
Opiniones sobre la profesión

IFORS: 50 at 50

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Abstract

In 2009 the International Federation of Operational Research Societies (IFORS), currently with a membership of 50 national societies, celebrated its 50th year since formation. This article provides an overview of the federation's history, its leadership and current composition, initiatives that have been put in place, current activities as well as the challenges it faces.

The Beginnings

The International Federation of Operational Research Societies (IFORS) is a 50-year old organization which is currently composed of 50 national societies. Its beginnings date from 1955, when the vice-president of the Operations Research Society of America (ORSA) sent a proposal for an international conference to the secretary of the UK society, the Operational Research Society (ORS). The French Society, SOFRO, was added as a sponsoring society to what would be the first in a line of triennial conferences. This was the 1957 Oxford Conference, described by Maurice Kirby as the fifth of seven defining moments in OR history (Cummins, 1998). The Statutes were prepared and the working arrangements for the Federation completed by January 1, 1959 (Rand, 2000), marking the birth of IFORS. The Statutes (Anon, 1959) stated the purpose of the Federation as “the development of operational research as a unified science and its advancement in all nations of the world.” Specifics about how this objective can be attained were given as follows:

1. Sponsoring of international conferences and meetings;
2. Providing other means for the exchange of information on operational research between nations;

3. Encouraging the establishment of national operational research societies;
4. Maintaining standards of competence in operational research;
5. Encouraging the teaching of operational research;
6. Promoting the development of specific parts of operational research, for example, to ensure a balance within that science and to open up new fields.

It is interesting to note that in order to give greater weight to larger societies but not to overwhelm the smaller ones, the Statutes had a provision that in all formal votes taken by the Board, the voting strength of each society is the square root of the qualified membership of that society. The by-laws further stated that all papers shall be published or presented in French or English.

Conferences

The first conference following the founding of IFORS was held in Aix-en-Provence in September 1960, attended by delegates from ten member societies. The subsequent conference locations along with the names of the Organizing Committee and Program Committees Chairs are indicated below:

Date	Location	Organizing Committee Chairman	Program Committee Chairman
1957	Oxford (UK)	Charles Goodeve (UK)	Charles Goodeve (UK) and Thornton Page (USA)
1960	Aix-en-Provence (France)	P. Tabatoni (France)	Pat Rivett (UK)
1963	Oslo (Norway)	Mr Falch (Norway)	Germain Kreweras (France)
1966	Boston (USA)	William Marcuse (USA)	Martin Ernst (USA)
1969	Venice (Italy)	Mario Volpato (Italy)	Pat Rivett (UK)
1972	Dublin (Ireland)	Fred Ridgway (Ireland)	Heiner Muller-Merbach (Germany)
1975	Tokyo/Kyoto (Japan)	S. Moriguti (Japan)	Roger Collcutt (UK) and J. Kondo (Japan)
1978	Toronto (Canada)	John Gratwick (Canada)	Fred Ridgway (Ireland)
1981	Hamburg (Germany)	Dieter Pressmar (Germany)	Marc Roubens (Belgium)
1984	Washington DC (USA)	Donald Gross (USA)	Paul Belshaw (Canada)
1987	Buenos Aires (Argentina)	Alejandro Oliveros (Argentina)	Michael Thomas (USA)
1990	Athens (Greece)	Nicholas Blesseos (Greece)	Graham Rand (UK)
1993	Lisbon (Portugal)	Jose Dias Coelho (Portugal)	Saul Gass (USA)
1996	Vancouver (Canada)	Drew Parker (Canada)	Theodor Stewart (South Africa)
1999	Beijing (China)	Xiang-Sun Zhang (China)	Paolo Toth (Italy)
2002	Edinburgh (UK)	Lyn Thomas (UK)	Benjamin Lev (USA)
2005	Hawaii (USA)	Jeffrey Arthur (USA)	Martine Labbé (Belgium)
2008	Sandton (South Africa)	Hans Ittmann (South Africa)	John Bartholdi III (USA)
2011	Melbourne (Australia)	Patrick Tobin (Australia)	Janny Leung (China)

The conferences had always followed the format of a Monday to Friday programme, with the Wednesday reserved for tours away from the conference. Providing an opportunity for social interaction had always been the aim of this

activity. The 2011 Triennial Conference has been set for Melbourne, Australia while Spain's bid to host the 2014 conference in Barcelona has been accepted.

