



Annual Report and Accounts

for the year ended 31st December 2013

The Operational Research Society
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A registered charity No 313713. A company limited by guarantee No 663819

Preamble

- (1) 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 2013 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.

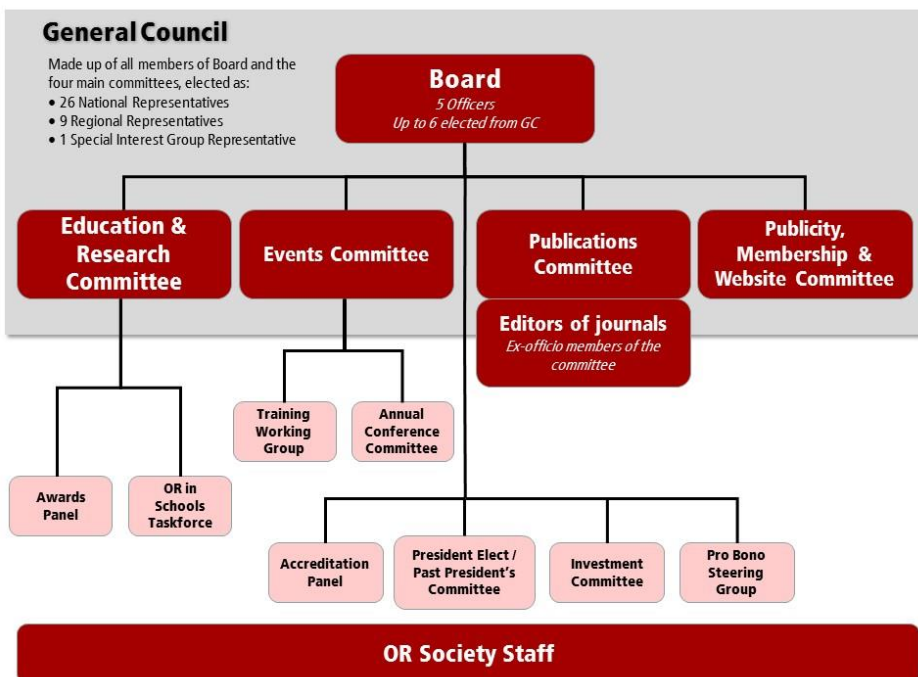
The following served as members of the Board in 2013

G H ROYSTON President	J D GRIFFITHS
J R HOPES Vice President	R A KAUFMAN
S PETROVIC Vice President	F A O'BRIEN
S L ROBINSON President Elect	J PARKIN
R A FORDER 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 Elect'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 Blckett
The OR Society
12 Edward Street
BIRMINGHAM
B1 2RX

Its Bankers are:

The Co-operative Bank
Delf House
Southway
SKELMERSDALE
WN8 6WT

Its Solicitors are:

Sydney Mitchell and Co
Cavendish House
Waterloo Street
BIRMINGHAM
B2 5PU

Its Auditors are:

Mazars LLP
45 Church Street
BIRMINGHAM
B3 2RT

Its Investment Adviser is:

Elliot Bancroft
Investec
2 Gresham Street
LONDON
EC2V 7QN

Its Stockbrokers are:

Investec
2 Gresham Street
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, Science Council, 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 funds 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 (except for the President, who serves one year as President-Elect, two years as President and a further year as Immediate Past-President). A member of the Board, other than the President, whose first term of office has expired may stand for election for one further term. At the end of 2013, there were no changes to the membership of the Board.

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 2013, and recommend their adoption by the Society at its Annual General Meeting.

S L ROBINSON President

R A FORDER Hon Treasurer

J D GRIFFITHS

J R HOPES

R A KAUFMAN

F A O'BRIEN

J PARKIN

S PETROVIC

G H ROYSTON

J K SMEDLEY

Being the elected officers and members of the Board of the Operational Research Society as at 21st May 2014.

I G Blackett

Secretary & General Manager

21st May 2014

Annual Report 2013

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 third sector.

To fulfil its mission and achieve its vision the Society's **aims** are 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 2013. 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 2013 the Society's publications, website, conferences, training, accreditation, awards, regional societies, special interest groups, charitable projects, 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 that follow, and included highlights such as:

- The Society joined the Science Council in line with our organisational outreach, networking and profile-raising aims;
- The development of the Society's social media strategy, particularly through LinkedIn and Twitter, and the launch of a new Science of Better website;
- A Corporate Partnership scheme was launched with the aim of attracting more members and engagement from practitioner organisations;

- A working group was established to consider a new publication in an accessible magazine style to replace *OR Insight*, which ceased publication at the end of 2013;
- It has been agreed with Palgrave to launch a book series, *OR Essentials*, with Simon Taylor as series editor;
- The Society continued to develop its focus on analytics with a second very successful national one-day event held in London in June and the launch of the Analytics Network led by Sayara Beg;
- 2013 was a busy year for conferences with four multi-day events, including the Annual Conference and Young-to-OR (both held in Exeter) and a series of shorter meetings;
- The 2013 Blackett Memorial Lecture was given by David Spiegelhalter on the topic "Communicating Risk and Deeper Uncertainty." Demand was such that the lecture had to be moved away from the Royal Society to a larger facility;
- Growing interest in Behavioural O.R. led to a workshop in October from which a series of initiatives were recommended, including setting-up a new special interest group;
- The O.R. in Schools initiative 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 Pro-Bono initiative was strengthened with the employment of a scheme project manager, Felicity McLeister, overseen by the Pro Bono Steering Group;
- The first tranche of four Charitable Investment Projects (projects that would help take the Society forward and be an investment in the future) progressed successfully throughout the year and a further three projects were commissioned;
- The Society's 60th anniversary (November 2013) is to be marked by a series of special articles in *Inside OR*.

Board Business

The Board met five times during 2013. In addition, to facilitate communication, over the same period two special meetings were held between the Board and General Council members ('mega-meetings').

At the beginning of the year the Board welcomed two new members, Sanja Petrovic as a Vice-President and Roger Forder as Treasurer. The Board continues to include all four Chairs of the main committees. At the end of the year, Stewart Robinson, formerly President-Elect, commenced his two year presidential term. Geoff Royston continues on the Board as Immediate Past-President.

The Board noted that, unlike many similar societies, the Society did not have a Finance Committee (only an Investment Committee). It agreed to set up a Finance Working Group, chaired by the Treasurer, to run for 18 months, as a trial for a possible future committee.

