

# Annual Report and Accounts

# for the year ended 31st December 2012

#### The Operational Research Society

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A registered charity No 313713. A company limited by guarantee No 663819

# **Preamble**

- The Operational Research Society is a company limited by guarantee (no. 663819). It is also a charity registered in accordance with the provisions of the Charities Act 2011 (registration no. 313713)
- (2) The objects of the Society are given in its Memorandum and Articles, and can be summarised as:
  - (a) the advancement of knowledge by fostering, promoting and furthering interest in Operational Research; and
  - (b) the advancement of education by providing facilities for, and by subsidising it; endowing, organising or supporting scholarships or educational or training schemes; and conducting examinations or advising on their content.
- (3) The Society is empowered to do all proper things in pursuit of these objectives.
- (4) The affairs of the Society were managed during 2012 by the elected officers and members of the Board listed below. Together they constitute the Board of Directors of the limited company, and Trustees of the charity and the members of its management committee. Specific matters are delegated to particular committees of the Society by resolution of the Board and in accordance with the Society's Articles.

The following served as members of the Board in 2012

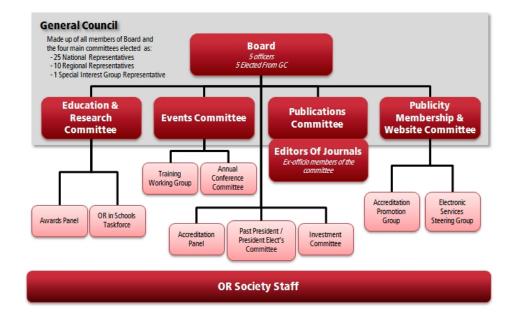
G H ROYSTON President J D GRIFFITHS S C WEDDELL

J R HOPES Vice President R A KAUFMAN
S L ROBINSON Vice President F A O'BRIEN
R W EGLESE Past President J PARKIN
I M MITCHELL Hon. Treasurer J K SMEDLEY

Unless otherwise stated, changes in the membership of the Board occur at the end of a calendar year.

The Board is supported by a General Council with a maximum membership of thirty-six. These two bodies assist the Society in its ongoing commitment to involve as many members as possible in its affairs. The Board of Directors is responsible for routine business, and the General Council, with its wide representation, addresses more strategic issues and monitors the Board's activity. Members of General Council have also, in all cases, been assigned to one of the Society's four main committees: Publications; Publicity, Membership and Website; Education and Research; and Events and Training, and the Chairs of those committees are currently Board members.

The structure is set out in the diagram below.



(5) The committees are established to implement policies of Board & General Council with respect to meeting the Society's objectives and to controlling expenditure. The names of the committees are set out as follows, together with the object ((a) or (b) as above) towards the achievement of which they contribute:

Accreditation Panel (a) Awards Panel (a) **Education & Research** (b) **Events** (a), (b) Investment Management of investments Past President's/President Flect's Elections, planning & administrative reviews Publications (a) Publicity, Membership & Website (a) Training Working Group (b)

(6) Other Committees are set up from time to time for specific purposes, but they are given no delegated powers. In addition, the Society has a large number of active Special Interest Groups which are listed in the Journal of the Society. They contribute particularly to object (a). (7) The registered address of the Society is:

Seymour House 12 Edward Street BIRMINGHAM B1 2RX

Its Secretary & General Manager is:

I G Blackett The Co-operative Bank

Its Bankers are:

Its Auditors are:

EC2V 7QN

The OR Society
Delf House
12 Edward Street
Southway
BIRMINGHAM
SKELMERSDALE
B1 2RX
WN8 6WT

Its Solicitors are:

Sydney Mitchell and Co Mazars LLP
Cavendish House 45 Church Street
Waterloo Street BIRMINGHAM
BIRMINGHAM B3 2RT

B2 5PU

Its Investment Adviser is: Its Stockbrokers are:

John Ross Investec

Investec 2 Gresham Street 2 Gresham Street LONDON

LONDON EC2V 7QN

(8) The Society's investment policy is governed by the legislative provisions relating to charity investments, but the Society is not otherwise restricted in the way in which it can invest. However, it is the Society's policy not to invest in tobacco shares.

(9) These particulars are published in compliance with Statement of Recommended Practice: Accounting and Reporting by Charities, March 2005, issued by the Charity Commissioners in England and Wales.

# **Public Benefit**

The OR Society is a charity and meets the public benefit test as set out in the Charities Act 2011 in various ways:

#### Advancement of education:

Through the O.R. in Schools initiative, its many networking, training, and conferencing activities in schools, universities and workplaces, and extensive on-line resources, the OR Society promotes the understanding of O.R. and how it can be applied for the wider benefit. The OR Society is a participating society (with voting rights) on the Joint Mathematical Council of the UK.

#### Advancement of science:

Through its publications, conferences, and networking activities; representation on the Council for Mathematical Sciences, funding bodies and international federations; and on-line materials and facilities, the OR Society supports, promotes and publicises research; raises standards of research and practice; and promotes the effective application of O.R. for wider social benefit. Through its accreditation and awards schemes, the OR Society recognises and promotes engagement, effectiveness and development in its members, further raising standards.

#### **Advancement of community development:**

The OR Society encourages volunteering and involvement through its Pro Bono O.R. initiative, involvement of members in outreach to schools and universities, and networks of Regional and Special Interest Groups.

The OR Society maintains a fund which is used to promote educational, development and research projects that are in line with its charitable aims of advancing knowledge and education through fostering O.R.

All OR Society events and training are open to all who may be interested. In addition, it minimises barriers to access by:

- (1) ensuring that many of its on-line resources are publicly and freely available;
- (2) keeping membership fees low, and offering reduced fees for unwaged groups; and
- (3) supporting Regional and Special Interest Group networks which offer free meetings.

# Statements as to disclosure of information to auditors

In accordance with Company Law, as the charity's trustees, we certify that:

- so far as we are aware, there is no relevant audit information of which the Charity's Auditors are unaware; and
- we have taken all the steps that we ought to have taken in order to make ourselves aware
  of any relevant audit information and to establish that the Charity's Auditors are aware of
  that information.

# Statement of responsibilities of the elected officers and members of the Board

Company law requires the elected officers and members of the Board to prepare financial statements for each year which give a true and fair view of the state of affairs of the Society and of the surplus or deficit of the Society for that period. In preparing those financial statements, the elected officers and members of the Board are required to:

- select suitable accounting policies and then apply them consistently;
- make judgements and estimates that are reasonable and prudent;
- state whether applicable accounting standards have been followed, subject to any material departures disclosed and explained in the financial statements;
- prepare the financial statements on the going concern basis unless it is inappropriate to assume that the Society will continue in business.

The elected officers and members of the Board are responsible for keeping proper accounting records which disclose with reasonable accuracy at any time the financial position of the Society and to enable them to ensure that the financial statements comply with the Companies Act 2006. They are also responsible for safeguarding the assets of the Society and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

#### **Appointment of trustees**

The officers and other members of the Board are elected by secret ballot of the Society's membership and the members of General Council respectively, to serve for a three-year term. A member of the Board whose first term of office has expired may stand for election for one further term. At the end of 2012, Richard Eglese, Ian Mitchell and Sandra Weddell completed their terms as members of the Board. Roger Forder and Sanja Petrovic were elected to the Board from the start of 2013.

#### Induction of new trustees

New trustees receive a comprehensive information pack, setting out details of their role and responsibilities as both trustees and company directors, the nature of a charity, the Society's constitution, its policies on members' interests and expense claims, and including the Charity Commission's 'welcome' leaflet.

#### **Members' interests**

In accordance with Article 46 of its constitution, the Society requires that members of Board or committees having an interest in a matter to be debated should declare that interest and leave the room whilst the matter is discussed and decided. Members of the Training Working Group are drawn from organisations which have no interest in bidding for courses and wherever appropriate, recommendations on major charitable projects are made by a special expert committee comprised entirely of disinterested parties.

# Approval of report

We approve this report and the audited accounts for the year 1st January to 31st December 2012, and recommend their adoption by the Society at its Annual General Meeting.

G H ROYSTON President R A FORDER Hon Treasurer

J D GRIFFITHS J R HOPES R A KAUFMAN F A O'BRIEN J PARKIN S PETROVIC S L ROBINSON J K SMEDLEY

Being the elected officers and members of the Board of the Operational Research Society as at 15th May 2013.