Special Purpose Conferences (SPCs), on the other hand, enabled smaller meetings on any OR topic to be organized either independently or jointly with other professional organizations, including any national OR society. The topic of SPC-1, conducted in 1991 in Bruges, Belgium, was *Decision Support Systems*, while the last and eleventh SPC was held in 2001 in Athens, Greece on the subject of *New Trends in Banking Management* (Rand, 2001).

Membership

Within two years of the formation of IFORS, the three founding members, United States (ORSA), United Kingdom (ORS), and France (SOFRO), were joined by a further seven national societies, namely, Australia, Belgium, Canada, India, Netherlands, Norway, and Sweden, bringing to ten the societies present at the 1960 Conference. The table below shows the national societies and the years they were formally accepted into IFORS.

Year	National Society Joining	Year	National Society Joining	Year	National Society Joining
1959	France, UK, USA	1973	South Africa	1988	Malaysia
1960	Australia, Belgium, Canada, India, The Netherlands, Norway, Sweden	1975	Chile, Finland	1990	Philippines, Poland
1961	Japan	1976	Egypt	1992	Hungary
1962	Argentina, Germany, Italy	1977	Turkey	1993	Bulgaria
1963	Denmark, Spain, Switzerland	1978	Singapore	1994	Croatia, Czech Republic, Slovakia
1966	Greece, Ireland, Mexico	1979	Austria	1998	Belarus
1969	Brazil, Israel	1982	China, Portugal	2002	Bangladesh, Colombia, Lithuania
1970	New Zealand	1983	Hong Kong, Yugoslavia	2007	Slovenia
1972	Korea	1986	Iceland	2009	Uruguay, Iran

A total of 51 national societies have been accepted into the Federation. Through being unable to retain a formal structure for their society, the OR society of Bangladesh withdrew from IFORS in 2009 seven years after it joined the Federation. The newest members for 2009 are Uruguay and Iran. The formal vote for Iran's acceptance ended in December 15, 2009. Meanwhile, the application for membership of the national societies of Peru and Nepal are in process at the time of writing.

The national member societies represent some 30,000 individual members. Their membership ranges from around 10,000 (USA) to about 3,000 (UK and Japan) to those with less than 50 (Belarus, Lithuania, Slovakia). With few exceptions, national member society representatives were on hand to accept their IFORS 50th Anniversary memento during the 2008 Conference banquet “Members Parade”, a reminder of how broad IFORS is as an organization (Trick, 2009).

Regional Groupings

The idea of more frequent meetings among European operational research workers was put forward in 1972 during the 6th IFORS Conference in Dublin. Two years and many meetings later, the First European Conference on Operational Research was held in Brussels in 1975. In a year, the Association of European Operational Research Societies within IFORS (EURO) was formally constituted.

In 1982, the Association of Latin-Iberoamerican Operations Research Societies (ALIO) was established in Rio de Janeiro after OR workers from Argentina, Brazil and Chile had laid the foundations for a regional grouping the year before. ALIO also counts among its members two national societies which are concurrently members of EURO, namely, the national society of Spain (SEIO) and that of Portugal (APDIO) (Yanasse, 2008).

IFORS gave its encouragement to the development of a grouping in the Asia-Pacific region, which came into being as the Association of Asian-Pacific OR Societies within IFORS (APORS) in 1985. Representatives from Korea, China, Japan and Australia comprised the first officers of APORS (Oyama, 2008).

When, in 1987, the IFORS’ constitution was changed, NORAM, the Association of North American OR Societies within IFORS, composed of the OR Societies in Canada (CORS) and the USA (INFORMS), was created solely so that a Vice-President would be able to represent North America.

Since EURO had been very supportive of activities in the African region, it has welcomed into its group the national society of South Africa (ORSS).