Following a report by Noel Corrigan on Regional Groups and Special Interest Groups, the Board agreed that any dormant groups should be closed or handed over to someone who was keen to reinvigorate them. The System Dynamics+ and the Simulation SIGs agreed to merge, with a new committee in place.

The Board finalised and approved the Annual Report and Accounts for the year ending December 2012 and recommended it be proposed for approval at the Annual General Meeting. It was approved at the AGM held on 3 September 2013 and is available online on the Society's website. At its meeting in October the Board reviewed progress on the actions in its part of the Society Business Plan for 2013-2015.

The year-end position suggested that the roughly break-even position of 2012 for income and expenditure would be maintained for 2013. The Board considered the review from the Finance Working Group on the Society's financial position and noted that this position remained reasonably strong, particularly owing to a considerable and steadily growing contribution from our journals. It agreed that the Society's reserves, currently some £1.3m, could be reduced to £1m to support additional expenditure of £100k per year for a limited period (three years) if the investment of such sums could be seen to be justified in terms of future benefits to the health of the Society and the achievement of its charitable aims, for example, by allowing us to consolidate our "market position" on analytics.

Seeking to strike a balance between the risk of inhibiting efforts to increase membership and the risk of over-dependence on publication income, the Board recommended a small increase (2%) in annual subscription rates with effect from 1st January 2014. The increase, taken over two years, is substantially below inflation since the last rise 2 years ago and the Society's rates remain low by comparison with similar bodies. The new rates were approved by the required 75% majority at the AGM.

As noted above, the contribution to the Society from its journals, both financially and otherwise, is considerable and indeed crucial. There seems scope however for a better spread between the Society's more academic publications and those aimed at a wider audience, including practitioners and users of OR. The Board accordingly agreed a recommendation from the Publications Committee that production of *OR Insight* should cease at the end of this year and that it should be replaced with a new publication in an accessible "magazine" style. A working group, chaired by Stewart Robinson, considered how this could best be done and is reporting its deliberations to the Board. In addition, a new journal on analytics is being considered.

The Board noted that 2013 had been a very busy and successful year for events. Future years, not least 2015 with the EURO conference to be held in the UK, looked promising but the administrative burden on the Society's General Office needed to be monitored. The Board agreed that the Society would provide (financial) sponsorship for a Student Conference on O.R. (SCOR 2014) in 2014.

The Board approved the proposals of the Training Working Group for the courses to be offered by the Society in 2014. The 2014 training programme is an expanded one, with more analytics content.

Nominated Board members attended meetings of the Council of Mathematical Sciences during the year. Issues discussed included open access journal publishing and improving the "pipeline" of people taking up doctoral and post-doctoral positions in mathematical sciences in the UK.

The Board agreed that in future the posts of EURO and IFORS Representatives (which might sensibly be combined, to assist continuity) should, like other Society positions, carry fixed terms of office and that therefore a candidate should be sought from General Council with a view to a three year, renewable, appointment.

There were signs that the slow decline in subscribing members seen over recent years might be beginning to reverse, but there was clearly work still to be done on this. (It was however also noteworthy that the Society was gaining interested people through pathways other than subscription membership - for the first time the Society now has more people belonging to its *LinkedIn* network than it has formal members.) The Board considered several reports from the Membership Working Group, chaired by Ruth Kaufman. These reports, on lapsing members, on leavers and on membership and conference data, provided some valuable elements for development of a framework for modelling the impact of actions on membership over time and hence to prioritise actions to increase membership. Some initial actions have already been identified for each main committee, all of which are represented on the Working Group. The Board agreed proposals for a trial of corporate membership.

Following extensive preparatory work by Ruth Kaufman and colleagues the Board approved the proposal for the Society to join the Science Council, in line with our organisational outreach, networking and profile-raising aims. Our application was accepted in June. Membership also opens up the opportunity for Society members to be awarded chartered scientist status and the Board agreed that the business case for this should be investigated further, in the context of our existing accreditation scheme and of developments from INFORMS on certification in analytics.

Early-career O.R. workers is a key group for the Society, as well demonstrated by the success of the Young OR Conference, and the Board agreed more should be done to increase the input from and profile of this demographic within the Society. One immediate innovation is to have a specific "Early Career" section in *Inside OR* and Louise Maynard-Atem, currently working in her first O.R. analyst post, has volunteered to take the lead for producing this. The Board also wished to see a group established to advise on the needs of people in the early stages of an O.R. career and an advertisement was placed in *Inside OR* to seek those interested.

The Board continued to promote and monitor activity in the analytics area. It commended John Ranyard, John Hopes, Graham Sharp and others for the launch of the Society's Analytics Network on March 6th and on the second successful annual national event on analytics held on June 12th, with a very impressive set of speakers. A third such event was held in April 2014. The Board agreed to appoint Sayara Beg as chair of the Analytics Network. Vice-President John Hopes continues as lead for the Board on analytics, chairing the Analytics Working Group.

While at the EURO conference in July, Geoff Royston had met with the INFORMS president, Anne Robinson, and the chair of the INFORMS Analytics Section, Don Kleinmuntz, to discuss progress of each Society on analytics initiatives. Discussions are due to continue with Dr Kleinmuntz in 2014.

Activity continued on fostering two other potential growth areas for O.R.:

- Behavioural Operational Research (BOR). This topic had attracted considerable interest and a workshop, to consider how the OR Society might best support its development, was held

on 16th October. Future steps, for all of which there were now volunteers, included proposals for a BOR SIG, a stream at the Society's conference and a special issue of the *Journal of the OR Society*. A follow up meeting was planned for March 2014 to address issues such as scoping, bids for research council funding and demand of and provision for training in BOR.

- O.R. and Design. Discussions were continuing with academics involved in design, particularly in the engineering field, and with the associated professional bodies, notably the Design Society. There was clearly mutual interest in developing links and exchanging views and ideas. A joint workshop was being arranged between the OR Society and the Design Society for February 2014.

The Board considered recommendations from the Education and Research Committee on funding a second tranche of charitable projects. Three further projects costing £27k in total were approved. The Board was very pleased to note that a scheme project manager for pro-bono O.R. (Felicity McLeister) had been appointed, and has now taken up her post.

The Board welcomed a proposal from Vice-President Sanja Petrovic that the Society should host debates on themes of wide interest (e.g. "optimisation vs. satisficing"). The first such debate was likely to take place during the next annual conference.

The Board noted that November 2013 was the 60th anniversary of the founding of the OR Society (it was formally reconstituted from its earlier 1948 incarnation, the Operational Research Club, on 10 November 1953) and agreed that this should be marked by a series of special articles in *Inside OR*.

