions of traditional hierarchical classification techniques from a combinatorial optimization point of view, and study the complexity of the underlying optimization problems.

- 8 Counting and enumeration complexity with application to multicriteria scheduling (40R 3/1, T'kindt et al. 2005): Vincent T'kindt, Karima Bouibede-Hocine and Carl Esswein study several aspects of multicriteria scheduling, with special emphasis on the complexity of problems linked with counting and enumerating optimal solutions.
- 9 *Bilevel programming: A survey (4OR 3/2, Colson et al. 2005)*: Benoît Colson, Patrice Marcotte and Gilles Savard review the good progress that is being made in handling special classes of problems in which the objective involves the optimal solution to another second level problem, or admit even more levels.
- 10 Complexity and algorithms for convex network optimization and other nonlinear problems (40R 3/3, Hochbaum 2005): Dorit Hochbaum analyzes the effort needed to produce optimal solutions with pre-specified accuracy for nonlinear continuous optimization problems, and presents polynomial-time methods for several nonlinear network problems.
- 11 Production planning with load dependent lead times (40R 3/4, Pahl et al. 2005): Julia Pahl, Stefan Voß and David L. Woodruff give a detailed account of techniques for supply chain management in contexts where it is required to produce goods in a timely manner so as to be able to meet a demand varying in time and space.

# 3.2 Invited surveys: 2006–2008

We briefly summarize below each of the 11 surveys that were published in vol. 4–6.

- 1 Some operations research methods for analyzing protein sequences and structures (4OR 4/2, Błażewicz et al. 2006): Jacek Błażewicz, Piotr Łukasiak and Maciej Miłostan review Operations Research techniques that were relatively recently introduced in biology, especially in the protein analysis area, to support biologists.
- 2 Integrating operations research in constraint programming (40R 4/3, Milano and Wallace 2006): Michela Milano and Mark Wallace describe how constraint programming, viewed as a natural formalism for modeling problems, allows linear programming to be combined with propagation and novel and varied search techniques.
- 3 Ejection chain and filter-and-fan methods in combinatorial optimization (40R 4/4, Glover and Rego 2006): Fred Glover and César Rego present the general framework of the ejection chain and filter-and-fan methods, powerful neighborhood structures fundamental to the performance of local search and metaheuristic algorithms for combinatorial optimization.
- 4 A survey on the linear ordering problem for weighted or unweighted tournaments (40R 5/1, Charon and Hudry 2007): Irène Charon and Olivier Hudry survey



results, conjectures and open problems dealing with the combinatorial and algorithmic aspects of the linear ordering problem.

- 5 Combinatorial optimization and green logistics (4OR 5/2, Sbihi and Eglese 2007): Abdelkader Sbihi and Richard W. Eglese introduce the area of green logistics and describe the main topics in this field which can be formulated as combinatorial optimization problems.
- 6 Generalized Nash equilibrium problems (4OR 5/3, Facchinei and Kanzow 2007): Francisco Facchinei and Christian Kanzow discuss the main properties and solution algorithms for the generalized Nash equilibrium problem, an important model that has its roots in the economic sciences but is being fruitfully used in many different fields.
- 7 Recent advances in vehicle routing exact algorithms (4OR 5/4, Baldacci et al. 2007): Roberto Baldacci, Paolo Toth and Daniele Vigo review the most recent developments that had a major impact in the current state-of-the-art of exact algorithms for the capacitated vehicle routing problem.
- 8 A decade of application of the Choquet and Sugeno integrals in multi-criteria decision aid (4OR 6/1, Grabisch and Labreuche 2008): Michel Grabisch and Christophe Labreuche examine the main advances on the use of the Choquet and Sugeno integrals in multi-criteria decision aid over the last decade.
- 9 On the use of graphs in discrete tomography (4OR 6/2, de Werra et al. 2008): Dominique de Werra, Marie-Christine Costa, Christophe Picouleau and Bernard Ries present a tutorial paper on a graph theoretical model for the basic image reconstruction problem which stems from discrete tomography.
- 10 Mathematical optimization in intensity modulated radiation therapy (4OR 6/3, Ehrgott et al. 2008): Matthias Ehrgott, Çiğdem Güler, Horst W. Hamacher and Lizhen Shao survey optimization models, methods, and theories in mathematical optimization which were recently successfully introduced in the design of intensity modulated radiotherapy treatments.
- 11 Variable neighborhood search: methods and applications (4OR 6/4, Hansen et al. 2008): Pierre Hansen, Nenad Mladenović and José Moreno Pérez review the main aspects of variable neighborhood search metaheuristics, a framework based upon systematic changes of neighborhoods.