I G Blackett Secretary & General Manager 15th May 2013

# **Annual Report 2012**

#### Introduction

The **charitable objects** of the Society are to advance knowledge of and interest in Operational Research and to advance education in Operational Research. In support of these objects the Society's **mission** is "To be a vibrant, visible and valued society which exceeds the expectations of members and effectively promotes the use of O.R., such that it is highly respected both in the UK and abroad".

Our **vision** is of a world improved by rigorous analysis and better, evidence-based, decision-making: "O.R. providing world class analysis for world class decisions". In this world O.R. would be seen as indispensable - not just a "nice to have" but a "must have" - and be used and acknowledged widely in all areas of industry, business, government and the 3rd sector.

To fulfil its mission and achieve its vision the Society's **aims** that:

- decision makers understand how O.R. can help, value and seek its contribution, and know from whom they can get it; and
- operational researchers are knowledgeable and well-trained, and in good supply.

In support of this the Society also aims to:

- have a vibrant and active membership drawn from diverse areas; and
- be well-run, provide excellent services and be adequately and sustainably resourced.

These broad aims serve as high level measures of success for the Society and this report provides an account of progress on them during 2012. More detailed objectives and corresponding indicators are set out in the Society's Business Plan, and are reviewed as part of the planning cycle.

#### Overview of the Year

In 2012 the Society's publications, websites, conferences, training, accreditation, awards, regional societies, special interest groups, outreach to schools and other activities all continued to further its charitable objects and the associated mission, vision and aims.

The year featured a wide range of developments, many of which are detailed in the committee reports in later parts of this report, and included highlights such as:

- The early fruits of the new contract for publishing the Society's six journals made last year with Palgrave-Macmillan - the Society's share of the proceeds for all journals exceeded £500k for the first time;
- The publication In June of the first issue of Health Systems the latest addition to the Society's portfolio of journals, with a 15% increase in revenue already apparent from the journal bundle in which it is included;

- A very successful start to increasing Society activity in the rapidly growing field of Analytics

   a well-attended national one-day event was held in April on "Developments in Advanced Analytics finding competitive advantage in challenging times" and plans were laid for launching an Analytics Network;
- Investigation of the possibilities of the OR Society becoming a member of the Science Council, and the associated potential for OR Society members to acquire chartered scientist status;
- The establishment of a cross-cutting working group on retaining and growing Society membership;
- The O.R. in Schools initiative (ORIS) which continued to make encouraging progress in promoting awareness of O.R. among teachers and schoolchildren and to build up resources to support education in O.R.;
- The Society's continuing active membership of the Council for Mathematical Sciences (CMS), representing on it the interests of the O.R. community, for example on Open Access;
- Work on strengthening and widening links with the Research Councils, including the continuing success of the EPSRC-funded NATCOR initiative to nourish tomorrow's O.R. academics and practitioners (A National Taught Course Centre in O.R., www.natcor.ac.uk);
- The flourishing of the new Special Interest Group (SIG), O.R. in the Third Sector and of the Pro Bono O.R. scheme, with agreement to the appointment of a co-ordinator for the latter;
- The launch of the first tranche of four Charitable Aims Investment Projects projects that would help take the Society forward and be an investment in the future;
- The Society's annual conference (OR54) held in early September at the University of Edinburgh (organised by a committee chaired by Tom Archibald.);
- The selection by the Society and subsequent acceptance by EURO of a proposal from Glasgow (Strathclyde) to host EURO2015 (subject to agreement on some points of detail); and
- The 2012 Blackett Memorial Lecture: "2050 Pathways" (on sustainable future UK energy provision) delivered in November at the Royal Society to a packed audience by Professor David MacKay FRS, Chief Scientific Adviser to the Department of Energy and Climate Change.

#### Board Business

The Board met five times during 2012. This reflects an increase in the number of Board meetings per year (from four to five), adding a meeting in the autumn to avoid the previous long gap between the summer and winter meetings and ensure a smooth flow of Board business throughout the year. In addition two special meetings between the Board and General Council members ('mega-meetings') were held during the year to facilitate communication. The Society's AGM was held on 27 June. Following a decision by the Board last year, the minutes of its meetings are now made available to members, via the website.

At the end of 2012 three members of the Board - Richard Eglese, Ian Mitchell and Sandra Weddell - came to the end of their term of office. The Society thanks them warmly for their service. New members joining the Board were Sanja Petrovic as a Vice—President and Roger Forder as Treasurer.

Stewart Robinson continues on the Board, now as President-Elect. The Board continues to include all four Chairs of the main committees.

#### The Board agreed:

- to the appointments to General Council of Sayara Begg, Noel Corrigan and Mike Wright to fill casual vacancies for National Member, SIG representative and North West Regional representative respectively;
- the appointment of Kees Van Haperen as chair of the Information Systems SIG; and
- that the EURO and IFORS representatives should have more formal terms of office.

The Board reviewed the products of the work on business planning carried out at the two meetings of General Council during the year, in which the Council had reviewed the vision and supporting aims for the Society. Based on that, an updated and streamlined structure for the revised plan was produced, with a shorter and clearer chain linking the plan's aims, objectives and actions to the General Council's vision for O.R. and for the Society in the future. There remained further work required during 2013 to further refine the more detailed objectives and to update the associated performance indicators.

The Board congratulated John Hopes, John Ranyard, Graham Sharp, and others involved in the organisation of the national one-day event on "Developments in Advanced Analytics — finding competitive advantage in challenging times" held in London on 25th April. This had featured a range of impressive speakers, including the then Permanent Secretary at the Cabinet Office, and was attended by over 140 delegates, many of whom were not currently Society members. The Board would continue to support development of the Society's activities in analytics, including the repeat in 2013 of a national one-day event and the establishment of an Analytics Network and accompanying website.

The Board reviewed progress on O.R. in the Third Sector (ORiTS) and congratulated the ORiTS group on its progress. It ratified the committee for the ORiTS SIG - Ruth Kaufman as Chair and Katherine Byrne as Secretary and four non-portfolio officers (Cath Reynolds, Jeff Jones, Jane Parkin and David Pritchard). It agreed additional resources for a one-year part-time coordinator for the Pro Bono O.R. scheme, supported by an O.R. Pro Bono Steering Group along the same lines as the O.R. in Schools initiative.

Following the successful activity at OR54 and SW12 conferences on the academic–practitioner interface, Stewart Robinson (President–Elect) is advising on plans for an academic–practitioner event at OR55. He is also investigating the possibility of an academic-practitioner prize and setting-up a working group on "user friendly" publications that will report to the Board. Discussions have been held on what collaboration the Society could offer to COPIOR (the Committee of Professors in Operational Research) in promoting O.R. through the requirements to demonstrate impact in the new Research Excellence Framework (REF).

The Board considered the results of the members' survey, completed in March, which sought members' views on the various services provided by the Society and their engagement with it. The Board, through its committees, would be following up the results.

The Board agreed various membership-related actions including:

- to hold member subscription rates steady for 2013, especially given the strong performance from our journals;
- proposals on a trial of corporate membership/partnership; and

 the formation of a cross-cutting working party on membership, with Ruth Kaufman as its chair.

The Board monitored the work of the Investment Committee, noted its benchmarking of the appropriateness of the current ethical investment policy, and agreed its risk strategy for investments should be reviewed. A summary of the Society's finances is provided in a later section of this report.

It also agreed the Palgrave proposal that OR Society journals should follow the hybrid open access model. It noted that publications committee would continue to consider the wider implications for the Society of the developments on open access publication and that it had had set up a working group to consider a Palgrave proposal for a full Open Access journal, possibly including analytics.

The Board welcomed the work of the Publications Committee on the future development options for *OR Insight* and awaited its proposals, in early 2013, on best ways of meeting its aims – especially of disseminating the fruits of O.R. to a wider readership.

The Board considered the assessments from the Education and Research Committee of the six outline proposals that had been received under the Charitable Investment Projects initiative. On the basis of that assessment the Board decided that four bids should be shortlisted and these were all subsequently accepted. This left about half of the original funding (of £100k) still available for such work. A call for a second tranche of these projects was agreed by the Board. The aim is for such projects to commence by the autumn of 2013 at the latest.