Kindred Societies and International Membership

The need to include within IFORS bodies other than the National Societies was recognized very early. The Institute of Management Sciences (TIMS), and the Airlines Group of IFORS (AGIFORS) became kindred societies, followed later by the Czechoslovak Economico-Mathematical Commission (EMCO) in 1966 the Mathematical Programming Society (MPS) in 1975, the Fellowship for Operational Research (FOR), and the OR wing of the Investment Advisory Centre of Pakistan in 1978. The kindred society status provided the means for IFORS to have links in countries where a national society was not ready to join IFORS. TIMS merged with ORSA in 1995 to form INFORMS, which

thus became the US National Society (Rand, 2001). Other kindred societies on record include Committee on Operations Research Hungary and the Resource Modeling Association (Weintraub, 2000).

Inspired by UNESCO, IFORS joined with four other international federations to form FIACC (the Five International Associations Co-ordinating Committee). FIACC existed to exchange information about conferences of the sister federations, which include the International Federation of Automatic Control (IFAC), the International Federation for Information Processing (IFIP), the International Federation for Mathematics and Computers in Simulation (IMACS), and the International Measurement Confederation (IMEKO). At present, there is limited communication and no joint activities carried out with kindred societies and the FIACC.

Publications

International Abstracts in Operations Research

The history of *International Abstracts in Operations Research* (IAOR) goes as far back as 1958 when Hugh Miser, then secretary of ORSA, proposed that one of the early items of IFORS business should be the possibility of funding and operating a journal that would bring all “unclassified” OR work to the attention of the worldwide OR community.

IAOR was thus first published in 1961 under the editorship of Herbert P. Galliher. There was relatively little change in the method of collecting, indexing, and publishing material until 2005 when the Administrative Committee directed that a Strategic Plan for *IAOR* be crafted to determine how best to respond to the challenges and opportunities of the internet. That plan plus a subsequent definition of detailed requirements led in March 2007 to the AC commissioning a project which would incorporate available technologies into the production and distribution of the content of IAOR.

Over the last few years, following the recommendations of the IAOR Strategic Planning Committee, a comprehensive plan of action was undertaken to completely transform IAOR from a paper-based publication to an online journal capable of meeting the challenges created by the widespread availability of powerful browsers on the Internet. The objectives of this transformation are: to regain IAOR’s role as the “First Source” for those researching the OR literature; and to maintain its profitability for IFORS and its Publisher (Gendreau, 2008). This it aims to do by being: a one-stop-source format; easily searched; possessing added value; up-to-date; and with a printed version also available. In his 19th year as IAOR Managing Editor, David K. Smith (UK) is working to achieve the objectives thus set.

Conference Proceedings and International Transactions in Operational Research

From the first conference in 1957 up to the Athens Conference in 1990, a

volume of proceedings was published. These volumes include a selection of papers presented as well as records of discussions at workshops. These volumes were made available to each participant at the conference though very few institutional libraries purchased volumes. Moreover, some authors refused to allow their papers to be published in the proceedings, because they believed their papers would not receive recognition.

To avoid these problems, it was decided to change the method of publication of conference papers. The *International Transactions in Operational Research* (ITOR) was thus published in 2001 under the editorship of Peter Bell (Canada). The difficulty of maintaining a steady stream of quality paper submissions was addressed by a review of both the Editorial Board composition and the editorial policy. The new editorial policy instituted by current ITO Editor, Celso Ribeiro (Brazil), gives importance to special issues focused on current topics, as well as to international perspectives of operations research, in particular, the applications of OR in development, a subject that is seldom covered by other major OR journals. The journal is continuing to improve as a commercial success, with a significant shift from print to online for institutional subscriptions, i.e., online subscriptions represented 36% of the total by the end of 2008 compared to only 17% at the end of 2005. In order to attract papers from more sources, ITO is completing the process of obtaining ISI recognition for the journal (Gendreau, 2008).

Developing Countries

A significant turning point in putting OR for development on the IFORS agenda was the IFORS Conference held in Japan in 1975. The theme of the Conference was “OR in the Service of Developing Economies.” The conference reflected its theme, and a number of initiatives started since have their origin here. During the 1984 IFORS triennial conference in Washington, several initiatives were agreed upon, one of which was the conduct of regional conference for teachers of OR for developing countries. With the aim of increasing the use of OR as a practical tool for decision-makers in Asia by influencing the way OR is taught, regional workshops for teachers of OR in developing countries were held in Ahmedabad (1986), Bombay (1987), Kuala Lumpur (1988), Singapore (1989), and Jakarta (1990).