# 4 Research papers

## 4.1 Research papers published

Regular papers are the core of the journal. Excluding book reviews, we published 26 such papers in volumes 4–6, giving an average number of 2.25 research papers per issue. For volumes 1–3, we had 34 research papers published. This slight decrease in the number of research paper published is mainly due to an increase of their average length. Table 3 details the country of origin of the papers published (using the same convention as above). Belgium, France and Italy account for 69% of all papers, showing that the research output of these three countries is well represented in 40R. For volumes 1–3, this percentage was 47%. This important increase is probably due to the



**Table 3** Origin of research papers (excluding book reviews) published (2006–2008)

Country	Number of papers	Percentage (%)
France	10	38.5
Italy	6	23.1
Belgium	2	7.7
Germany	2	7.7
Netherlands	2	7.7
Luxembourg	1	3.8
Portugal	1	3.8
Tunisia	1	3.8
USA	1	3.8
Total	26	100.0

**Table 4** Length in pages of research papers (excluding book reviews) published (2006–2008)

Length	Number of papers	Percentage (%)
$x \le 10$	0	0.0
$11 \le x \le 14$	11	42.3
$15 \le x \le 19$	9	34.6
$20 \le x \le 24$	5	19.2
$25 \le x$	1	3.8
Total	26	100.0

fact that all members of the Belgian, French and Italian OR societies receive the journal (as part of their membership fees for SOGESCI/BVWB, ROADEF and AIRO), which has greatly increased the visibility of the journal in these three countries. We intend to work hard to keep attracting authors also from outside the three promoting countries.

The average length of the research papers published (excluding book reviews) is 17 pages (13 in volumes 1–3) with a minimum of 12 pages and a maximum of 26 pages. This is detailed in Table 4. Around half the papers published are under 14 pages. This seems in line with our policy of favoring the publication of short papers, although we do not have a strict rule concerning the maximum length of a research paper.

We have published too few research papers since vol. 1 to be in position to analyze whether or not we cover in the journal the main areas of research within OR. Let us simply say here that the journal welcomes papers in *all* areas of OR and that papers in emerging fields of OR are especially welcomed (for the record, we published several papers in vol. 4–6 dealing with the contribution of OR techniques in medical application and especially in the fight against cancer: Błażewicz et al. (2006), Conforti et al. (2008), Ehrgott et al. (2008), Holder and Llagostera (2008)) and de Werra et al. (2008).



### 4.2 Selection of research papers

We give here information on the reviewing process of research papers for which a decision was taken before 12 November 2008.

Except for a case of plagiarism that was fortunately detected (see Bouyssou et al. 2009, for details on this case) the reviewing process of the papers was rather smooth. The collaboration between the three editors and the area editors proved effective and efficient. Our purely electronic way of handling papers turned out to be swift and economical.

### 4.2.1 Rejection rate

Submissions have been following a regular pace. Between 31 December 2005 and 12 November 2008, 136 submissions, excluding book reviews, were fully processed (to be compared with 189 submissions before 31 December 2005). This apparent decrease in the number of submissions has two main explanations. First, we use here a period of reference that does not include the submissions received late in 2008. Second, the number of 189 submissions received prior to 31 December 2005 also includes all submissions received during the launching of the journal (before 1 January 2003). Therefore, the comparison of these two numbers is not very significant.

A total of 28 research papers were accepted, meaning an overall rejection rate of 79% (71% before 31 December 2005). In order to interpret this, rather high, rejection rate one should keep in mind that the editorial policy of the journal, in order to ensure a fast and fair processing of the manuscripts, is to reject all papers needing a major revision. After they have been revised, some of these papers are resubmitted to the journal, in which case they are considered as new submissions.

Let us finally note that the number of 136 submissions does not include 5 papers that were submitted although they were manifestly of a non-academic nature. Including them the rejection rate rises to 80%.

#### 4.2.2 Time before decision

The mean time between the reception of the paper and the communication of the decision to the authors was 144 days, i.e., less than 5 months (to be compared with 142 days for papers processed before 31 December 2005) with a minimum of 0 days and a maximum of 1077 days (this maximum is clearly an outlier, as shown in Fig. 2). Information on the reviewing time of research papers is summarized in Table 5 and Fig. 2.