Following indications from the EURO Council that a UK proposal to host the EURO conference in 2015 or 2016 would be welcomed, the Board issued an invitation for interested bodies to bid. Three good bids were received and carefully considered by the Board which agreed that a bid for hosting EURO2015 should go forward to the EURO Council, and that the chosen bid should be the one from the University of Strathclyde (Glasgow). Subject to some discussion on fees, this bid has been accepted by the EURO Council.

The Board ensured that Council for Mathematical Sciences (CMS) meetings including those with EPSRC were attended by a Board representative and contributed to CMS responses on various issues including open access.

The Board considered a paper on possibilities of the OR Society becoming a member of the Science Council, and the associated potential for OR Society members acquiring chartered scientist status, and would be seeking to progress this.

#### Committees

Many members of the Society devote considerable time and energy to committee and associated activities to ensure that the Society continues to meet its charitable objectives and enhance its service to members and general public alike. Their efforts and those of the office staff, who are ever supportive and efficient, are very much appreciated.

The **Events** Committee (chaired by Sandra Weddell, succeeded by Frances O'Brien from January 2013) oversaw the delivery of a full programme of conferences, events and training, designed to meet the needs of the O.R. community and to develop increased awareness of the range of O.R. techniques and skills required by both academics and practitioners.

The conference programme for 2012 included the sixth Simulation Workshop (SW12), held at The Abbey Hotel, Worcestershire, and our annual conference, OR54, held at Edinburgh University. Between them, these conferences attracted 370 participants. As is our tradition, the lessons learnt from each conference are reflected upon and passed onto those organising the following year's conferences – in 2013 we have a hive of activity in the form of four conferences, for which planning is well under way, including the biennial Young (to) O.R. conference and the annual main conference, OR55, both of which are being held at Exeter University. In addition we have two specialist conferences (Intelligent Management Systems in Operations, and Knowledge and Information Management).

In April 2012, we held a very successful Analytics event which attracted over 140 delegates; given its success, another one day event has been planned for June 2013. In addition to this event, we have continued to draw attention to our analytics offerings in our training brochure.

Other events that we have delivered to help the development of O.R. include the Careers Open Day which attracted over 250 students to a new more spacious venue at Nottingham University. The annual Blackett lecture continues to attract a full audience: this year we welcomed 110. During 2012 we have explored the introduction of a new high profile event linked to the Beale medal and are planning to hold the event in the second half of 2013.

We have continued to deliver a high quality training programme. During 2012 we delivered 18 courses covering a range of O.R. topics, eight of which ran 'in-house'. The courses attracted 161 delegates of whom 97 attended the in-house courses (we don't know whether they were members or not). Of the remaining 64 delegates, 30 were members. To increase the likelihood of courses running, we have: reduced costs; had discussions with other societies on brokering training; emphasised our ability to run in-house and bespoke courses; offered discounts for multiple bookings; and highlighted the reasons for using our training in particular in these tough economic times; and pointed out the value of our courses which provide significant individual attention.

The **Publicity, Membership and Website** Committee (chaired by Ruth Kaufman) initiated a number of actions to retain and build OR Society membership. This issue was of particular concern given a decline in membership levels that began towards the end of 2011 and continued at a slow but steady rate throughout 2012. This decline is not a problem for the Society in the short term, given that our revenues remain buoyant from other sources, as does our 'impact' as measured by numbers visiting our website, attending our meetings, buying and citing our journals, and participating in training courses. But the OR Society relies on its members for its effectiveness and its reach, so for the

longer term, retaining and building membership is crucial. The main actions on this initiated during the year were:

- developing a new 'corporate partnership' scheme, to be launched in Spring 2013;
- segmenting our potential member population, and initiating a thorough review of benefits
  of and barriers to membership for each segment, starting with a systematic survey of lapsed
  members; working with other committees on potential new benefits; and
- building on the analytics initiative to raise our profile in this area.

These are all expected to bear fruit over the coming three years or so.

There have been two key developments to the website: the launching of a document repository, which has vastly expanded the amount of useful literature, reports and presentations available to members and non-members; and the development of an Analytics Network website in time for the launch of the Analytics Network in March 2013. In addition the 'Learn about O.R.' DVD was refreshed and re-edited to make it more suitable for a business audience.

A 'communications initiative' was piloted, intending to get O.R. case studies into appropriate trade press. However, the pilot did not meet its targets, and we are reconsidering how we can improve our marketing to the public and to potential users of O.R.

The LinkedIn, Twitter and Facebook followings continued to grow. LinkedIn, in particular, began to thrive as a forum for discussion. A priority for the coming year is to build on this with a more systematic social media strategy, to improve the way we use social media to publicise our activities and to engage our members and contacts.

The **Publications** Committee (chaired by Jeff Griffiths) was able to announce another very successful year for OR Society publications, with all seven titles meeting their publication targets. Gross revenues for the six journals published on behalf of the Society by Palgrave Macmillan were up 4.1% on the previous year. The Society has benefitted from the new financial arrangements with our publishers, which has resulted in a 14.5% increase in the returns to the OR Society to £519k (plus an additional £50k towards editorial office support). As in previous years, the major proportion of the payment to the Society comes via sales of *JORS/KMRP*, which accounts for about 70% of total publication revenue. All issues of the journals were published on time, and were very close to the volume pagination levels set in the budget. A trend noted in previous years towards an increase in online sales seems to be levelling off, but revenue from this form of publication still exceeds that of hard copy sales.

2012 saw the introduction of our new journal, *Health Systems*, which is bundled with *EJIS*. This resulted in a very strong performance from sales of the bundle, which saw revenues increase by 15.2% on the previous year. Palgrave continues to absorb the losses incurred by *JoS* and *OR Insight*. We were delighted to learn that *JoS* has now been included in the Science Citation Index; it will receive its first Impact Factor in June 2013.

The deliberations of the committee during the year have concentrated on two main topics: open access (OA) and the future of *OR Insight*. Discussions on open access were informed by the Finch Report published in June 2012, which strongly recommended that all UK-funded research should be made freely available via open access. Following recommendations from Publications Committee, the Society's Board agreed that, from 1st January 2013, all journals would be offered as hybrid publications, where the author is offered the choice of either paying for OA or allowing the article to

be published via the traditional subscription-based route. Further proposals by Palgrave relate to the possibility of launching a new fully OA broadly based O.R. journal. Publications Committee will debate this proposal early in 2013, and make a recommendation to the Board as to whether to proceed or not

Debate continued throughout the year on the future direction of *OR Insight*, and the three editors, led by Alistair Clark, produced a future options paper. The paper is informed by Palgrave's mini-survey of members (about 2/3 of whom were practitioners), where opinions were sought on the future direction of the publication, and led the editors to suggesting eight possible options. The options will be considered by the committee early in 2013.

John Edwards retired from the editorship of *KMRP* at the end of 2012, and the Committee recorded its gratitude to him for his outstanding efforts in establishing *KMRP* as a leading journal in its field. Nine new editors took up duties in 2012, John Fowler and Loo Hay Lee (*JoS)*, Dov Te'eni (*EJIS*), John Crocker (*Inside OR*), Sally Brailsford, Paul Harper, Cynthia LeRouge, Fay Cobb Payton (*Health Systems*), Giovanni Schiuma (*KMRP*). All three current editors of *OR Insight* will retire at the end of 2013, and a new editor(s) will be sought when its future direction becomes clearer.

The Committee extends its thanks to Palgrave representatives, Ros Pyne, Neil Henderson, and David Bull, and to Sarah Parry in the Society's office, for their efforts and commitment during 2012. Ros Pyne moved to a new position in Palgrave at the end of 2012, and the committee thanked her for her outstanding service over the years. Neil Henderson will now be the main link between Palgrave and the Society — we look forward to working with him.

The **Education and Research** Committee (chaired by Jo Smedley) continued to make progress across its diverse remit of education and research.

The O.R. in Schools Task Force (chaired by Vince Knight with Louise Orpin based at the OR Society) continued its work in promoting O.R. to school-aged audiences. Building on the success of the initial product, in 2012 new case studies contributed to a re-launch of the ORIS DVD. Workshops have been run at teacher conferences to engage with school-focused audiences and widen awareness of O.R. as a subject for further study as well as a tool to aid management decision making.