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 Frances O'Brien) 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 2013 was a hive of activity in the form of four conferences and three one-day events. The biennial Young-to-OR (YOR18) and Annual Conference (OR55), both held at Exeter University, between them attracted 334 participants. Two smaller specialist conferences were also run: Intelligent Management Systems in Operations (IMSIO) in July (Salford); and Knowledge and Information Management (KIM) in June (Coventry). As is our tradition, the lessons learnt from each conference are reflected upon and passed on to those organising the following year's conferences. In 2014 we have two conferences, the biennial specialist Simulation Workshop (SW14) and the main Annual Conference (OR56) at Royal Holloway, University of London, plus a possible five one-day events, planning for all of

which is well under way.

In June 2013, we held a very successful Analytics event in London which attracted 156 delegates; given its success, another event has been planned for April 2014. 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 150 students to a new more spacious venue at Millennium Point in Birmingham. The annual Blakett lecture continues to attract a full audience. This year the lecture was given on 28 November by David Spiegelhalter, OBE, FRS, University of Cambridge Winton Professor for the Public Understanding of Risk, speaking on the topic "Communicating Risk and Deeper Uncertainty". The capacity of the Royal Society venue was exceeded and so instead we welcomed 150 delegates to a larger venue at Browns Courtrooms, London. During 2013 we have secured the introduction of a new high-profile event linked to the Beale medal and are holding the event in February 2014 at the Royal Society.

We have continued to deliver a high-quality training programme. During 2013 we delivered five open courses covering a range of O.R. which attracted 27 delegates of whom eight were non-members. In addition, three bespoke in-house courses were run attracting some 30 delegates. To raise demand for courses 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 two central goals being pursued by the **Publicity, Membership and Website** Committee (chaired by Ruth Kaufman) in the medium term are (i) a high profile for O.R. and the Society amongst the analytical and analysis-user communities; and (ii) membership at double the current level. To achieve these, we have various actions in hand and planned over a two-to-three year period.

Key achievements in promoting 'profile' during 2013 include:

- growth in our LinkedIn and Twitter communities (2785 members and 940 followers respectively at the end of 2013) with active discussions on both;
- launch of a new Science of Better website, with more information, more functionality, and more value to offer to potential users or champions of O.R.;
- working alongside HORF (the Heads of O.R. Forum) which brings together senior practitioners. HORF now has 38 members who lead analytics or O.R. groups ranging in size from 10 to 500 analysts;
- and in response to HORF requests, setting up a Corporate Partnership scheme, enabling closer links with their organisations, and greater visibility for the Society and its services amongst their staff.

To meet its goals, the Society needs to be able to reach a broad constituency of analysts; and members play a fundamental part in making this happen. The recent decline in membership has therefore been of great concern. Whilst this trend has not yet been reversed, it was stemmed during the year: the Society ended 2013 with only 25 fewer members than in 2012. Recruitment remains healthy, with over 350 new or reinstated members during the year. However, this is offset by the number of resignations. An

in-depth survey of departing members showed that whilst some of the resignations are inevitable, there are many which might be prevented by better engagement and communication activity on the Society's part. This is a priority for 2014.

Of course, it is not just about communication; the Society must provide actual value to its members. A number of initiatives have been identified which will help maintain and build value, some of which (such as new journals and a new magazine) are reported elsewhere. One important step under consideration is applying to become licensed by the Science Council to award Chartered Scientist status. During 2014 we hope to be considering the case for this; and initiating work with the Science Council accordingly.

The analytics and O.R. Pro Bono initiatives, covered elsewhere, are also significant in raising the profile of the Society and O.R., and potentially in generating new members. During 2014 we will continue to support these and other initiatives.

The **Publications** Committee (chaired by Jeff Griffiths) oversaw another successful year for the Society's journals, with all Palgrave-published journals producing an increase in revenue compared with 2012. Gross profits for the whole Palgrave portfolio for 2013 were up by 6% on 2012. The income to the Society in 2013 was £587k, representing a 13.3% increase on the 2012 figure. With the inclusion of editorial stipends paid by Palgrave to the Society, total income for the Society for 2013 was £641k, up 12.3% from 2012. A breakdown of publishing income shows that 10.5% derives from UK sources, and 89.5% from the rest of the world. All issues of the journals were published on or ahead of schedule, and volume paginations were very close to page budgets. Palgrave's budget for 2014 indicates an increase of 3% in site licences and 5% in print licences.

All journals now offer the hybrid "author pays" open access option; to date there have been seven open access papers accepted for publication across the portfolio. Thompson-Reuters latest impact factors, issued in June 2013, saw small increases for all journals currently included; The *Journal of Simulation* (JoS) was a new addition to the list and was awarded a creditable 0.74, placing it halfway up the rankings in its category. In future, *JoS* will be included with the *JORS/KMRP* bundle, which will add about 5% to the bundle price. The advantage of this decision is that wider exposure will be afforded to *JoS*, which may translate into additional citations and an increased impact factor.

The deliberations of Publications Committee during the year have been concerned with a number of issues. Early in 2013 discussions on open access were held with Palgrave and with the Society's Board. Palgrave proposed setting up a "pure" open access journal which would cover the whole spectrum of O.R. After lengthy discussions ranging over several months, the Board decided not to proceed with this proposal, but agreed to the hybrid option being available across all the Society's journals. It is likely that this matter will need further discussion in the future, especially as the Research Councils and the Higher Education Funding Councils are likely to insist that all publications submitted to the Research Excellence Framework for the "2020" exercise are open access.

Following long discussions on the future of *OR Insight*, the Board acted on a recommendation from Publications Committee that *OR Insight* should cease publication with the December 2013 issue. All content of previous issues of *OR Insight* have now been made free to view and will remain so. Negotiations are well advanced for the introduction of an alternative publication which will be in a

glossy magazine-type format, similar to the RSS publication *Significance*. The content of the magazine will be aimed mainly at Society members, but it will also have a role as an outreach publication. It is suggested that material for the magazine would be sourced partly from other published articles, but would be re-written in a style more suitable for those without specialised knowledge in that subject area. It is anticipated that this will require the services of a professional editor on a part-time basis, who will be supported by an editor with specialised knowledge of the O.R. world. The target is to begin publication in 2015. Discussions on the possible introduction of a journal on Analytics have continued throughout 2013, but it has not been possible as yet to find a suitable candidate for the post of editor-in-chief.