For the 108 papers that were rejected, the mean time before decision was 130 days, i.e., 4 months (125 days for papers processed before 31 December 2005) with a minimum time of 0 days (paper rejected the day it was received) and a maximum time of 1077 days (this case being rather exceptional: the average time before rejection is 121 days without this outlier).

For the 28 papers that were accepted the average time before decision was 198 days, i.e., less than 7 months (183 days for papers processed before 31 December



**Table 5** Processing time (in days) of research papers (excluding book reviews, 2006–2008)

Time in days	Number of papers	Percentage (%)
$0 \le x \le 20$	15	11.0
$21 \le x \le 40$	11	8.1
$41 \le x \le 60$	11	8.1
$61 \le x \le 80$	5	3.7
$81 \le x \le 100$	16	11.8
$101 \le x \le 120$	9	6.6
$121 \le x \le 140$	17	12.5
$141 \le x \le 160$	10	7.4
$161 \le x \le 180$	11	8.1
$181 \le x \le 200$	4	2.9
$201 \le x \le 220$	3	2.2
$221 \le x \le 240$	4	2.9
$241 \le x \le 260$	3	2.2
$261 \le x \le 280$	2	1.5
$281 \le x \le 300$	1	0.7
$301 \le x \le 320$	1	0.7
$321 \le x \le 340$	0	0.0
$341 \le x \le 360$	3	2.2
$361 \le x \le 380$	1	0.7
$381 \le x \le 400$	3	2.2
$401 \le x \le 420$	2	1.5
$421 \le x \le 440$	0	0.0
$441 \le x \le 460$	2	1.5
$461 \le x \le 480$	0	0.0
$481 \le x \le 500$	0	0.0
$501 \le x \le 520$	1	0.7
$521 \le x$	1	0.7
Total	136	100.0

2005) with a minimum of 15 days (corresponding to a paper re-submitted after having been rejected because it needed a major revision) and a maximum of 519 days.

### 4.2.3 Origin of papers

Table 6 summarizes the country of origin of the 136 submissions that were processed (using the same convention as above; Table 7 gives more details). The fact that the journal is attracting papers from outside the three promoting countries is happily confirmed. It should also be noticed that there is no significant difference between the rejection rate according to the country of origin of the authors: papers coming from Belgium, France or Italy obviously do not receive a special treatment when compared to papers received from other countries. The small number of papers received from



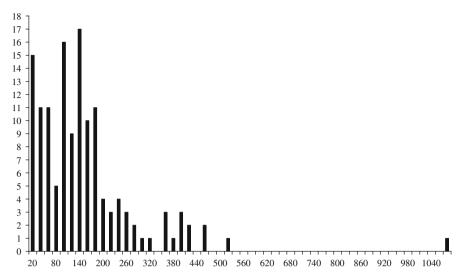


Fig. 2 Distribution of processing time (in days) of research papers (excluding book reviews, 2006–2008)

**Table 6** Origin and selection of research papers (excluding book reviews, 2006–2008)

Country	Number of papers received	Number of papers accepted	Rejection rate (%)
Europe	69	25	63.7
Among which BIF	50	21	58.0
UJTSASAAZ	15	0	100.0
Rest of world	52	3 <sup>a</sup>	94.2
Total	136	28	79.4

BIF Belgium, Italy, France; UJTSASAAZ USA, Japan, Taiwan, South America, South Africa, Australia, New Zealand

countries outside Europe and having quite well structured academic systems is too small to draw any significant conclusion from the very high rejection rate that was observed. Comparing Tables 6 and 7, it is clear that papers coming from outside Europe are mainly coming from countries in which academic institutions are still poorly structured and/or financed. We are sorry to say that, although we received many papers from such countries and in spite of our willingness to help colleagues doing good work under poor conditions, we have only been able to accept very few of these papers.