The Annual Careers Day (led by Vince Knight and Louise Orpin) took place at the University of Nottingham in November 2012. In a new venue, this historically successful event continued to attract a robust mix of universities and practitioner organisations emphasising the opportunities that O.R. offers through continued study or as a career.

Research in O.R. continued to be an important focus of the Committee. The Annual Prize for the best Ph.D. in O.R. continued with the Award overseen by an Awards Panel chaired by Professor Chris Potts (University of Southampton) with five members drawn from across the OR Society. The winner was Richard Wood (Cardiff University) with a thesis title of "Modelling Activities at a Neurological Rehabilitation Unit".

Individual ERC members had responsibility for links with EPSRC (Tim Bedford) and ERSC (Brian Dangerfield) respectively. The EPSRC-funded NATCOR initiative continued as an example of the excellent progress resulting from active academic links supported by the OR Society to support and

influence tomorrow's O.R. academics and practitioners. We were pleased to note that Kevin Glazebrook has been invited to join the EPSRC's Strategic Advisory Team. ESRC engagement strengthened with opportunities to feedback on proposed developments.

Community links continued to be a main theme of the Committee's work in 2012 with an ERC member (Thierry Chaussalet) as the SIG representative. Jo Smedley linked with the Higher Education Academy (HEA) on O.R. developments as well as becoming an Academy Associate in O.R. She also attended the Maths, Stats and O.R. conference in Sheffield in July 2012. The COPIOR (Committee of Professors in OR) link continued through the membership of Professor Tim Bedford on the Education and Research Committee.

In overseeing the OR Society library (Mike Wright) and archives (Martin Kunc) the Committee continued to review and maintain a stock of books, journals and archive materials offering a unique insight into historical aspects of O.R. Currently held at Brunel University, the library provides a valuable source of O.R. heritage. Developments are in progress to raise awareness of the contents to enhance usage of the materials. Of particular note are interviews of the "Great and the Good in O.R.", held in our archives at the University of Warwick, which Martin will be seeking to expand.

During 2012, ERC led the development and implementation of the £100k OR Society Charitable Projects Initiative, designed to support project developments which highlight and reflect the Society's charitable aims and form an investment for the Society's future. Four projects were successful in the first round of bidding:

- Is O.R. in UK universities fit-for-purpose for the developing field of analytics? (£32k). Project Leader: Stewart Robinson. Mentor: Tim Bedford
- Piloting blended learning in O.R. training courses (£10k). Project Leaders: John Crocker & Martin Serpell. Mentor: Brian Dangerfield
- Measuring the impact of O.R. in local economic development in developing countries (£8k).
   Project Leader: Martin Kunc. Mentor: Chris Smith
- ORAiS: O.R. Ambassadors in Schools (£4k). Project Leader: Vince Knight. Mentor: Jo Smedley/Louise Orpin.

Regular progress reports are provided to the Society's Board. As well as supporting proposed O.R. developments, this initiative has provided an agile mechanism enabling the OR Society to respond quickly to new real-world developments.

A further call for Charitable Project proposals will be announced in January 2013.

The Board oversees the **Awards Panel**, which is chaired by John Ranyard. Its remit includes promoting entries (for most awards), assessing entries according to agreed criteria, selecting winners, producing appropriate citations, arranging presentations if appropriate and proposing subsequent publicity.

The Society's principal medals in 2012 were awarded to the following, who are congratulated on their achievement.

- Goodeve Medal awarded for best paper published in JORS in 2011. Roy Johnston, Estelle Shale, Sukhbir Kapoor, Adit Sheth and Ray True, Breadth of range and depth of stock: forecasting and inventory management at Euro Car Parts Ltd, Journal of the Operational Research Society, Volume 62, p433-441.
- **Stafford Beer Medal** awarded for best paper published in *EJIS* or *KMRP* in 2011. : Reeva Lederman and Robert Johnston, Decision support or support for situated choice: lessons for system design from effective manual systems, *European Journal of Information Systems*, Volume 20, p510-528.
- President's Medal awarded for the best practical application of O.R. submitted to the competition. Colin Marston & Patrick Rose (Dstl) for their paper 'From Operational Research to Operational Planning: Shaping the NATO plan for Afghanistan'.
- PhD Prize awarded for the most distinguished body of research leading to the award of a
  doctorate in the field of O.R. in 2011. Richard Wood for his thesis 'Modelling Activities at a
  Neurological Rehabilitation Unit'.
- Beale Medal awarded for a sustained contribution to the theory, practice, or philosophy
  of O.R. Mark Elder.
- **Companionship of O.R.** awarded for sustained support and encouragement for the development of Operational Research or for those in influential positions who are in broad sympathy with the subject area. Peter Millard.

#### Finance

In accordance with the accounting practices that are recommended for charitable organisations, the Society's funds are divided into four, with an additional fifth designated fund in respect of the risk to Journal income:

- the General Fund, representing the ongoing operational performance of the Society;
- the Reserve Fund, comprising the Society's investments, the Seymour House property and the money held on deposit by our stockbrokers;
- the Journal Risks Special Reserve Fund represents funds set aside to cover potential future reduction in income from the Society's journals;
- the Charitable Projects Fund, which is used to promote educational, development and research projects undertaken in line with the Society's charitable aims; and
- the Award Fund which contains the bequest from Mrs Hicks this is kept separate from the other funds and is used to support projects which are consistent with her wishes, by providing awards for the best student O.R. projects, undertaken for a client organisation.

The OR Society Board sets financial policy for investment, reviewing this from time-to-time. Within the constraints of this policy, decisions are passed down to the Investment Committee, as a sub-committee of the Board. The investment policy has been designed to maximise financial returns without any undue exposure to risk or to the particular performance of a given market sector.

#### Review of the Year

2012 was a finely balanced year. Economic turbulence and lack of growth in the wider economy had a dampening effect on many offerings, with most Society activities recording minor deficits. These were offset by an increased contribution from publications and some realised capital gains resulting from a more buoyant stock market. These positive factors also allowed an increased expenditure on special

charitable projects.

#### Operations

Most operations to support the charitable aims of the Society - such as conferences, special events, training, regional societies, special interest groups, and education and publicity initiatives - result in deficits to the Society. To support them the Society relies on subscriptions and publications, which in 2012 contributed £45k and £370k respectively.

Total incoming resources were £1,033k whilst total resources used were £1,050k, leading to a deficit of some £17k. This level of deficit represents about 1.6% of operating income or 1.4% of the cash, stocks and shares held in our Designated and Journal Risks Special Reserve Funds. It is therefore sustainable, especially since, this year, it was largely offset by nearly £13k of realised capital gains on our investments. In fact, these results can be seen as distinctly satisfactory since the Society was able to spend almost £36k on special charitable projects compared with nil under this heading in 2011. However, the figures serve as a reminder of the Society's current financial dependence on the academic publication system. Given the importance of the income from the journals the Society continues to keep the future security of that income stream under close review.

There was no rental income from the upper floor of the Society offices, which now stands vacant.

The Society retains 8.5 full-time-equivalent staff, unchanged from last year.

#### **Investments and reserves**

The total funds of the Society increased by £91k to just over £2M, reflecting unrealised gains in the value of the Society's investment portfolio which more than offset the small operating deficit. The market value of the Society's investments at year end was about £1M.

The Society's policy has been that the value of cash, stocks and shares held in the Designated Reserve Fund should not be less than 75% of General Fund expenditure. This policy is intended to ensure that the Society has adequate funds to continue to operate through temporary shocks. The Society's General Fund expenditure for the year was £995k and the cash, stocks and shares element of the Designated Reserve Fund stood at £696k at the end of 2012. The ratio was therefore 70%, a figure which reflects the still somewhat depressed, although now improving, conditions on the stock market. The mix of cash, shares and stocks is intended to provide resilience through a broad set of environments: low interest rates since 2009 have limited the return from cash, whilst the same cash holdings had been the means of mitigating the earlier fall in share prices.

As noted in the section on Risk, the Society also maintains a Journal Risks Special Reserve Fund, intended to mitigate the problems that would arise if the Society were forced to move quickly to a financial regime in which its publications income was significantly reduced.

As and when conditions permit, the Society will consider opportunities to make judicious use of its reserves to support longer-term developments and specific charitable projects

#### Risk

The Society's dependency on journal income is a material risk, so the Board has closely monitored current developments, both here and abroad, that will mandate 'open access' publishing for publicly funded work. The Journal Risks Special Reserve Fund was established in 2006 and had a balance of

£463k in December 2012, increased from £412k at the end of 2011.