Following discussions with Palgrave, Publications Committee agreed to introduce a book series (*OR Essentials*) on O.R. topics. This will be a "state-of-the art" type of series, using key members of the O.R. community as authors. We are much obliged to Simon Taylor, editor of *JOS*, who has championed this initiative and has agreed to take on the duties of editor-in-chief. Three books are already in various stages of development.

Some notable matters relating to our publications include the introduction of a prize for the best paper published in *KMRP*, which will be known as the Steve Cook Medal, and the introduction of a monthly "early-career" section in *Inside OR*, which is produced by Louise Maynard-Atem, one of our younger members.

Neil Henderson, Senior Publishing Editor at Palgrave, left the company at the turn of 2013; his role will be taken over in 2014 by Guy Edwards. The Committee thanks Neil for his contribution over several years and wishes him well in the next stage of his career. The Committee extends its thanks to all editors, and to Sarah Parry in the Society office, for their efforts and commitment in 2013.

The **Education and Research** Committee (chaired by Jo Smedley) continued to make progress across its diverse remit. As well as individual area developments, a focus this year across the Committee has been to raise awareness of education and research developments in the OR Society. Consequently, each area contributed an article to *Inside OR* during 2013 with continuing focus on developing associated social media in 2014 to engage in dialogue with Society members.

The O.R. in Schools (ORiS) 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 ORiS DVD, workshops have been run at teacher conferences and linked to Regional Society meetings 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, returned to Birmingham in November 2013. Situated at the Think Tank, this historically successful event attracted a robust mix of universities and practitioner organisations emphasising the opportunities that O.R. offers through continued study or as a career. Plans are already underway for the 2014 event to ensure that its success is maintained.

Research in O.R. continued to be an important focus of the Committee. The Annual Prize for the best PhD in O.R. continued with the award overseen by a panel of members drawn from across the OR Society.

The winner in 2013 was Dr Kabir Rustogi, who recently finished his PhD at the School of Computing and Mathematical Sciences in Greenwich. Kabir's winning dissertation was "Machine Scheduling with Changing Processing Times and Rate-modifying Activities".

The EPSRC-funded NATCOR initiative (OR Society lead, Tim Bedford) continued as an example of the excellent progress resulting from active academic and practitioner links supported by the OR Society to encourage and influence tomorrow's O.R. professionals. ESRC engagement (OR Society lead, Brian Dangerfield) strengthened this year with feedback on several developments ensuring that the voice of the OR Society is heard on soft O.R. initiatives.

Community links continued to be a main theme of the Committee's work in 2013 through Special Interest Groups (SIGs) with an ERC member (Noel Corrigan) as the Society SIG leader. Work in 2013 has focused on identifying dormant groups and either looking to reinvigorate such groups or to progress with closure where appropriate. Proposals for emerging SIGs were supported (e.g. Behavioural OR). Collectively, SIGs provide an important way of enhancing services to members through the development of communities of practice on various OR topics. These continue to be an important focus for ERC.

Jo Smedley linked with the Higher Education Academy (HEA) on O.R. developments as well as continuing as an Academy Associate in O.R. She also attended the Maths, Stats and O.R. conference in Sheffield in September 2013. The ERC-COPIOR (Committee of Professors in O.R.) link continued through the membership of Tim Bedford on the Education and Research Committee.

In overseeing the OR Society Library (OR Society lead, Mike Wright), the Committee reviewed and maintained a stock of books, journals and archive materials offering a unique insight into historical aspects of O.R. and an invaluable source of O.R. heritage. To enhance access for members and increase materials use, its location is under review (currently based at Brunel University). Interviews of the "Great and the Good in O.R.", held at the University of Warwick, have been reviewed (Martin Kunc) with additions being made to maintain currency.

During 2013, ERC continued to lead 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. In 2013, three projects were funded through a second round of bidding:

- "The Future Policy Influence of O.R.", John Friend, £5,000
- "Mapping and Analysis of Knowledge Exchange Funding Sources of O.R. Members and other O.R. Academics", Alistair Clark, £6,039
- "Training to Practice or Training to Research? An Assessment of Teaching Tools and Methodologies for Postgraduate and Executive O.R. Education in EUROPE", Jana Ries, £13,300.

With ERC organising and mentoring progress of the projects (mentors: James Crosbie, Martin Kunc and Brian Dangerfield), regular updates are provided to the Society Board to assist strategic decision making as necessary. Since 2012, this initiative has provided an agile mechanism enabling the OR Society to respond quickly to new real-world developments through outcomes from recent project work on various hard and soft O.R. topics.

Alistair Clark joined ERC in September 2013, with responsibility for the educational aspects of accreditation.

ERC oversees the Awards Panel, chaired by John Ranyard, with the remit of 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 2013 were awarded to the following, who are congratulated on their achievement:

- **Goodeve Medal** – awarded for best paper published in *JORS* in 2012. Philipp Kemmer, Arne Strauss and Thomas Winter, Dynamic simultaneous fare proration for large-scale network revenue management, *Journal of the Operational Research Society*, Volume 63, p1336–1350.
- **Stafford Beer Medal** – awarded for best paper published in *EJIS* or *KMRP* in 2012. Hope Koch, Ester Gonzalez and Dorothy Leidner, Bridging the work / social divide: the emotional response to organisational social networking sites, *European Journal of Information Systems*, Volume 21, p699-717.
- **Tocher Medal** – awarded for best paper published in *JoS* in 2011/12. Csaba Boer and Yvo Saanen. Improving container terminal efficiency through emulation, *Journal of Simulation*, Volume 6, p267-278.
- **President's Medal** – awarded for the best practical application of OR submitted to the competition. Simon Mardle, Louise Fildes, Tony Lewins (Ernst & Young) for their paper 'Optimising the Retail Network for New Zealand Post'.
- **PhD Prize** – awarded for the most distinguished body of research leading to the award of a doctorate in the field of OR in 2012. Kabir Rustogi for his thesis 'Machine Scheduling with Changing Processing Times and Rate-Modifying Activities'.
- **Beale Medal** – awarded for a sustained contribution to the theory, practice, or philosophy of OR Kevin Glazebrook.
- **Companionship of OR** – 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. David Ryan.

Structure of the Accounts

The Society's funds are organised into:

- the General Fund, through which the ongoing operations of the Society are conducted;
- the Designated Reserve Fund, comprising the Seymour House property together with investments and cash on deposit to cover potential risks of a general nature;
- the Journal Risks Special Reserve Fund, comprising investments and cash on deposit set aside 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;
- the Designated Award Fund which represents a bequest received from Mrs May Hicks in 2002 and which is used for purposes consistent with her wishes, by providing awards for the best student O.R. projects undertaken for a client organisation.