#### 5 Industry papers

Industry papers consist of case studies, state-of-the-art papers on the applications of OR techniques or reflections on the practice of OR. We have published 6 papers in this section in volumes 4–6 (4 in volumes 1–3). The country of origin of these papers, using the same convention as above, is detailed in Table 8. The average length of the



<sup>&</sup>lt;sup>a</sup>Coming from India, Iran, and Tunisia

**Table 7** Origin of research papers received (excluding book reviews, 2006–2008)

Country	Number of papers	Percentage (%)
India	30	22.1
France	23	16.9
Italy	17	12.5
Belgium	10	7.4
Iran	8	5.9
Taiwan	7	5.1
Portugal	5	3.7
Algeria	4	2.9
Germany	4	2.9
Greece	3	2.2
Japan	3	2.2
China	2	1.5
Saudi Arabia	2	1.5
South Africa	2	1.5
Tunisia	2	1.5
USA	2	1.5
Australia	1	0.7
Azerbaijan	1	0.7
Croatia	1	0.7
Denmark	1	0.7
Egypt	1	0.7
Kuwait	1	0.7
Luxembourg	1	0.7
Netherlands	1	0.7
South Korea	1	0.7
Spain	1	0.7
Turkey	1	0.7
Ukraine	1	0.7
Total	136	100.0

papers published in this section of the journal was 15 pages with a minimum of 8 pages and a maximum of 20 pages. These papers are usually reviewed by the three of us, using a referee from Industry whenever necessary.

Although we managed to increase the number of papers in this section by 50% compared to volumes 1–3, 6 papers in this section remains a small number. Although we are well aware of the fact that practitioners do not have much time or interest to write a paper, we will work hard to increase the number of submissions to this section.

# 6 Education papers

Education papers aim at giving an up-to-date exposition of classical OR problems that are frequently used in OR classes, or throwing a novel light on such. We have only



**Table 8** Country of origin of industry papers published (2006–2008)

Country	Number of papers	Percentage (%)
France	2	33.3
Italy	2	33.3
Belgium	1	16.7
USA	1	16.7
Total	6	100.0

received one submission in this section of the journal in 2005–2008. This paper was reviewed by the three of us and had to be rejected. Hence we published no paper in this section in volumes 4–6 (while 1 was published in volumes 1–3).

Although this is a disappointing outcome for us, we have decided to keep this section of the journal open and to work hard to attract good papers in this section. Indeed, we believe that teaching and communicating OR in an attractive and effective way should be on the agenda of most of our readers.

#### 7 PhD thesis abstracts

The journal publishes abstracts of PhD Theses defended in Belgium, France and Italy (or by Belgian, French and Italian students studying abroad). These abstracts are published under the responsibility of the supervisor of the work. We have received a total of 28 (17 for volumes 1–3) abstracts. We published all of them although we retain the right not to do so in the future. Among these abstracts, 8 (29%) were coming from Belgium, 17 (61%) from France and 3 (11%) from Italy. Noticing that Italy was poorly represented, we have worked towards increasing the number of PhD abstracts coming from Italy. Based on the current backlog for such papers, we have been reasonably successful in doing so. Most important universities in these three countries granting PhD Theses in OR are represented.

For volumes 4–6, Denis Bouyssou was responsible for this section. Although these abstracts are not refereed, the editor in charge of this section reviews them, making sure that they are informative and that their presentation remains homogeneous. Authors willing to submit the abstract of their PhD Thesis should therefore first read the instructions for the preparation of such papers that are available from our web site at <a href="http://homepages.vub.ac.be/~fouror/4OR\_PhD\_abstract.pdf">http://homepages.vub.ac.be/~fouror/4OR\_PhD\_abstract.pdf</a>. Abstracts are 3 or 4 pages long.

#### 8 What's next?

At the time of the writing of this editorial, the backlog of accepted papers in 40R represents slightly less than 1 year of publication at the present publishing pace of 100 pages per issue. This is rather a confortable situation, but we should not forget that 40R is only 6 years old. Although the journal is not in its infancy anymore, it is far from being mature yet... and we all know that being in one's teens in never too



comfortable. We will soon enter the small world of journals having an impact factor, a world in which competition is fierce. You can help us. Indeed, we expect our readers:

- to promote the journal,
- to submit good papers (and to suggest others to submit good papers), and, in particular, industry and education papers,
- to cite papers published in the journal,
- to accept refereeing tasks and to give motivated and constructive advice without undue delay,
- to make the editors aware of new emerging fields that would give nice invited surveys by well-established scholars,
- to give incentives to their doctoral students to submit an abstract of their PhD
  Thesis to the journal.

Furthermore, we are eager to receive comments and suggestions on the present state of the journal and possible directions of improvement. The new editorial team will continue to work hard to make this journal a useful tool for any member of the three promoting OR societies and, more generally, for the whole OR community.

