4OR for what purpose?

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"To justify burdening the scientific world with yet another journal, two conditions must be rigorously fulfilled: undoubted utility and the utmost brevity."

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1 Why a new journal?

4OR is a new quarterly journal jointly published by the Operations Research societies of Belgium (SOGESCI/ BVWB), France (ROADEF) and Italy (AIRO). As its name suggests, this journal is devoted to Operations Research (OR).
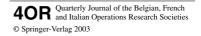
In view of the wise quotation taken from the first page of the first OR journal ever published (it was only 53 years ago), the *raison d'être* of this new publication needs some words of explanation.

1.1 We have: $-2 + 1 = -1$

Although this journal is new, its creation is accompanied by the disappearance of two OR journals:

JORBEL the former journal of the Belgian OR society and
Ricerca Operativa the former journal of the Italian OR society

(the French OR society did not publish a journal before the creation of *4OR*). The net effect of the creation of *4OR* on the number of OR publications is therefore negative.

JORBEL and *Ricerca Operativa* were undoubtedly good national OR journals. Then why stop them? Everyone who has been involved in editing a journal knows that:

- chasing (good) papers,
- chasing (knowledgeable) referees,
- explaining (sometimes unpleasant) decisions to authors,
- ensuring the diffusion of the journal,

are time-consuming and not so pleasant tasks. They only make sense if the results of these efforts have a minimal visibility in the OR community.

Both *JORBEL* and *Ricerca Operativa* demanded a great deal of effort from their editors, while having a distribution mainly limited to Belgium and Italy, respectively. Although the editors of both journals were often successful in attracting good papers, they were not as widely referenced as they deserved to be. An OR community is no longer defined by country limits. Spending much energy in order to produce a good journal that is not read as much as it deserves to be is not an efficient use of resources, a situation that is particularly unsatisfactory for someone working in OR.

This explains the creation of *4OR*. It remains a national journal… but will be the national journal of three countries at the same time. It will be a national journal but will be published by a commercial publisher that will strive to maximize its international diffusion: every member of any of the three promoting OR societies will receive *4OR*… but, hopefully, many other institutions and individuals will also receive it. This seems a much more efficient use of scarce resources.

1.2 OK, but why in English then?

4OR is a Belgo-French-Italian journal that will only publish texts in English. Clearly neither of us is responsible for the choice of the present *lingua franca* of academia and industry. If you are not convinced by this obvious argument, let us say that, although our national societies are replete with polyglot individuals, we are not aware of many of them speaking at the same time Dutch, French and Italian (not to mention the fact that German is also an official language in parts of Belgium and Italy) and it would have been difficult to prevent authors from submitting papers in English. A journal publishing papers in four different languages was thought to be an interesting object but hardly a useful scientific tool.

With all apologies to our English colleagues, we are sorry to say that we will contribute to the diffusion of this new idiom known as *Continental English*. Although Continental English has a much poorer vocabulary and a much simpler grammar than its Shakespearian ancestor, it has nevertheless a few rules that authors willing to submit a paper to *4OR* are kindly invited to follow. With their help, we shall do our best to avoid enlarging the gap between Continental English and English.

2 What type of articles will you publish?

Basically, editors of a journal are interested in publishing any good paper dealing with the subject of the journal. We are no exception. Any good paper related with Operations Research is therefore of potential interest to the journal. However, there are already plenty of good OR journals around the world and we thought that (waiting to be in a position to compete with the most prestigious ones) it could be a good idea to define more precisely the type of papers we are interested in. This is all the more true since this journal is a national journal that should be of interest to any member of the three promoting OR societies, whether coming from academia or from industry.

The journal will be divided into five different sections of unequal importance.

2.1 Regular papers

This section is the core of the journal. The aim is to be able to publish *good quality papers within a short period of time*. This will be the main distinctive characteristic of the new journal. In particular, it is hoped that such a policy will help young OR researchers to communicate their results in a fast and efficient way.

Publishing quickly is demanding for the editors and the referees. We have therefore decided to process all papers in electronic form, and to limit the length of the papers that will be considered for publication in this section to around 12 pages (in final form, i.e., without the 'referee' option of the Springer's template, see Section 3.1). This limit is fuzzy, but a constraint being fuzzy does not mean that it is non-existent.

More importantly, we have an uncommon policy with respect to major revisions. Quite often, referees suggest a major revision with the (secret) hope that the authors will withdraw their paper. More than often the authors do not withdraw their papers and keep revisions to a bare minimum. The revised version is then sent back to referees who were wishing never to see the paper again. This is a time-consuming and often very frustrating process. We have decided to suppress it altogether.