Until last year, there was also a Designated Charitable Projects Fund through which specific educational, development and research projects were funded in order to promote the Society's charitable aims. However, during 2013, the Board decided, as a simplification measure, to discontinue this Fund as a separate entity and to run special projects through the General Fund. It should be stressed that this change in management and presentation does not imply any change in the Society's policy of supporting such special projects when appropriate.

Review of Operations

Income and expenditure were essentially in balance during 2013 (at just over £1m), with a small surplus of £3k being recorded. This includes the contribution from investment income and compares with a deficit of £17k in 2012.

Most operations to support the charitable aims of the Society - such as conferences, special events, training, regional societies, special interest groups, education and publicity initiatives, the monthly *Inside OR* magazine and special charitable projects - result in deficits to the Society. To support them the Society relies primarily on subscriptions and its academic journals, which in 2013 contributed £46k and £537k respectively. This latter figure, which compares with the £470k received in 2012, serves 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.

On the whole, the pattern of expenditure was little different from that in 2012. A notable exception was expenditure on 'Governance', which was 40% higher than last year; this was primarily the result of a more realistic estimate of the proportion of staff time allocated to supporting the Board, General Council and committees, rather than any real increase in this overhead activity. Staff costs supporting the website were also somewhat higher, arising mainly from a requirement to cover maternity leave.

At year end, the Society employed 11 members of staff (9.9 full-time-equivalents); this is up from 8.5 full-time-equivalents last year as a result of new recruitment to manage the Pro Bono initiative and to support the website.

Investments and Reserves

Although, as noted above, only a very small operating surplus was recorded during the year, buoyant stock market conditions led to a welcome increase in the Society's net worth from about £2m to nearly £2.2m, as a result of realised and unrealised capital gains.

The Board reviewed its policy on reserves and concluded that the total cash, stocks and shares element of its two reserve funds need not exceed one year's General Fund expenditure, even taking account of the possibility of a fall-back from current stock market valuations. This will allow some £300k currently held as reserves to be made available to fund initiatives that support the Society's charitable aims, including, of course, services to members.

The Society's investments and their performance are kept under review by the Investment Committee in accordance with policies decided by the Board. The Committee is chaired by the Treasurer and, in addition to other members of the Society, includes representatives from the Society's investment managers. During 2013, the Board decided that, with the exception of those underpinning the Designated Awards Fund, the Society's investments should be managed as a single portfolio, the value of which is assigned to the Designated Reserve Fund and the Journal Risks Special Reserve Fund on an agreed proportional basis (which can be changed if required). This has already resulted in a significant simplification of the management and review task.

Risk

The Board has set in hand a review of the risks faced by the Society and this has already informed the decision on the level of reserves noted above. The Society's dependency on journal income is the most significant material risk, owing to developments, both here and abroad, that will mandate 'open access' publishing for publicly funded work. The current perception is that any adverse financial impact from such developments would manifest itself over a somewhat longer timescale than was previously feared, but the position will continue to be closely monitored by the Board.

Voluntary Contributions

The Society's work in 2013 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 2013 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 Stewart Robinson, Geoff Royston and Roger Forder.

Signed on behalf of Board

Stewart Robinson, President

Roger Forder, Hon Treasurer

Accounts

for the year ended 31st December 2013

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 2013 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

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

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:

- give a true and fair view of the state of the charity's affairs as at 31st December 2013 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

OPERATIONAL RESEARCH SOCIETY

STATEMENT OF FINANCIAL ACTIVITIES FOR THE YEAR ENDED 31 DECEMBER 2013

		<u>2013</u>		<u>2012</u>		
		£		£		
-----Unrestricted Funds-----						
	<u>Note</u>	<u>General</u> <u>Fund</u>	<u>Reserve</u> <u>Funds</u>	<u>Designated</u> <u>Award</u> <u>Fund</u>	<u>Total</u> <u>Funds</u>	<u>Total</u> <u>Funds</u>
INCOMING RESOURCES						
Charitable activities :						
Subscriptions		145,187	-	-	145,187	147,020
Events and Conferences		160,997	-	-	160,997	152,453
Training		52,015	-	-	52,015	80,487
Publications	2	655,475	-	-	655,475	597,591
Accreditation		7,162	-	-	7,162	5,797
World Wide Web and Internet		5,457	-	-	5,457	6,129
Miscellaneous Sales		761	-	-	761	1,016
		<u>1,027,054</u>	<u>-</u>	<u>-</u>	<u>1,027,054</u>	<u>990,493</u>
Rental Income		-	-	-	0	0
Investment Income	6	30	42,479	2,184	44,693	42,057
Total Incoming Resources		<u>1,027,084</u>	<u>42,479</u>	<u>2,184</u>	<u>1,071,747</u>	<u>1,032,550</u>
RESOURCES USED						
Investment Management Costs		-	9,677	-	9,677	8,781
Direct charitable expenditure :						
Subscriptions		100,446	1,194	-	101,640	102,214
Events and Conferences		209,928	817	-	210,745	206,031
Training		61,534	220	-	61,754	89,394
Publications	2	228,912	981	-	229,893	228,050
Accreditation		4,865	25	-	4,890	6,583
World Wide Web and Internet		115,102	1,037	-	116,139	102,239
Miscellaneous Sales		714	6	-	720	5,211
Other Charitable Expenditure	3	235,997	1,183	1,250	238,430	233,062
		<u>957,498</u>	<u>5,463</u>	<u>1,250</u>	<u>964,211</u>	<u>972,784</u>
Governance Costs	4	91,862	2,701	-	94,563	67,609
Total Resources Used	5	<u>1,049,360</u>	<u>17,841</u>	<u>1,250</u>	<u>1,068,451</u>	<u>1,049,174</u>
NET INCOMING / (OUTGOING) RESOURCES BEFORE TRANSFERS						
		(22,276)	24,638	934	3,296	(16,624)
Transfers between Funds		77,000	(77,000)	-	-	-
NET INCOMING / (OUTGOING) RESOURCES FOR THE YEAR						
		54,724	(52,362)	934	3,296	(16,624)
carried forward		54,724	(52,362)	934	3,296	(16,624)

OPERATIONAL RESEARCH SOCIETY

STATEMENT OF FINANCIAL ACTIVITIES FOR THE YEAR ENDED 31 DECEMBER 2013 (continued)