In December 1992, participants of the first International Conference on OR for Development (ICORD) held in Ahmedabad, India, made recommendations on how OR could best be advanced in developing countries. What has come to be known as the Ahmedabad Declaration called for a range of actions from IFORS to support and strengthen OR in developing countries. Notwithstanding the perceived lack of commitment on the part of IFORS to deliver on this “wish list” (Rosenhead, 1998), IFORS support of development-relevant OR activities have continued. Successor ICORDs were held in Rio de Janeiro (1996), Manila

(1997), Berg-en-dal (2001), Jamshedpur (2005) and Fortaleza (2008).

In 2009, IFORS set aside funds to sponsor the conduct of more frequent workshops in different regions with the goal of enhancing continuity and sustaining interest in between the three-year ICORD cycle. Such workshops were envisioned to focus on a particular theme for OR in Development (ORD), such as health, food, poverty, with the intent that representatives from such workshops would present their findings and follow up work at a full meeting held in conjunction with the IFORS Triennial Conference (Stewart, 2008). Some proposals had been received from national societies to conduct such workshops. However, revisions requested by the Developing Countries Committee that would make the proposals consistent with the aims of the program have not been received. As of this writing, funds for this purpose have yet to be spent.

IFORS has in the past published *OR for Developing Countries Newsletter*, later renamed *DC to DC (Direct Connection to Developing Countries)*, the purpose of which is to keep people in contact between the ICORD conferences. This feature has been incorporated into the regular IFORS newsletter. The IFORS Prize for OR in Development (known as the Third World Prize until 1993) competition has been held at every triennial conference since 1987. The Prize recognizes exemplary work in the application of OR to address issues of development. For the 2011 competition, prize money has been doubled and the limitation that authors must be nationals of developing countries has been removed. Jointly with EURO, IFORS has initiated several activities, including sponsoring conferences and scholarships in the African continent in an effort to address the lack of organized OR activity in the area.

IFORS Website

The IFORS website <http://www.ifors.org>, is seen as a key tool for promoting OR internationally by providing a means by which the national societies can exchange news, information, ideas and share their views on issues concerning OR and IFORS. It also aims to be a valuable resource for any practitioner or academic.

The site includes information about local and international conferences, activities of member societies, updates on IFORS committee activities, links to national societies and regional groupings, the IFORS newsletter, and educational and training material. Announcements on available scholarships and competitions continue to be updated here. As part of fostering excellence in OR education, the website includes OR Educational Resources, the goal of which is to gather high quality educational material such as case studies, methodological readings and algorithms and make them available to IFORS members. One component of this project is tutORial, a collection of interactive web-based tutorial modules on generic OR topics developed by Moshe Sniedovich (Australia).

The IFORS website was redesigned in 2008. By 2009, the website started

accepting on-line voting and discussion postings on topics being presented to member society representatives. With the significant role played by the internet, IFORS continues to recognize the potential of this tool in promoting OR.

IFORS News

The IFORS Bulletin had traditionally been published by the Secretary and normally contains a collection of announcements from national societies and articles from the newsletters that member societies supply to the Secretary. The last such bulletin was issued in 2000. Starting June, 2007, with the appointment of Hans Ittmann (South Africa) as editor, a quarterly newsletter called *IFORS News* has regularly appeared. It has taken on the task of communicating ideas, interesting developments, conferences, major OR events from member societies, including at least one technically oriented article per issue. Envisioned to also take over the *DC to DC*, it covers developing country initiatives and activities. Each issue also features an editorial from an AC member. The format of the newsletter is electronic and is published on the IFORS website. With every edition of the newsletter, the link to the website is sent to society representatives with a request to send the link or the copy of the newsletter to all its members (Ittmann, 2008). Hard copies are printed for distribution only for the annual report which has traditionally been available in the middle of the succeeding year.

IFORS Distinguished Lecture (IDL)

In 1999 IFORS established a special program, called IFORS Distinguished Lectures (IDL), to recognize distinguished OR scholars and analysts. Furthermore, providing experts to conferences serves to enrich the member society and regional conferences. This has been an on-going program, as can be seen from the following list of IFORS Distinguished Lecturers.