These notes are also the occasion to warmly thank once more our board of Area Editors and all the persons that have accepted to referee papers for the journal (the list of referees is published every year at the end of the fourth issue of each volume). Their help has been instrumental in the success of the journal.

### References

Aardal KI, van Hoesel SPM, Koster AMCA, Mannino C, Sassano A (2003) Models and solution techniques for frequency assignment problems. 4OR 1(4):261–317

Abrache J, Crainic TG, Gendreau M (2004) Design issues for combinatorial auctions. 4OR 2(1):1-33

Baldacci R, Toth P, Vigo D (2007) Recent advances in vehicle routing exact algorithms. 4OR 5(4):269–298 Barthélemy J-P, Brucker F, Osswald C (2004) Combinatorial optimization and hierarchical classifications. 4OR 2(3):179–219

Błażewicz J, Łukasiak P, Miłostan M (2006) Some operations research methods for analyzing protein sequences and structures. 4OR 4(2):91–123

Boros E, Crama Y, Simeone B (2007) Peter L. Hammer (1936–2006). 4OR 5(1):1-4

Bouyssou D, Martello S, Plastria F (2003) 4OR for what purpose? 4OR 1(1):1-6

Bouyssou D, Martello S, Plastria F (2006) 4OR, Year 4. 4OR 4(1):1–9

Bouyssou D, Martello S, Plastria F (2007a) Eleven surveys in operations research. Ann Oper Res 153(1): 3–7

Bouyssou D, Martello S, Plastria F (eds) (2007b) Surveys in Operations Research (Invited surveys from 40R). Annals of Operations Research, vol 153. Springer, New York

Bouyssou D, Martello S, Plastria F (2009) Plagiarism again: Sreenivas and Srinivas, with an update on Marcu. 4OR 7(1):16–19

Brans J-P, Gallo G (2004) Ethics in OR/MS: past, present and future. 4OR 2(2):95-110

Charon I, Hudry O (2007) A survey on the linear ordering problem for weighted or unweighted tournaments. 4OR 5(1):5–60

Colson B, Marcotte P, Savard G (2005) Bilevel programming: a survey. 4OR 3(2):87-107

Conforti D, Guerriero F, Guido B (2008) Optimization models for radiotherapy patient scheduling. 4OR 6(3):263–278

Cordeau J-F, Laporte G (2003) The dial-a-ride problem: variants, modeling issues and algorithms. 4OR 1(2):89–101

de Werra D, Costa M-C, Picouleau C, Ries B (2008) On the use of graphs in discrete tomography. 4OR 6(2):101–123



Ehrgott M, Güler Ç, Hamacher HW, Shao L (2008) Mathematical optimization in intensity modulated radiation therapy. 4OR 6(3):199–262

Facchinei F, Kanzow C (2007) Generalized Nash equilibrium problems. 4OR 5(3):173-210

Glover F, Rego C (2006) Ejection chain and filter-and-fan methods in combinatorial optimization. 4OR 4(4):263–296

Grabisch M, Labreuche C (2008) A decade of application of the Choquet and Sugeno integrals in multicriteria decision aid. 4OR 6(1):1–44

Hansen P, Mladenović N, Pérez JM (2008) Variable neighborhood search: methods and applications. 4OR 6(4):99–999

Hochbaum DS (2005) Complexity and algorithms for convex network optimization and other nonlinear problems. 4OR 3(3):171–216

Holder A, Llagostera D (2008) Optimal treatment for photodynamic therapy. 4OR 6(2):167-182

Lemaréchal C (2003) The omnipresence of Lagrange. 4OR 1(1):7-25

Louveaux Q, Wolsey LA (2003) Lifting, superadditivity, mixed integer rounding and single node flow sets revisited. 4OR 1(3):173–207

Milano M, Wallace M (2006) Integrating operations research in constraint programming. 4OR 4(3):175–219

Pahl J, Voß S, Woodruff DL (2005) Production planning with load dependent lead times. 4OR 3(4):257–302 Sbihi A, Eglese RW (2007) Combinatorial optimization and green logistics. 4OR 5(2):99–116

T'kindt V, Bouibede-Hocine K, Esswein C (2005) Counting and enumeration complexity with application to multicriteria scheduling. 4OR 3(1):1–21