#### **Voluntary Contributions**

The Society's work in 2012 benefited from voluntary contributions of time, from members and others, through these principal lines of work: authorship and refereeing of journal papers; editing of journals; authorship and delivery of conference papers; conference organisation; authorship and delivery of talks to regional societies and special interest groups; organisation of regional societies and special interest groups; the work of the Society's officers; contributions to the administration of the Society through service on Board and the Society's committees.

It is estimated that a total of 4,800 person-days were contributed in 2012 on these lines of work. If this time is valued at £500 per day, its value is £2.5M. The Society is most grateful to all who contributed voluntary effort, without which the Society could not accomplish its goals.

Written on behalf of Board by Geoff Royston, Ian Mitchell and Roger Forder.

Signed on behalf of Board

Geoff Royston, President

Roger Forder, Hon Treasurer

### **Accounts**

#### for the year ended 31st December 2012

# INDEPENDENT AUDITORS' REPORT TO THE MEMBERS OF OPERATIONAL RESEARCH SOCIETY

We have audited the financial statements of the Operational Research Society for the year ended 31st December 2012 which comprise the Statement of Financial Activities, the Balance Sheet and the related notes. The financial reporting framework that has been applied in their preparation is applicable law and United Kingdom Accounting Standards (United Kingdom Generally Accepted Accounting Practice).

#### Respective responsibilities of trustees and auditors

(who are also the directors of the charity for the purposes of company law) are responsible for the preparation of the financial statements and for being satisfied that they give a true and fair view. Our responsibility is to audit and express an opinion on the financial statements in accordance with applicable law and International Standards on Auditing (UK and Ireland). Those standards require us to comply with the Auditing Practices Board's (APB's) Ethical Standards for Auditors. This report is made solely to the charity's members, as a body, in accordance with Chapter 3 of Part 16 of the Companies Act 2006. Our audit work has been undertaken so that we might state to the charity's members those matters we are required to state to them in an auditor's report and for no other purpose. To the fullest

extent permitted by law, we do not accept or assume responsibility to anyone other than the charity and the charity's members as a body for our audit work, for this report, or for the opinions we have

As explained more fully in the Trustees' Responsibilities Statement set out on page 5, the trustees

#### Scope of the audit of the financial statements

A description of the scope of an audit of financial statements is provided on the Financial Reporting Council's website at www.frc.org.uk/auditscopeukprivate

#### Opinion on the financial statements

In our opinion the financial statements:

formed.

- give a true and fair view of the state of the charity's affairs as at 31st December 2012 and of
  its incoming resources and application of resources, including its income and expenditure,
  for the year then ended;
- have been properly prepared in accordance with United Kingdom Generally Accepted Accounting Practice; and
- have been prepared in accordance with the requirements of the Companies Act 2006.

#### Opinion on the other matter prescribed by the Companies Act 2006

In our opinion the information given in the Trustees' Report for the financial year for which the financial statements are prepared is consistent with the financial statements.

#### Matters on which we are required to report by exception

We have nothing to report in respect of the following matters where the Companies Act 2006 requires us to report to you if, in our opinion:

- adequate accounting records have not been kept, or returns adequate for our audit have not been received from branches not visited by us; or
- the financial statements are not in agreement with the accounting records and returns; or
- certain disclosures of trustees' remuneration specified by law are not made; or
- we have not received all the information and explanations we require for our audit;

Glen Jones (Senior Statutory Auditor) for and on behalf of Mazars LLP Chartered Accountants and Statutory Auditor 45 Church Street Birmingham B3 2RT

#### STATEMENT OF FINANCIAL ACTIVITIES FOR THE YEAR ENDED 31 DECEMBER 2012

							<u>2012</u>	<u>2011</u>
			I Inre	estricted Fund	łe		£	£
				sstricted i dire	13	Journal		
				Designated		Risks		
		D	esignated	Charitable [	Designated	Special		
		General	Reserve	Projects	Award	Reserve	Total	Total
1	Note	<u>Fund</u>	<u>Fund</u>	<u>Fund</u>	<u>Fund</u>	<u>Fund</u>	<u>Funds</u>	<u>Funds</u>
INCOMING RESOURCES								
Charitable activities :								
Subscriptions		147,020	-	-	-	-	147,020	148,242
Events and Conferences		152,453	-	-	-	-	152,453	166,410
Training		80,487	-	-	-	-	80,487	80,253
Publications	2	597,591	-	-	-	-	597,591	533,310
Accreditation		5,797	-	-	-	-	5,797	6,588
World Wide Web and Internet		6,129	-	-	-	-	6,129	6,918
Miscellaneous Sales		1,016	-	-	-	-	1,016	508
	•	990,493	-	-	-	-	990,493	942,229
Rental Income		-	-	-	-	-	0	3,890
Investment Income	6	24	24,887	-	1,363	15,783	42,057	39,751
Total Incoming Resources		990,517	24,887	_	1,363	15,783	1,032,550	985,870
	•				.,000	. 0,1 00	.,002,000	
RESOURCES USED								
Investment Management Costs		-	5,656	-	-	3,125	8,781	8,332
Direct charitable expenditure	:							
Subscriptions		100,950	1,264	-	-	-	102,214	102,146
Events and Conferences		205,088	943	-	-	-	206,031	218,982
Training		89,080	314	-	-	-	89,394	82,496
Publications	2	226,925	1,125	-	-	-	228,050	207,750
Accreditation		6,533	50	-	-	-	6,583	4,033
World Wide Web and Internet		101,157	1,082	-	-	-	102,239	88,546
Miscellaneous Sales		5,161	50	-	-	-	5,211	5,030
Other Charitable Expenditure	3	194,596	943	35,923	1,600	-	233,062	212,067
·		929,490	5,771	35,923	1,600	-	972,784	921,050
Governance Costs	4	65,367	1,634	-	-	608	67,609	66,110
Total Resources Used	5	994,857	13,061	35,923	1,600	3,733	1,049,174	995,492
NET (OUTGOING) / INCOMING	ì							
TRANSFERS		(4,340)	11,826	(35,923)	(237)	12,050	(16,624)	(9,622)
Transfers between Funds		-	(52,863)	52,863	-	-	-	-
NET (OUTGOING) / INCOMING RESOURCES FOR THE YEAR		(4,340)	(41,037)	16,940	(237)	12,050	(16,624)	(9,622)
carried forward		(4,340)	(41,037)	16,940	(237)	12,050	(16,624)	(9,622)

#### STATEMENT OF FINANCIAL ACTIVITIES FOR THE YEAR ENDED 31 DECEMBER 2012 (continued)

							2012 £	<u>2011</u> £
			Unre	_	_			
						Journal		
				Designated		Risks		
		D	esignated	Charitable D	esignated	Special		
		General	Reserve	Projects	Award	Reserve	Total	Total
<u>N</u>	Note	<u>Fund</u>	<u>Fund</u>	Fund	<u>Fund</u>	<u>Fund</u>	<u>Funds</u>	<u>Funds</u>
brought forward		(4,340)	(41,037)	16,940	(237)	12,050	(16,624)	(9,622)
Realised Gains/(Losses) on								
Sale of Investments	14	-	10,799	-	-	1,936	12,735	(8,923)
(NET RESOURCES USED) /	_							
NET INCOME FOR THE								
FINANCIAL YEAR		(4,340)	(30,238)	16,940	(237)	13,986	(3,889)	(18,545)
Other Recognised Gains and L		:						
Unrealised Gains/(Losses) on			56,152		2.510	26 440	95,119	(66.966)
Investments in the year	13	-	36,132	-	2,519	36,448	95,119	(66,866)
NET MOVEMENT IN FUNDS		(4,340)	25,914	16,940	2,282	50,434	91,230	(85,411)
		,						
Balances brought forward								
1 January 2012		571,871	865,407	22,723	53,151	412,156	1,925,308	2,010,719
BALANCES CARRIED	_							
FORWARD 31 DECEMBER 20	012 _	567,531	891,321	39,663	55,433	462,590	2,016,538	1,925,308

The notes on pages 4 to 10 form part of these accounts.

The Statement of Financial Activities, noted on this and the preceding page, shows income and expenditure relating to the five unrestricted funds operated by the Society in accordance with Statement of Recommended Practice (Revised 2005), "Accounting and Reporting by Charities".