		-----Unrestricted Funds-----			<u>2013</u> £	<u>2012</u> £
	<u>Note</u>	<u>General Fund</u>	<u>Reserve Funds</u>	<u>Designated Award Fund</u>	<u>Total Funds</u>	<u>Total Funds</u>
brought forward		54,724	(52,362)	934	3,296	(16,624)
Realised Gains/(Losses) on Sale of Investments	14	-	15,756	-	15,756	12,735
NET INCOME / (NET RESOURCES USED) FOR THE FINANCIAL YEAR		54,724	(36,606)	934	19,052	(3,889)
Other Recognised Gains and Losses : Unrealised Gains/(Losses) on Investments in the year	13	-	150,472	(1,425)	149,047	95,119
NET MOVEMENT IN FUNDS		54,724	113,866	(491)	168,099	91,230
Balances brought forward 1 January 2013		607,194	1,353,911	55,433	2,016,538	1,925,308
BALANCES CARRIED FORWARD 31 DECEMBER 2013		<u>661,918</u>	<u>1,467,777</u>	<u>54,942</u>	<u>2,184,637</u>	<u>2,016,538</u>

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 four unrestricted funds now operated by the Society in accordance with Statement of Recommended Practice (Revised 2005), "Accounting and Reporting by Charities".

The figure reported as net income / (net resources used) for the financial year in the Statement of Financial Activities, £19,052 (2012 - £(3,889)) 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.

OPERATIONAL RESEARCH SOCIETY

BALANCE SHEET - 31 DECEMBER 2013

	<u>Note</u>	<u>2013</u> £	<u>2012</u> £
FIXED ASSETS			
Tangible Fixed Assets	7	301,355	276,176
Investments :			
Listed at Market Value	8	1,264,538	1,092,813
Cash Deposited with Investment Brokers		17,153	108,116
Charities Aid Foundation	9	60,542	59,783
		<u>1,643,588</u>	<u>1,536,888</u>
CURRENT ASSETS			
Debtors	10	628,029	579,081
Cash at Bank and In Hand		4,994	(14,010)
		<u>633,023</u>	<u>565,071</u>
CREDITORS (amounts falling due within one year)	11	91,974	85,421
NET CURRENT ASSETS		<u>541,049</u>	<u>479,650</u>
TOTAL ASSETS LESS CURRENT LIABILITIES		<u><u>2,184,637</u></u>	<u><u>2,016,538</u></u>
FUNDS			
General Fund		661,918	607,194
Reserve Funds :			
Designated Reserve Fund	12(1)	957,124	891,321
Journal Risks Special Reserve Fund	12(2)	<u>510,653</u>	<u>462,590</u>
		1,467,777	1,353,911
Designated Award Fund	12(3)	54,942	55,433
TOTAL FUNDS		<u><u>2,184,637</u></u>	<u><u>2,016,538</u></u>

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 21st May 2014 and signed on its behalf :

R. A. FORDER
Honorary Treasurer

S L ROBINSON
President

OPERATIONAL RESEARCH SOCIETY

NOTES TO THE ACCOUNTS FOR THE YEAR ENDED 31 DECEMBER 2013

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 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 Journal Risks Special Reserve Fund represents funds set aside to cover potential future reduction in income from the Society's journals. The Designated Award Fund represents a legacy received in 2002 which will be used to fund an annual award.

The Designated Charitable Projects Fund has been incorporated back into the General Fund .

(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 2013.(2012 - £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.

OPERATIONAL RESEARCH SOCIETY

NOTES TO THE ACCOUNTS FOR THE YEAR ENDED 31 DECEMBER 2013 (continued)

	<u>2013</u>	<u>2012</u>
	£	£
2 PUBLICATIONS		
Incoming resources :		
Journal / KMRP / JOS	465,005	419,068
Inside OR	9,998	22,265
EJIS / Health Systems	177,606	153,139
Other Publications	<u>2,866</u>	<u>3,119</u>
	<u>655,475</u>	<u>597,591</u>
Resources used :		
Journal / KMRP / JOS	69,783	70,069
Inside OR	121,488	122,313
EJIS / Health Systems	31,196	25,630
Other Publications	<u>7,426</u>	<u>10,038</u>
	<u>229,893</u>	<u>228,050</u>
3 OTHER DIRECT CHARITABLE EXPENDITURE		
Charitable projects		
Fitness of OR in Universities	10,980	10,500
Piloting Blended Learning	3,137	-
The Future Policy Influence of OR	1,294	-
OR - Impact in Developing Countries	5,543	2,700
OR - Ambassadors in Schools	3,367	-
Training to Practice or Training to Research ?	4,636	-
Learn About OR DVD	-	<u>22,723</u>
	<u>28,957</u>	<u>35,923</u>
Non-revenue earning activities in pursuit of charitable aims		
IAOR Online - Members access	5,750	5,855
Library	9,254	9,612
Foreign Affairs Expenses	6,312	3,924
Regional Societies	2,718	600
Special Interest Groups	3,017	6,487
Public Information about OR :		
Science of Better	23,771	56,889
Learn about OR	64,564	51,735
General Publicity	53,634	47,544
Third Sector Pro Bono	8,484	-
Sponsorship of OR Conferences	-	5,800
Medals, Awards and Scholarships	4,959	5,117
Strategic Initiatives	27,010	3,295
Other Costs	-	<u>281</u>
	<u>209,473</u>	<u>197,139</u>
Total	<u>238,430</u>	<u>233,062</u>
4 GOVERNANCE COSTS		
Board and Committees	82,696	55,376
Auditors' Fees :		
for audit	6,250	6,000
for other services	-	-
Other Legal and Professional Fees	5,617	6,233
	<u>94,563</u>	<u>67,609</u>

OPERATIONAL RESEARCH SOCIETY

NOTES TO THE ACCOUNTS FOR THE YEAR ENDED 31 DECEMBER 2013 (continued)

5 TOTAL RESOURCES EXPENDED

Expenditure analysed by type of cost :