Papers needing a minor revision will not normally be sent back in revised form to the referees, and the area editors will check their adequacy to the suggestions of the referees. The revised version will have to be provided within two months. On the contrary, all papers needing a "major revision", i.e., a revision that cannot be reasonably expected to be undertaken within two months and/or that is likely to significantly alter the whole paper, will be rejected. This will clearly be of interest to referees. This might be tough for authors however. We feel that it is better for authors to have a paper rejected quickly (with constructive comments) than a paper entering endless rounds of major revisions. Needless to say, papers rejected because they need a major revision can, after substantial rewriting, be resubmitted to *4OR*. They will then be considered as new submissions and, thus, evaluated by two, possibly new, referees.

The refereeing process of regular papers will conform with the usual standards of academic journals. It will involve at least two independent referee reports and the advice of an appropriate area editor.

2.2 Invited surveys

This section is limited to one paper per issue. It will consist of "state-of-the-art surveys" written by prominent researchers on invitation by the editors. Papers in this section will be refereed according to special guidelines.

2.3 Industry section

This section offers a means of communication between OR practitioners and academics. Papers published in this section will consist of case studies, state-of-the-art papers on the applications of OR techniques or reflections on the practice of OR. Papers in this section will be refereed according to special guidelines. The possible need for confidentiality will be assured as long as the referees have sufficient freedom to evaluate the paper.

2.4 PhD section

Professors may represent the present, but are less likely to be the future of a scientific field; their students are much more likely to be so. We feel that a national journal has the responsibility to publicize doctoral works.

We will therefore publish abstracts of doctoral dissertations defended in Belgium, France or Italy after January 2002 (Belgian, French and Italian students defending their dissertation in another country are also invited to submit). Authors are requested to prepare an under-700 word abstract of their work and to send it to `4or@lamsade.dauphine.fr` via their supervisor or promotor. These abstracts will be published under the responsibility of the supervisor of the work, the editors of the journal keeping the possibility not to publish all abstracts received.

2.5 Display section

This section is intended for research groups and OR firms within the community of the three countries. They will have the opportunity to describe their recent directions of research and development and put their achievements in perspective. An annotated bibliography of the recent publications or realizations will document the text.

2.6 OK, but what is your vision of OR?

Although this will be tempting and challenging, we shall refrain from trying here a new definition of OR. Let us only mention that our view of OR is characterized by three main convictions:

- OR is a *science*. When confronted with a complex problem, there may be several ways to deal with it. You may ask an astrologer, perform a ritual sacrifice or simply ask a friend. OR's distinctive touch lies in the willingness to use formal tools to foster reflection and creativity. Rigor, clarity, transparency and usefulness are therefore our natural guides.
- OR is an *applied science*. It is more than a collection of techniques and cannot live without a close contact with the real world in which its models and tools are (hopefully) implemented. Applications of OR to new situations or to new sectors will clearly be of particular interest.
- OR has *fuzzy boundaries*. Dealing with real-world problems rarely only requires the mastering of techniques belonging to the historical core of OR (e.g., mathematical programming or combinatorial optimization). More than often, Statistics, Computer Science or Management skills, just to mention a few, will be badly needed. An OR journal should not neglect these non-core skills. It should encourage mixing OR with other scientific fields in order to tackle complex problems.

3 Practical aspects

3.1 How do I submit a paper?

Please refer to the "Instructions for authors". Let us however insist on the following points.

- All papers must be sent in *electronic form* to one of the editors. We strongly encourage the use of LaTeX, although files prepared using Word are also acceptable. Please prepare files in such a way that their electronic transmission to referees will not be likely to cause any difficulty. Practically, this means that we only expect to receive compressed postscript or pdf files (bandwidth and disk space are scarce resources).
- Please take into account the special style files that have been prepared for the journal, available at Springer's website, where a template is also provided for the preparation of LaTeX manuscripts. You may not like this style. However, you will certainly not want to read a journal in which each paper has its own style…and none of the editors are prepared to reformat individual files.
- The final version of accepted papers has to be provided also as a LaTeX or Word file.

3.2 What if I am not Belgian, French or Italian?

Clearly, the nationality of authors is of no relevance for the first three sections of the journal.

3.3 Who is responsible?

4OR is a joint venture of AIRO, ROADEF and SOGESCI/BVWB who have created a special body for this purpose. This body has appointed a board of three editors (one from each country) for a 3-year term that is renewable once.

The editors are the sole responsible for the content of the journal. They are benevolent; their only motivation is to provide the OR community of the three countries with a rich and lively journal. They will be helped in their task by a board of area editors. Because the OR community in our three countries was felt to be sufficiently rich, the editors thought that it made sense to limit their search for area editors to the three countries.

Needless to say, comments, suggestions and remarks from readers are expected and will be of great help. The editors will strive to make this journal a useful tool for any member of the three promoting OR societies and, more generally, the whole OR community.

Starting a new journal is a challenge. We need your collaboration: without authors and/or referees, a journal is unlikely to live long. With your active help, we are ready to face it.

Bologna, Brussels, Paris
September 2002