The figure reported as (net resources used) / net income for the financial year in the Statement of Financial Activities ,  $\pounds(3,889)$  (2011 -  $\pounds(18.545)$ ) corresponds to the surplus for the financial year that would be disclosed if an Income and Expenditure Account compliant with the Companies Act 2006 was presented.

The structure of the Society's unrestricted funds is detailed in note 1(2) of these accounts.

#### **BALANCE SHEET - 31 DECEMBER 2012**

	<u>Note</u>	2012 £	<u>2011</u> £
FIXED ASSETS			
Tangible Fixed Assets	7	276,176	281,465
Investments : Listed at Market Value	8	1,092,813	981,862
Cash Deposited with Investment Brokers	0	108,116	119,405
Charities Aid Foundation	9	59,783	55,901
		1,536,888	1,438,633
CURRENT ASSETS	40	F70 004	547.440
Debtors Cash at Bank and In Hand	10	579,081 (14,010)	517,418 64,696
Cash at Bank and III hand		(14,010)	04,030
		565,071	582,114
CREDITORS (amounts falling due within one year)	11	85,421	95,439
NET CURRENT ASSETS		479,650	486,675
TOTAL ASSETS LESS CURRENT LIABILITIES		2,016,538	1,925,308
FUNDS		507 504	574 074
General Fund Designated Reserve Fund	12(1)	567,531 891,321	571,871 865,407
Designated Charitable Projects Fund	12(1)	39,663	22,723
Designated Award Fund	12(3)	55,433	53,151
Journal Risks Special Reserve Fund	12(4)	462,590	412,156
TOTAL FUNDS		2,016,538	1,925,308
*****************	******	*******	******

The reconciliation of movement on total funds is noted in the Statement of Financial Activities on pages 2 and 3.

The notes on pages 4 to 10 form part of these accounts.

Approved by the Board on 15th May 2013 and signed on its behalf:

R. A. FORDER

**Honorary Treasurer** 

G. H. ROYSTON

President

#### NOTES TO THE ACCOUNTS FOR THE YEAR ENDED 31 DECEMBER 2012

#### 1 ACCOUNTING POLICIES

#### (1) Accounting convention

The accounts have been prepared in accordance with both the Companies Act 2006 and the Statement of Recommended Practice (Revised 2005), "Accounting and Reporting by Charities", and under the historical cost convention in accordance with applicable Accounting Standards as modified by the accounting policy for investments quoted on a recognised stock exchange, which are stated at market value (see 1(6) below).

#### (2) Designation of funds

Income and expenditure arising from the normal charitable activities of the Society is included within the general fund. The Trustees may make transfers from the general fund to the designated funds which are set aside for specific purposes. The Designated Charitable Projects Fund represents amounts set aside for specific charitable projects. The Designated Reserve Fund consists of resources of the Society which are represented by land and buildings, fixed asset investments and cash deposited with the Society's investment brokers. The Designated Award Fund represents a legacy received in 2002 which will be used to fund a bi-annual award. The Journal Risks Special Reserve Fund represents funds set aside to cover potential future reduction in income from the Society's journals.

#### (3) Dividends and investment income

Dividends and investment income are recognised when receivable.

#### (4) Other income and expenditure

Income and expenditure other than dividends are accounted for on an accruals basis.

#### (5) Value added tax

The Society has partial exemption status for Value Added Tax and Value Added Tax on apportionable costs which cannot be reclaimed is disclosed separately within administration costs. This item was £nil in 2012.(2011 - £nil).

#### (6) Investments

Investments quoted on a recognised stock exchange are included in the accounts at their market value. Net investment gains/losses are taken to either the Designated Reserve Fund or the Journal Risks Special Reserve Fund as appropriate.

#### (7) Tangible fixed assets and depreciation

Tangible fixed assets costing more than £1,000 and with a useful economic life in excess of 3 years are capitalised and included at cost including any incidental expenses of acquisition.

Depreciation is charged on a straight line basis at the following rates:

Long leasehold building-2%Office machines and computer equipment-25%Fixtures and fittings-10%Software systems-25%

#### (8) Pensions

The Society contributes to individual pension schemes established for each eligible employee.

#### (9) Allocation of costs

Salaries, depreciation, world wide web expenditure and other central and establishment overheads are allocated to appropriate cost categories using consistently applied ratios based on estimates of actual time and costs expended in each area.

#### (10) Cash flow statement

No cash flow statement has been prepared, as permitted by FRS1, as the Society meets the criteria of a small company under the provisions of the Companies Act 2006.

#### NOTES TO THE ACCOUNTS FOR THE YEAR ENDED 31 DECEMBER 2012 (continued)

2	PUBLICATIONS	2012 £	2011 £
	Incoming resources: Journal / KMRP Inside OR ORMS Today EJIS Insight  Resources used: Journal / KMRP Inside OR ORMS Today EJIS Insight	419,068 22,265 2,300 153,139 819 597,591 70,069 122,313 2,167 25,630 7,871 228,050	374,309 28,073 2,563 127,453 912 533,310 66,701 112,434 2,618 21,026 4,971 207,750
3	OTHER DIRECT CHARITABLE EXPENDITURE		
	Designated charitable projects fund See note 12(2) for details of the projects funded	35,923	
	Non-revenue earning activities in pursuit of charitable aims IAOR Online - Members access Library Foreign Affairs Expenses Regional Society Grants Special Interest Groups Public Information about OR:     Science of Better     Learn about OR     General Publicity     Sponsorship of OR Conferences Medals, Awards and Scholarships Strategy Other Costs  Total	5,855 9,612 3,924 600 6,487  56,889 51,735 47,544 5,800 5,117 3,295 281 197,139  233,062	6,350 3,951 7,764 500 7,001 50,647 54,575 45,242 - 3,852 31,820 365 212,067
4	GOVERNANCE COSTS Board and Committees	55,376	54,192
	Auditors' Fees : for audit for other services	6,000 -	5,775 -
	Other Legal and Professional Fees	6,233	6,143
		67,609	66,110

#### NOTES TO THE ACCOUNTS FOR THE YEAR ENDED 31 DECEMBER 2012 (continued)

#### 5 TOTAL RESOURCES EXPENDED

#### Expenditure analysed by type of cost:

				Total	Total
	Staff Costs	Other Costs	Depreciation	<u>2012</u>	<u>2011</u>
	£	£	£	£	£
Investment Management Costs	_	8,781	_	8,781	8,332
Subscriptions	69,462	23,683	9,069	102,214	102,146
Events and Conferences	51,837	150,386	•	206,031	218,982
Training	17,279	71,446	669	89,394	82,496
Publications	61,860	163,795	2,395	228,050	207,750
Accreditation	2,765	1,411	2,407	6,583	4,033
World Wide Web & Internet	59,440	11,872	30,927	102,239	88,546
Miscellaneous Sales	2,765	2,338	108	5,211	5,030
Other Expenditure	51,837	179,217	2,008	233,062	212,067
Governance Costs	28,338	38,173	1,098	67,609	66,110
- -	345,583	651,102	52,489	1,049,174	995,492
Staff costs :					
Wages and Salaries				285,291	272,635
Social Security Costs				29,650	28,696
Pension Costs				30,642	29,297
i chalon coata				50,042	23,231
				345,583	330,628

The average number of employees of the Society, calculated on a full time equivalent basis, during the year was :

	<u>2012</u>	<u>2011</u>
Charitable activities	7.0	7.0
Management and administration	1.5	1.5
	8.5	8.5

During both the current year and the previous year one employee of the Society earned between £60,000 and £70,000, excluding pension contributions.

No remuneration was paid or is payable to Trustees for service on the Board for the year (2011 - £Nil).

During the year 11 Trustees (2011 - 9 Trustees) received a total of £7,110 (2011 - £10,300) in reimbursement of expenses incurred on Society business . Prof S L Robinson received £3,945 (2011 - £6,184) and Ms F O'Brien £4,747 (2011 - £nil) for the supply of training courses to the Society during the year.