Year	Distinguished Lecturer	Conference
1999, May	William Pierskalla	INFORMS, Cincinnati, Ohio, USA
2000, May	Thomas Magnanti	INFORMS, Salt Lake City, Utah, USA
2000, July	Jong-Shi Pang	APORS, Singapore
2000, July	George Nemhauser	EURO, Budapest, Hungary
2000, September	Nelson Maculan	ALIO, Mexico City, Mexico
2001, May	Bernard Roy	CORS, Quebec City, Canada
2001, July	Donald Ratliff	EURO, Rotterdam, Netherlands
2002, October	Michael Florian	ALIO, Concepcion, Chile
2002, November	David Ryan	INFORMS, San Jose, California, USA

2003, July	Richard Rosenthal	EURO, Istanbul, Turkey
2003, October	Jan Karel Lenstra	INFORMS, Atlanta, Georgia, USA
2003, December	Toshihide Ibaraki	APORS, New Delhi, India
2004, May	Ralph Gomory	CORS/INFORMS, Banff, Canada
2004, July	Michael Pinedo	EURO, Rhodes, Greece
2004, October	Andres Weintraub	ALIO, Havana City, Cuba
2005, November	Luk Van Wassenhove	INFORMS, San Francisco, California USA
2006, January	Dominique de Werra	APORS, Manila, Philippines
2006, May	Egon Balas	CORS, Montreal, Canada
2006, July	Saul Gass	EURO, Reykjavik, Iceland
2006, November	Martin Grötschel	ALIO, Montevideo, Uruguay
2007, July	Robert Bixby	EURO, Prague, Czech Republic
2007, November	Ralph Keeney	INFORMS, Seattle, Washington, USA
2008, September	Stavros Zenios	ALIO, Cartagena de Indias, Columbia
2008, October	Michel Balinski	INFORMS, Washington DC, USA
2009, June	Richard Karp	CORS-INFORMS 2009, Toronto, Canada
2009, July	Christos Papadimitriou	EURO XXIII, Bonn, Germany
2009, December	Jonathan Caulkins	APORS, Jaipur, India

Young Scholars Program

Since 2000, IFORS has continually provided scholarship funds for participants to join summer institutes and workshops as part of regional activities. So far, several scholars have been sent to the EURO, ALIO, and APORS workshops. The sponsorship is aimed at encouraging the establishment of groups of promising young OR scientists who will continue to work and network in the future. This has taken several forms, with funds used to defray registration, accommodation or air fare expenses.

Leadership, Organizational Structure and Financial Position

The initial structure of IFORS did not require a President. The affairs of the Federation were to be administered by a “foster” society for every three-year period. The Statutes provided for a Secretariat consisting of an executive officer (the Secretary) and a treasurer; both nominated by the designated “foster” society. The initial foster society was the Operational Research Society (ORS) in the UK, which appointed Sir Charles Goodeve. ORSA took over as foster society for 1962-1964, with Philip Morse appointed as Secretary. A change in structure of the administration of IFORS came into effect in 1968, after France had taken its turn as the third foster society, with the creation of an Administrative Committee

(AC). A further change was introduced, when the vice-presidential component of the AC became four regional VPs, plus one VP at large, elected by the IFORS membership as a whole. The presidents of IFORS are as shown in the following table:

Period	President	Period	President
1959-61	Sir Charles Goodeve (UK)	1983-85	Heimer Muller Merbach (Germany)
1962-64	Philip Morse (USA)	1986-88	Jacques Lesourme (France)
1965-66	Marcel Boiteux (France)	1989-91	Bill Pierskalla (USA)
1967	Charles Salzmann (France)	1992-94	Brian Haley (UK)
1968-70	Alec Lee (Canada)	1995-97	Peter Bell (Canada)
1971-73	Arne Jensen (Denmark)	1998-2000	Andres Weintraub (Chile)
1974-76	Takehiko (Bill) Matsuda (Japan)	2001-03	Paolo Toth (Italy)
1977-79	David Hertz (USA)	2004-06	Thomas Magnanti (USA)
1980- 82	Roger Colcutt (UK)	2007-09	Elise del Rosario (Philippines)



IFORS Presidents (L to R): Heimer Muller-Merbach (1983-85,Germany), Brian Haley (1992-94,UK), Peter Bell (1995-97,Canada), Elise del Rosario (2007-09, Philippines), Andres Weintraub (1998-2000,Chile), Paolo Toth (2001-03, Italy) and Thomas Magnanti (2004-06, USA) on the occasion of the 50th Anniversary of IFORS celebrated in Sandton, South Africa, July 2008.