	<u>Staff Costs</u>	<u>Other Costs</u>	<u>Depreciation</u>	<u>Total</u>	<u>Total</u>
	£	£	£	2013	2012
				£	£
Investment Management Costs	-	9,677	-	9,677	8,781
Subscriptions	72,054	26,356	3,230	101,640	102,214
Events and Conferences	49,300	157,336	4,109	210,745	206,031
Training	13,273	47,886	595	61,754	89,394
Publications	59,161	168,080	2,652	229,893	228,050
Accreditation	1,517	1,005	2,368	4,890	6,583
World Wide Web & Internet	62,574	11,636	41,929	116,139	102,239
Miscellaneous Sales	379	324	17	720	5,211
Other Charitable Expenditure	71,295	158,448	8,687	238,430	233,062
Governance Costs	49,680	42,656	2,227	94,563	67,609
	<u>379,233</u>	<u>623,404</u>	<u>65,814</u>	<u>1,068,451</u>	<u>1,049,174</u>

Staff costs :

Wages and Salaries	313,457	285,291
Social Security Costs	32,096	29,650
Pension Costs	33,680	30,642
	<u>379,233</u>	<u>345,583</u>

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

	<u>2013</u>	<u>2012</u>
Charitable activities	7.0	7.0
Management and administration	2.0	1.5
	<u>9.0</u>	<u>8.5</u>

During the year one employee of the Society earned between £70,000 and £80,000 (2012 - 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 (2012 - £Nil).

During the year 9 Trustees (2012 - 11 Trustees) received a total of £ 7,147 (2012 - £7,110) in reimbursement of expenses incurred on Society business . Prof S L Robinson received £1,332 (2012 - £3,945) and Ms F O'Brien £792 (2012 - £4,747) for the supply of training courses to the Society during the year.

Other external costs include :	<u>2013</u>	<u>2012</u>
	£	£
Other Operating Leases	<u>5,915</u>	<u>4,628</u>

OPERATIONAL RESEARCH SOCIETY

NOTES TO THE ACCOUNTS FOR THE YEAR ENDED 31 DECEMBER 2013 (continued)

6 INTEREST RECEIVABLE AND SIMILAR INCOME

	<u>2013</u>	<u>2012</u>
	£	£
Income from Listed Investments	42,441	40,506
Interest on Bank Deposits	68	188
Distributions - CAF	2,184	1,363
	<u>44,693</u>	<u>42,057</u>

7 TANGIBLE ASSETS

	Long Leasehold Land and Buildings	Office Equipment	Fixtures & Fittings	Software Systems	Total
	£	£	£	£	£
Cost					
At 31 December 2012	314,306	121,037	42,297	632,002	1,109,642
Additions	-	30,677	-	64,373	95,050
Disposals	-	(37,759)	-	-	(37,759)
At 31 December 2013	<u>314,306</u>	<u>113,955</u>	<u>42,297</u>	<u>696,375</u>	<u>1,166,933</u>
Depreciation					
At 31 December 2012	119,434	113,938	39,632	560,462	833,466
Charge for the Year	6,286	9,879	833	48,816	65,814
Disposals	-	(33,702)	-	-	(33,702)
At 31 December 2013	<u>125,720</u>	<u>90,115</u>	<u>40,465</u>	<u>609,278</u>	<u>865,578</u>
Net Book Value					
At 31 December 2013	<u>188,586</u>	<u>23,840</u>	<u>1,832</u>	<u>87,097</u>	<u>301,355</u>
At 31 December 2012	<u>194,872</u>	<u>7,099</u>	<u>2,665</u>	<u>71,540</u>	<u>276,176</u>

Capital expenditure authorised but not contracted for at 31 December 2013 and not provided for in the accounts amounted to £Nil (2012 - £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.

OPERATIONAL RESEARCH SOCIETY

NOTES TO THE ACCOUNTS FOR THE YEAR ENDED 31 DECEMBER 2013 (continued)

8 LISTED INVESTMENTS AT MARKET VALUE

	<u>2013</u> £	<u>2012</u> £
Market Value at 1st January 2013	1,092,813	981,862
Additions at Cost	140,983	92,869
Proceeds on Disposal	(135,487)	(87,410)
Net Investment Gain /(Loss)	166,229	105,492
Market Value at 31st December 2013	<u>1,264,538</u>	<u>1,092,813</u>
Cost	<u>943,761</u>	<u>894,245</u>
Representing :-		
Designated Reserve Fund	759,734	665,387
Designated Journal Risks Special Reserve Fund	<u>504,804</u>	<u>427,426</u>
	<u>1,264,538</u>	<u>1,092,813</u>

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 the 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 Investec.

9 CHARITIES AID FOUNDATION

At 31 December 2013 this investment is represented by 56,058 (2012 - 56,058) shares in the IM CAF Fixed Interest B Accumulation Fund, having a market value of £60,542 (2012 - £59,783).

	<u>2013</u> £	<u>2012</u> £
Market Value at 1st January 2013	59,783	55,901
Net Investment Gain /(Loss)	(1,425)	
Distributions not remitted	<u>2,184</u>	
	759	3,882
Market Value at 31st December 2013	<u>60,542</u>	<u>59,783</u>
Cost	<u>56,060</u>	<u>56,060</u>

10 DEBTORS

	<u>2013</u> £	<u>2012</u> £
Trade Debtors	5,474	20,789
Taxation Recoverable	20,542	20,914
Prepayments	14,139	18,506
Accrued Income	587,874	518,872
	<u>628,029</u>	<u>579,081</u>

OPERATIONAL RESEARCH SOCIETY

NOTES TO THE ACCOUNTS FOR THE YEAR ENDED 31 DECEMBER 2013 (continued)

11 CREDITORS

	<u>2013</u>	<u>2012</u>
	£	£
Trade Creditors	16,704	27,792
Taxation and Social Security	5,632	-
Accruals	24,846	15,338
Deferred Income	44,792	42,291
	<u>91,974</u>	<u>85,421</u>

<i>Deferred income brought forward</i>	<i>42,291</i>
<i>Released to incoming resources during the year</i>	<i>(42,291)</i>
<i>Deferred income arising in the year</i>	<u><i>44,792</i></u>
<i>Deferred income carried forward</i>	<u><u><i>44,792</i></u></u>

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) 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.

(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) Designated Charitable Projects Fund

The Charitable Projects Fund was established as an account to hold cash committed to spending on Charitable Projects and its original purpose was for administrative clarity. For 2013, the Society's Board of Trustees decided to merge the fund into the General Fund to simplify the accounts layout. Detail of expenditure on Charitable Projects is now provided in Note 3.