Other external costs include :	2012 £	<u>2011</u> £
Other Operating Leases	4,628	4,222

#### NOTES TO THE ACCOUNTS FOR THE YEAR ENDED 31 DECEMBER 2012 (continued)

6 INTEREST RECEIVABLE AND SIMILAR INCOM
---

	<u>2012</u> £	<u>2011</u> £
Income from Listed Investments Interest on Bank Deposits Distributions - CAF	40,506 188 1,363	37,968 112 1,671
	42,057	39,751

#### 7 TANGIBLE ASSETS

Cost	Long Leasehold Land and <u>Buildings</u> £	Office Equipment £	Fixtures <u>&amp; Fittings</u> £	Software Systems £	<u>Total</u> £
At 31 December 2011 Additions Disposals	314,306 - -	121,037	42,297 - -	584,802 47,200	1,062,442 47,200
At 31 December 2012	314,306	121,037	42,297	632,002	1,109,642
Depreciation					
At 31 December 2011 Charge for the Year Disposals	113,148 6,286 -	107,672 6,266	38,799 833 -	521,358 39,104 -	780,977 52,489
At 31 December 2012	119,434	113,938	39,632	560,462	833,466
Net Book Value					
At 31 December 2012	194,872	7,099	2,665	71,540	276,176
At 31 December 2011	201,158	13,365	3,498	63,444	281,465

Capital expenditure authorised but not contracted for at 31 December 2012 and not provided for in the accounts amounted to £Nil (2011 - £Nil).

The Trustees consider the market value of the Long Leasehold Land and Buildings to be materially in excess of the book written down value shown above.

The Trustees do not consider that the difference can be accurately defined without the benefit of a professional valuation.

#### NOTES TO THE ACCOUNTS FOR THE YEAR ENDED 31 DECEMBER 2012 (continued)

#### 8 LISTED INVESTMENTS AT MARKET VALUE

		2012			2011			
		Journal			Journal			
	Designated Reserve <u>Fund</u> £	Risks Special Reserve <u>Fund</u> £	TOTAL £	Designated Reserve <u>Fund</u> £	Risks Special Reserve <u>Fund</u> £	TOTAL £		
Market Value at 1st January 2012	601,701	380,161	981,862	647,302	396,595	1,043,897		
Additions at Cost	58,713	34,156	92,869	62,347	37,589	99,936		
Proceeds on Disposal	(62,076)	(25,334)	(87,410)	(56,180)	(32,209)	(88,389)		
Net Investment Gain /(Loss)	67,049	38,443	105,492	(51,768)	(21,814)	(73,582)		
Market Value at 31st December 2012	665,387	427,426	1,092,813	601,701	380,161	981,862		
Cost	544,783	349,462	894,245	546,318	342,240	888,558		

All the above investments are either listed on a recognised stock exchange in Great Britain or are represented by unit trusts which are traded on a daily basis in th UK, and fall within the wider range of investments as defined by the Trustees Act 1961.

The Society's narrower range of investments as defined by the Trustees Act 1961 is covered by deposits held at Rensburg Sheppards.

#### 9 CHARITIES AID FOUNDATION

At 31 December 2012 this investment is represented by 56,058 (2011 - 56,058) shares in the IM CAF Fixed Interest B Accumulation Fund, having a market value of £59,783 (2011 - £55,901).

	<u>2012</u>	<u>2011</u> £
Market Value at 1st January 2012	55,901	56,438
Additions at Cost Proceeds on Disposal	- -	56,954 (55,842)
Net Investment Gain /(Loss) Distributions not remitted	2,519 1,363	
Distributions not remitted	3,882	(1,649)
Market Value at 31st December 2012	59,783	55,901
Cost	<u>56,060</u>	56,060
10 DEBTORS		
	<u>2012</u> £	<u>2011</u> £
Trade Debtors Taxation Recoverable Prepayments Accrued Income	20,789 20,914 18,506 518,872	29,470 28,041 6,857 453,050
	579,081	517,418

#### NOTES TO THE ACCOUNTS FOR THE YEAR ENDED 31 DECEMBER 2012 (continued)

#### 11 CREDITORS

	<u>2012</u>	<u>2011</u>
	£	£
Trade Creditors	27,792	32,185
Taxation and Social Security	-	-
Accruals	15,338	16,863
Deferred Income	42,291	46,391
	85,421	95,439
Deferred income brought forward		46,391
Released to incoming resources during the year		(46,391)
Deferred income arising in the year		42,291
Deferred income carried forward		42,291

#### 12 DESIGNATED FUNDS

The funds of the charity include the following designated funds which have been set aside out of unrestricted funds by the trustees for specific purposes:

#### (1) Designated Reserve Fund

The designated reserve fund consists of resources of the Society which are represented by land and buildings, fixed asset investments and a cash deposit with the Society's investment brokers.

#### (2) Designated Charitable Projects Fund

	31 December <u>2011</u> £	<u>Transfers</u>	New <u>Designations</u> £	Expenditure £	31 December <u>2012</u> £
Specific Future Projects	22,723	52,863	(75,586)	-	0
Learn About OR DVD	-	-	22,723	(22,723)	0
OR - School Ambassadors	-	-	3,843	·	3,843
OR - Impact in Developing Countries	-	-	8,000	(2,700)	5,300
Fitness of OR in Universities	-	-	31,020	(10,500)	20,520
Raising the profile of the OR Society	-	-	10,000	-	10,000
	22,723	52,863	-	(35,923)	39,663

#### (3) Designated Award Fund

The Designated Award Fund represents a legacy received in 2002. The Legator, Mrs May Hicks, expressed a non-binding wish that the Society uses its bequest to fund an annual award to be determined by the Council of the Society. The legacy is currently invested in the Charities Aid Foundation "IM CAF OEIC Fund".

#### (4) Journal Risks Special Reserve Fund

The Journal Risks Special Reserve Fund was established to cover possible future falls in income from the Society's journals and is represented by fixed asset investments and a cash deposit with the Society's investment brokers.

#### NOTES TO THE ACCOUNTS FOR THE YEAR ENDED 31 DECEMBER 2012 (continued)

13	ANALYSIS OF NET ASSETS BETWE			Designated Charitable	Designated	Journal Risks Special	
		General	Reserve	Projects	Award	Reserve	
		<u>Fund</u>	Fund	<u>Fund</u>	Fund	<u>Fund</u>	<u>Total</u>
		£	£	£	£	£	£
	Tangible Fixed Assets	81,304	194,872	-	-	-	276,176
	Investments	-	665,387	-	59,783	427,426	1,152,596
	Cash Deposited with Investment Brokers	_	32,466	39,670	_	35,980	108,116
	Net Current Assets/Liabilities	486,227	(1,404)	(7)	(4,350)	(816)	479,650
	Total Net Assets	567,531	891,321	39,663	55,433	462,590	2,016,538
	Reconciliation of movements in unrealised gains/(losses) on investment assets:						
	investment assets.						
	Unrealised gains at 31 Dec 2011 Realised investment (gains) /	-	55,381	-	(1,053)	37,920	92,248
	losses during the year	-	8,971	-	-	3,536	12,507
	Net unrealised investment gains/ (losses) arising during the year	-	56,152	-	2,519	36,448	95,119
	Unrealised (losses)/gains included						
	in net assets at 31 Dec 2012	-	120,504	-	1,466	77,904	199,874
14	DISPOSAL OF INVESTMENTS						
						Book	Realised
				Cost		Gain/(Loss) on Disposal	Revaluation Gain/(loss)
				£	£	£	£
	Designated Reserve Fund		=	60,248	62,076	10,799	(8,971)
	Designated Award Fund			-	-	-	-
			=				

#### 15 PENSION FUND

Journal Risks Special Reserve Fund

The Society contributes to individual pension schemes established for each individual employee. The assets of these schemes are held separately from those of the Society in independently administered funds. The pension charge represents contributions payable by the Society to the schemes and amounted to £30,642 (2011 - £29,297).

26,934

25,334

1,936

(3,536)

#### 16 CORPORATE STATUS

The Operational Research Society is a company limited by guarantee and is a registered charity, the objectives of which are the advancement of knowledge and education in operational research.



In the autumn of 1947, at a dinner discussion convened at the Athenaeum Club in London, it was decided to form an Operational Research Club. The Club was inaugurated in April 1948 with an initial membership of 50, under the chairmanship of Sir Charles Goodeve and with Mr J A Jukes as the first Secretary. The exclusivity associated with the word "Club" was deliberately chosen for the initial period, to ensure clarification of what was meant by operational research and to attempt to develop a wholeness in what was otherwise a somewhat vague field. The Club met regularly in the rooms at the Royal Society for technical discussions. By 1953 the initial objectives had been achieved and the pressure to form a normal "learned and professional" society had become strong. Therefore, the Club was transformed into the Operational Research Society, and its first President was Sir Owen Wansbrough-Jones and the Hon Secretary Mr B H P Rivett.