IFORS is run by a Board composed of the Representatives of each member country who vote on major issues confronting IFORS. The Administrative

Committee (AC) is responsible for the execution of activities and drafting of proposals for Board approval. The AC is elected for a period of three years, except for the Treasurer whose term is renewable twice at the maximum. The Secretary's location corresponds to the headquarters of IFORS. In its 50th year the IFORS 2007-2009 AC is composed of:

President	Elise del Rosario, <i>Philippines</i>
Immediate Past President	Thomas Magnanti, <i>USA</i>
Vice President at Large	Michel Gendreau, <i>Canada</i>
Treasurer	Peter Bell, <i>Canada</i>
Secretary	Mary Magrogan, <i>USA</i>
Vice President – ALIO	Horacio Hideki Yanasse, <i>Brazil</i>
Vice President – APORS	Tatsuo Oyama, <i>Japan</i>
Vice President – EURO	M. Grazia Speranza, <i>Italy</i>
Vice President - NORAM	Michael Trick, <i>USA</i>

Owing to the efforts and activities put in motion by its past leaders, IFORS, for the last 18 years, has ceased operating on a financial shoestring. IFORS is now in a position to do more. As the present treasurer, Peter Bell, says, the issue today is not so much, "Do we have the money?" as "What else can and should IFORS be doing?" (Bell and del Rosario, 2008).

Looking Ahead

A new AC under the leadership of Dominique de Werra takes IFORS past the 50-year mark. It is faced with the challenge of expanding and continuing to cater to the needs of IFORS national member societies, through which the goal of developing OR worldwide is best achieved. As such, communication - through newsletters, conferences, publications and the website - is key to making the membership active participants of the global OR community.

As a responsible member of the global community, IFORS in turn, must renew its commitment to pursue the application of OR where it is most needed - in developing countries. Lastly, any organization must be in a sound financial health to function effectively. Vigilance on the preservation and enhancement of revenue streams (as has been done with the publications initiatives of the past), coupled with a judicious use of funds and selection of appropriate programs will enable IFORS to do more as it opens the door to its next 50 years.

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About the authors



Elise del Rosario was the prime mover in the formation of the Philippine national OR society in 1987. OR practice in the Philippines was noticed as the San Miguel OR group, which she manages, won the ORSA Prize in 1982. Her efforts were recognized by the international community, with her election as the first woman and only second Asian to the presidency of IFORS. She has previously served IFORS as Developing Countries Committee Chair and Vice President.

Her retirement from the corporate world (as Vice President of San Miguel Corporation) enabled her to demonstrate the potential of OR as a tool for nation building, through the projects she undertook for the Philippine government as Chair of the Operations Research Society of the Philippines Committee on OR for Public Service (ORSP Corps). Apart from doing OR consulting work for the public and private sectors, she is currently the Chief Finance Officer of her family charity which aims to provide better education for the poor in the Philippines.



Graham Rand has been at Lancaster University since 1973. For the International Federation of Operational Research Societies (IFORS) he was Vice-President (1998-2000) and has been editor of both International Abstracts in Operations Research (from 1980-1991) and *International Transactions in Operational Research* (2000-05). He was editor of the proceedings of the IFORS Conference held in Buenos Aires in 1987 and Chairman of the Program Committee for the IFORS Conference held in Athens in 1990. He has been Council Member and Conference Chairman of the British

Operational Research Society, and was editor of the Journal of the Operational Research Society for six years from 1991-1996. He was elected Companion of Operational Research by the ORS in 2006 in recognition, inter alia, of his support for OR worldwide, particularly in developing countries. For the European Association of Operational Research Societies he was chairman of the Gold Medal jury in 1995. He was the first non-North American to be on INFORMS' Edelman Prize Jury. He was a founder member of both the International Society for Inventory Research (1983) and the Operations Management Association (1985). He is European Director of Omega Rho.