OPERATIONAL RESEARCH SOCIETY

NOTES TO THE ACCOUNTS FOR THE YEAR ENDED 31 DECEMBER 2013 (continued)

13 ANALYSIS OF NET ASSETS BETWEEN FUNDS

	General Fund £	Designated Reserve Fund £	Journal Risks Special Reserve Fund £	Designated Award Fund £	Total £
Tangible Fixed Assets	112,769	188,586	-	-	301,355
Investments	-	759,734	504,804	60,542	1,325,080
Cash Deposited with Investment Brokers	-	10,306	6,847	-	17,153
Net Current Assets/Liabilities	549,149	(1,502)	(998)	(5,600)	541,049
Total Net Assets	<u>661,918</u>	<u>957,124</u>	<u>510,653</u>	<u>54,942</u>	<u>2,184,637</u>

Reconciliation of movements in unrealised gains/(losses) on investment assets :

	Reserve Funds	Designated Award Fund £	Total £
Unrealised gains at 31 Dec 2012	198,408	1,466	199,874
Realised investment (gains) / losses during the year	(28,107)	-	(28,107)
Net unrealised investment gains/ (losses) arising during the year	150,472	(1,425)	149,047
Unrealised (losses)/gains included in net assets at 31 Dec 2013	<u>320,773</u>	<u>41</u>	<u>320,814</u>

14 DISPOSAL OF INVESTMENTS

	Cost £	Proceeds £	Book Gain/(Loss) on Disposal £	Realised Revaluation Gain/(loss) £
Reserve Funds	<u>91,624</u>	<u>135,487</u>	<u>15,756</u>	<u>(28,107)</u>

15 PENSION 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 £33,680 (2012 - £30,642).

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	Professor M Pidd	2000/01
Sir William K Slater	1956/57	Mr J Gibb	2002/03
Professor M G Kendall	1958/59	Professor V Belton	2004/05
The Earl of Halsbury	1960/61	Professor J D Griffiths	2006/07
Professor B H P Rivett	1962/63	Mrs S M Merchant	2008/09
Professor G A Barnard	1964/65	Professor R W Eglese	2010/11
Professor R T Eddison	1966/67	Dr G H Royston	2012/13
Mr E C Williams	1968/69	Professor S L Robinson	2014/15
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		

OR Society awards

Companion of Operational Research

Sir Hermann Bondi	1983	Professor M F Shutler	1996
Mr D Hicks	1983	Professor D J White	2001
Professor R V Jones	1983	Professor K C Bowen	2001
Professor B H P Rivett	1983	Dr R A Forder	2005
Mr H R W Watkins	1984	Professor F Kelly	2005
Professor Sir David Cox	1985	Mr G K Rand	2005
Lord Ezra	1985	Dr J C Ranyard	2005
Mr P Hughes	1985	Professor J V Rosenhead	2005
Lord Zuckerman	1985	Dr J F Miles	2006
Sir John Kingman	1986	Professor R G Dyson	2007
Sir Dennis Rooke	1986	Mr E K G James	2007
Sir Charles Carter	1987	Professor J Friend	2008
Mr T P Frost	1987	Dr G Royston	2008
Professor H. Muller-Merbach	1988	Professor R J Paul	2009
Mr D A Quarmby	1989	Professor A Mercer	2010
Professor R C Tomlinson	1990	Mr T O'Connor	2010
Mr R A Showell	1991	Professor V Belton	2011
Mr G H Mitchell	1992	Ms R A Kaufman	2011
Professor P Whittle	1994	Professor M Pidd	2011
Mr J Plymen	1994	Professor P H Millard	2012
Professor S Vajda	1995	Professor D M Ryan	2013
Professor K B Haley	1996		

Goodeve Medal

B H Mahon	1976	G Best	1987
R J M Bailey	1976	G Parston	1987
N R Tobin	1977	J V Rosenhead	1987
I Sanderson	1979	D Rowland	1988
A J Williams	1980	I R Turner	1989
J G Shepherd	1981	R Bandyopadhyay	1990
F K Lyness	1982	S Datta	1990
L P Fatti	1984	D Schrady	1992
A H Christer	1985	D Wadsworth	1992
W M Waller	1985	A Bouzاهر	1993

S Offutt	1993	G Lanot	2004
D W Bunn	1994	S C Brailsford	2005
E R Larsen	1994	V Lattimer	2005
K Vlahos	1994	P Tarnaras	2005
G M Campbell	1995	J Turnbull	2005
C F Davis	1995	K Taylor	2006
M Carey	1996	B Dangerfield	2006
D Lockwood	1996	S C Brailsford	2007
C M Yeats	1997	D Evenden	2007
T Rehman	1997	V Harinda	2007
D-W Tcha	1998	P Harper	2007
T-J Choi	1998	A Medina-Borja	2008
Y-S Myung	1998	K S Pasupathy	2008
F Duckworth	1999	K Triantis	2008
A J Lewis	1999	D Ronen	2009
J Banasik	2000	C A Goodhart	2009
J N Crook	2000	S Kumar	2010
L C Thomas	2000	D A Nottestad	2010
K Korporaal	2001	E E Murphy	2010
A Ridder	2001	L C Thomas	2011
P Kloprogge	2001	F R Johnston	2012
R Dekker	2001	E A Shale	2012
S Howick	2002	S Kapoor	2012
C Eden	2002	A Sheth	2012
J E Beasley	2003	R True	2012
H Howells	2003	P Kemmer	2013
J Sonander	2003	A Strauss	2013
R Hartley	2004	T Winter	2013

Stafford Beer Medal

JJ Jahng	2003	C Ashurst	2009
H Jain	2003	N Doherty	2009
K Ramamurthy	2003	J Peppard	2009
R Lindgren	2004	F Thiesse	2010
D Stenmark	2004	J Al-Kassab	2010
J Ljungberg	2004	E Fleisch	2010
S Sarker	2005	P O'Reilly	2011
S Sahay	2005	P Flanagan	2011
S Madon	2006	R Lederman	2012
C Middleton	2007	R Johnston	2012
W Cukier	2007	H Koch	2013
S K Sia	2008	E Gonzalez	2013
C Soh	2008	D Leidner	2013

Tocher Medal

K Kotiadis	2007/08	C Boer	2011/12
T Pitana	2009/10	Y Saanen	2011/12
E Kobayashii	2009/10		

PhD Prize

K Kaparis	2008	R Wood	2011
A Strauss	2009	K Rustogi	2012
F Liberatore	2010		

President's Medal

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

D Pankhurst	2008	C Marston	2012
I Wright	2008	P Rose	2012
P Frangos	2010	S Mardle	2013
S Hughes	2010	L Fildes	2013
S Hammond	2011	A Lewins	2013
K Slater	2011		

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	K D Glazebrook	2013

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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