# **Presidents of the Society**

Sir Owen Wansbrough-Jones	1954/55
Sir William K Slater	1956/57
Professor M G Kendall	1958/59
The Earl of Halsbury	1960/61
Professor B H P Rivett	1962/63
Professor G A Barnard	1964/65
Professor R T Eddison	1966/67
Mr E C Williams	1968/69
Mr S Beer	1970/71
Professor K D Tocher	1972/73
Mr R C Tomlinson	1974/75
Mr A M Lee	1976/77
Professor M G Simpson	1978/79
Mr G H Mitchell	1980/81
Professor K B Haley	1982/83
Dr R S Stainton	1984/85
Professor J V Rosenhead	1986/87
Dr J C Ranyard	1988/89
Mr P N Thornton	1990/91
Professor C B Chapman	1992/93
Professor L C Thomas	1994/95
Mr I J Disley	1996/97
Professor R G Dyson	1998/99

Professor M Pidd	2000/01
Mr J Gibb	2002/03
Professor V Belton	2004/05
Professor J D Griffiths	2006/07
Mrs S M Merchant	2008/09
Professor R W Eglese	2010/11
Dr G H Royston	2012/13

# **OR Society awards**

# **Companion of Operational Research**

Sir Hermann Bondi	1983	Professor K B Haley	1996
Mr D Hicks	1983	Professor M F Shutler	1996
Professor R V Jones	1983	Professor D J White	2001
Professor B H P Rivett	1983	Professor K C Bowen	2001
Mr H R W Watkins	1984	Dr R A Forder	2005
Professor Sir David Cox	1985	Professor F Kelly	2005
Lord Ezra	1985	Mr G K Rand	2005
Mr P Hughes	1985	Dr J C Ranyard	2005
Lord Zuckerman	1985	Professor J V Rosenhead	2005
Sir John Kingman	1986	Dr J F Miles	2006
Sir Dennis Rooke	1986	Professor R G Dyson	2007
Sir Charles Carter	1987	Mr E K G James	2007
Mr T P Frost	1987	Professor J Friend	2008
Professor H.Muller-Merbach	1988	Dr G Royston	2008
Mr D A Quarmby	1989	Professor R J Paul	2009
Professor R C Tomlinson	1990	Professor A Mercer	2010
Mr R A Showell	1991	Mr T O'Connor	2010
Mr G H Mitchell	1992	Professor V Belton	2011
Professor P Whittle	1994	Ms R A Kaufman	2011
Mr J Plymen	1994	Professor M Pidd	2011
Professor S Vajda	1995	Professor P H Millard	2012

# **Goodeve Medal**

B H Mahon	1976	R Bandyopadhay	1990
R J M Bailey	1976	S Datta	1990
N R Tobin	1977	D Schrady	1992
I Sanderson	1979	D Wadsworth	1992
A J Williams	1980	A Bouzaher	1993
J G Shepherd	1981	S Offutt	1993
F K Lyness	1982	D W Bunn	1994
L P Fatti	1984	E R Larsen	1994
A H Christer	1985	K Vlahos	1994
W M Waller	1985	G M Campbell	1995
G Best	1987	C F Davis	1995
G Parston	1987	M Carey	1996
J V Rosenhead	1987	D Lockwood	1996
D Rowland	1988	C M Yeats	1997
I R Turner	1989	T Rehman	1997

D-W Tcha	1998	J Turnbull	2005
T-J Choi	1998	K Taylor	2006
Y-S Myung	1998	B Dangerfield	2006
F Duckworth	1999	S C Brailsford	2007
A J Lewis	1999	D Evenden	2007
J Banasik	2000	V Harinda	2007
J N Crook	2000	P Harper	2007
L C Thomas	2000	A Medina-Borja	2008
K Korporaal	2001	K S Pasupathy	2008
A Ridder	2001	K Triantis	2008
P Kloprogge	2001	D Ronen	2009
R Dekker	2001	C A Goodhart	2009
S Howick	2002	S Kumar	2010
C Eden	2002	D A Nottestad	2010
J E Beasley	2003	E E Murphy	2010
H Howells	2003	L C Thomas	2011
J Sonander	2003	F R Johnston	2012
R Hartley	2004	E A Shale	2012
G Lanot	2004	S Kapoor	2012
S C Brailsford	2005	A Sheth	2012
V Lattimer	2005	R True	2012
P Tarnaras	2005		

# **Stafford Beer Medal**

JJ Jahng	2003	C Soh	2008
H Jain	2003	C Ashurst	2009
K Ramamurthy	2003	N Doherty	2009
R Lindgren	2004	J Peppard	2009
D Stenmark	2004	F Thiesse	2010
J Ljungberg	2004	J Al-Kassab	2010
S Sarker	2005	E Fleisch	2010
S Sahay	2005	P O'Reilly	2011
S Madon	2006	P Flanegan	2011
C Middleton	2007	R Lederman	2012
W Cukier	2007	R Johnston	2012
S K Sia	2008		

# **Tocher Medal**

<b>PhD Prize</b>			
T Pitana	2009/10		
K Kotiadis	2007/08	E Kobayashii	2009/10

K Kaparis	2008	F Liberatore	2010
A Strauss	2009	R Wood	2011

# **President's Medal**

D R Corkindale	1976	V V Dadeshidze	1999
M L Chambers	1977	L J Olsson	1999
R G Dyson	1977	F Vasko	2000
M Sloman	1978	H Gilles	2000
J V Rosenhead	1979	D Bright	2000
P Doyle	1980	V Kocatulum	2000
J Fenwick	1980	E Wolf	2000
G P Savage	1980	J Moffat	2000
D B Gilding	1981	J J Race	2001
C Lock	1981	D Burnell	2001
B Fokkens	1982	M Neighbour	2002
M Puylaert	1982	M Acutt	2003
R S Hambleton	1983	P Loader	2004
A W Nimmo	1984	M Bryant	2004
C B Chapman	1985	P Bates	2004
D F Cooper	1985	C McGuckin	2004
A B Cammaert	1985	D Kelly	2004
P Doyle	1987	P Loucopoulos	2005
J Saunders	1987	KG Zagrafos	2005
M Pidd	1988	Y Pyrgiotis	2005
S R Clarke	1989	D Beis	2005
A H Christer	1990	A Swain	2006
K A H Kobbacy	1990	A Ross	2006
B C Dangerfield	1991	A Lewins	2007
C A Roberts	1991	M Sykes	2007
M B Wright	1992	A Moon	2007
C P Thunhurst	1993	M Allwright	2008
C J Ritchie	1993	J Ball	2008
A Khakee	1994	D Pankhurst	2008
K Stromberg	1994	I Wright	2008
J J Glen	1996	P Frangos	2010
H Tsoukas	1997	S Hughes	2010
D B Papoulias	1997	S Hammond	2011
J H Powell	1998	K Slater	2011
G Laporte	1999	C Marston	2012
F Semet	1999	P Rose	2012

# **Beale Medal**

J V Rosenhead	1992	C Eden	2007
D J White	1993	L C Thomas	2008
A H Christer	1995	J D Griffiths	2009
G H Mitchell	1998	K H Haley	2010
H P Williams	1999	F Kelly	2011
R C Tomlinson	2005	M D Elder	2012
P Checkland	2006		

# **Silver Medal**

Sir Charles Goodeve	1964	Sir Geoffrey Vickers	1975
Professor P M Morse	1965	Mr E.K.G.James	1979
Professor K D Tocher	1967	Professor E M L Beale	1980
Professor B H P Rivett	1968	Professor S Eilon	1982
Professor R T Eddison	1969	Professor G Dantzig	1986
Mr A M Lee	1970	Mr L V Kantorovich	1986
Professor R L Ackoff	1971		

# **Bronze Medal**

R M Adelson	1965	M F Cantley	1969
J Stringer	1967	F D Lyness	1970
T A Burgin	1967	A M Duguid	1972
A R Wild	1967	C G Moss	1972
D J Chambers	1968		



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